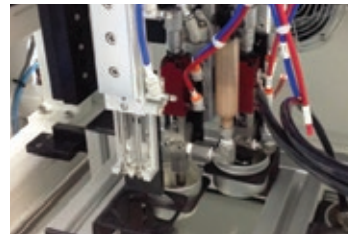
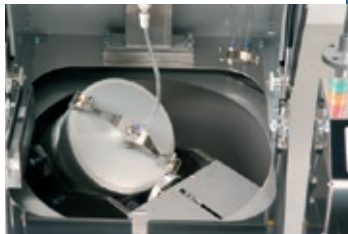
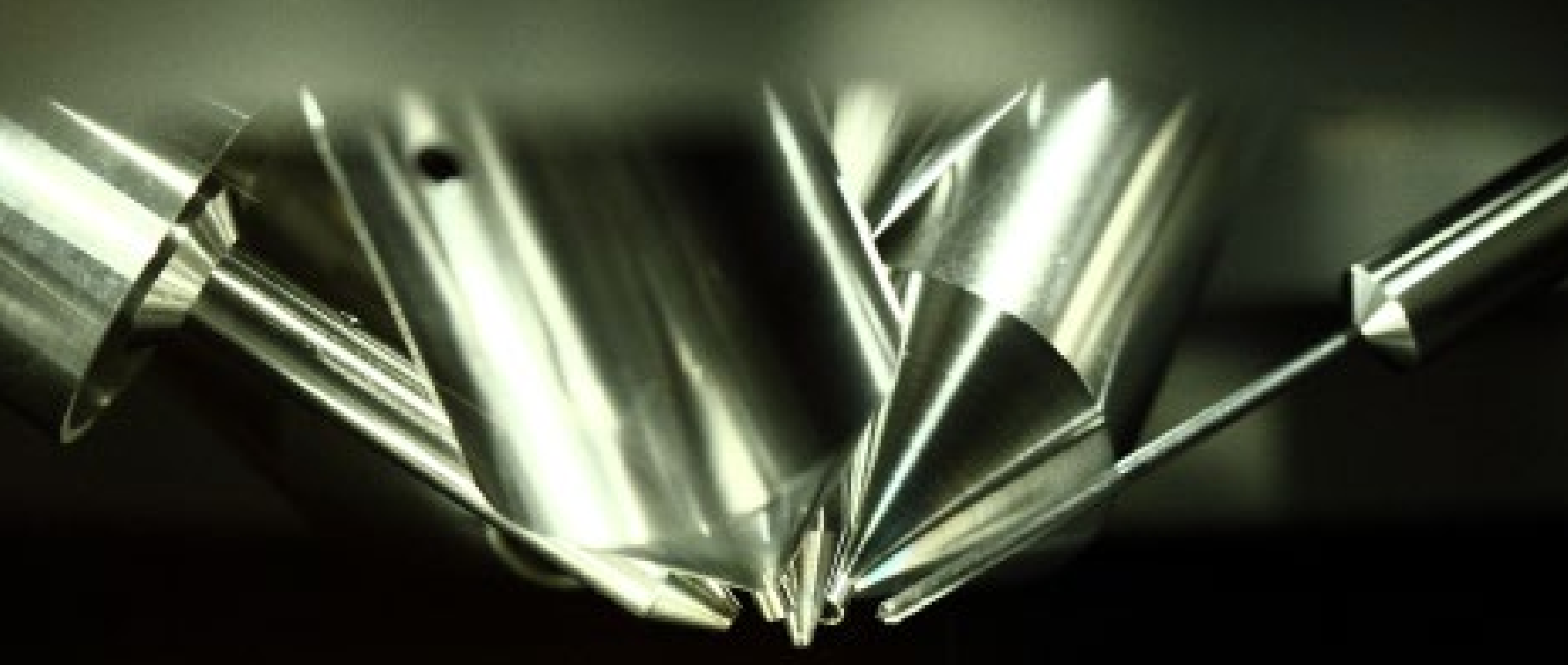


CATALOGUE OF PRODUCTS

Third edition

**DISPENSING IS OUR JOB,
PRECISION IS OUR PERFORMANCE**





SPECIALISTS IN DISPENSING

Dispensing a liquid with accuracy and in repetition during the manufacture procedure is our specialty.

Knowing that liquids are usually instable and invariable depending on heat conditions, hygrometric conditions etc. we offer you a choice between concepts as time, pressure and for each type of application.

Being convinced that our expertise should be as complete as possible, we also provide you tools preparing your liquid (mixing and degasification) and polymerize your adhesives after dispensing (UV insolation).

GENTEC, a Belgian company, total commitment is to provide you the largest and most comprehensive range available on the market with the highest quality and best prices.

Our expendable materials, needles, syringes and mixing valves are generally considered as the best materials available on the market (price, quality and reactivity).



PERFORMANCE

As experienced specialists in dispensing solutions, we provide you a wide range of reliable, tested and efficient dispensing equipments. Those equipments have provided our clients solutions in line with their financial and technical expectations. Our partners, POLY DISPENSING SYSTEMS, PVA, GRACO, JANOME, EXCELITAS, PHOSEON, EIT, COX, THINKY, LARIUS, SEMCO, PRECI FLUID DISPENSING, etc. are known for their relevance and innovations.

DURABILITE

We deliver reliable, tested and efficient dispensing equipments to dispense easily and permanently all industrial liquids and pastes: adhesives, lubricants, welding pastes, solvents, silicones, dyes, activators, RTV's, paints, UV, medical and food products. All our products are available for industrial sectors like aeronautics, electrics, automotive, jewellery, medical and food industry.

SATISFACTION

Our total commitment is the satisfaction of our clients and we exert every effort to give them the most complete service during pre-sales and post-sales. The acquisition of our products guarantees you :

- Better quality, sanitary conditions
- Higher productivity
- Lower production costs and less product consumption
- Progress on ecological concern of fabrication

PRECIFLUID CONCEPT

DISPENSING SYSTEMS

10



PreciFluid Concept
 PreciFluid accessories
 Air - Pulse Dispenser 7050 (Pick Up)
 Air - Pulse Dispenser Pedal
 Air - Pulse Dispenser 7150
 Air - Pulse Dispenser 7250
 Air - Pulse Dispenser 7350
 Air - Pulse Dispenser 100ETC
 Air - Pulse Dispenser 7550
 Air - Pulse accessories

CONSUMABLES

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PosiDot needles
 Precision needles
 Oval needles
 Plastic needles
 Brush needles
 Stainless needles
 Special needles
 Selection guide
 Static mixers
 Air - Pulse consumables
 PreciFluid consumables

VALVES SYSTEMS

32



MV metering valves
 CA Diaphragm
 FC High pressure
 FCM No Contact
 FCS Augur valve
 Valves with feeding auger
 PC Two - Component
 Valve controllers

GRACO DISPENSING SYSTEMS

50



Dispensing systems PR70, PR70V, PR70E
 MD2 Dispensing Valve
 HFR Metering System
 High performance valve PD44
 Display Module
 Controller
 Power supplies

DOSING ROBOTS

81



Cartesian robots: JRN Series
 Cartesian robots : JRNE Series
 Scara robots : JS Series
 Scara robots : JSR Series
 Applications

PRECIFLUID CONCEPT

DEVICES AND ACCESSORIES

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Manual pump MATO
Pneumatic pump DYNA – MITE
Pneumatic pump CHECK MATE
SmartWare technology
Pneumatic pump HUSKY
Gearing pump BEINLICH
Metered pump
Pressure tanks

OMNICURE UV LAMP

97



UV sources ARC: Serie S
Radiometer R2000
Accessories Serie S
LED UV sources : Serie LX
LED Light Meter
Accessories Serie LX
LED block

COX GUNS

132



Mono-component guns
Bi-component guns
Special guns

PLANETARY MIXERS

113



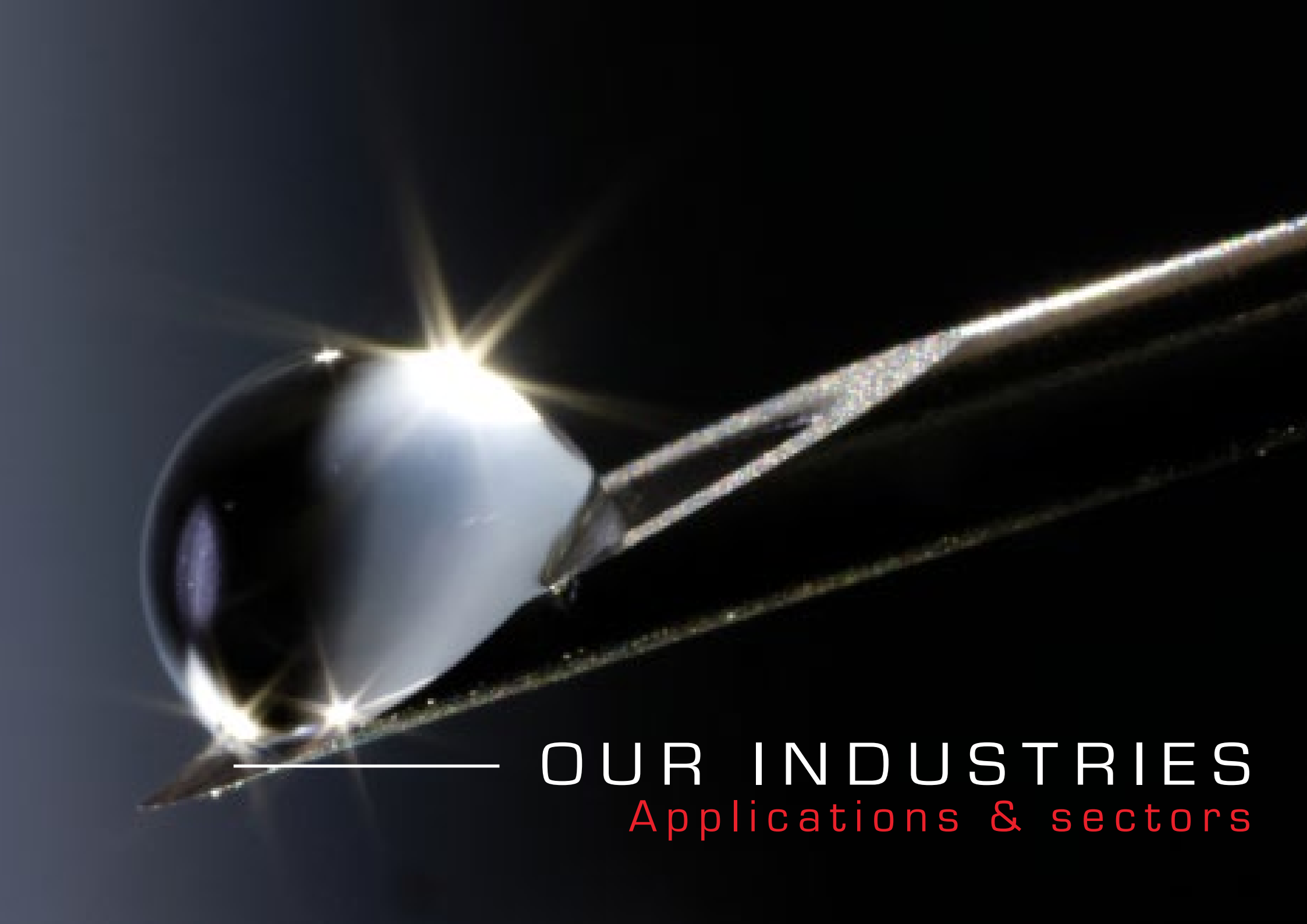
Applications
ARE 250 : High quality mixer
SR 500 : Solder paste mixer
ARV 310 : High quality vacuum mixer
ARE 930 : Twin vacuum mixer
ARE 500 : Higher load mixer
ARE 400 TWIN : Flexible lab twin mixer
ARV 5000 : Planetary centrifugal vacuum
ARC 40H : Vacuum syringe charger

SEMCO CONSUMABLES

125

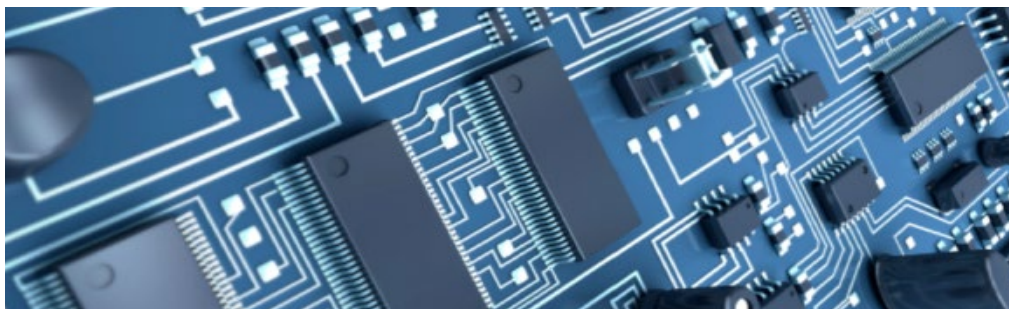


Cartridges
Pistons
Semkit
Nozzles
Spatulas
Connections
Caulking guns
Semkit mixing valves



OUR INDUSTRIES

Applications & sectors



ELECTRONICS

The accurate dispensing systems of Gentec guarantee a reliable and repetitive dispensing which makes it possible to optimize the assembling process of electronics for any application: dot deposits, lines or even varnishing.

The dispensers optimize your manufacture capability for different types of assembling. With volumetric dispensing systems, dispensing bi-component epoxies or other fluids with a variable viscosity has never been that easy. With the different valve systems you substantially increase your productivity on automatic and semi-automatic operations.

Operations like coating on cards, Gentec presents the dispensing robot Janone, a compact and autonomous unit which offers you the possibility to make highly precise movements to dispense. In the optoelectronic industry, the Omnicure range is highly recommended for the treatment of polymers.

Materials

- Solder pastes
- Epoxies
- Silicones
- UV resins
- RTV
- Cyanoacrylates

Dispensing application

- Optical fibres
- Electronic chips
- Touch screens
- Hyper frequent components
- Circuit board assemblies
- Condensers, fuses, relays
- Electric connectors
- Printed circuits for CMS
- Mobile phones
- Cameras



MEDICAL

The need of equipments in the medical industry is more and more demanding in terms of reliability and cleanliness. Forced to respect these rigorous regulations, this sector is an important market for Gentec.

GENTEC helps you with the manufacture of medical devices from prototypes until manufacturing on high scale. Our equipments are used for applications such as assembling plastic materials, glass and metals, equipments of lubrication, coating, distribution of UV adhesives for assembling needles, catheters and other plastic, glass and metal components. Additionally, dispensing systems are used to apply little quantities of lubrication of medical level, components in flexible rubber before their assembly to syringes or other components.

Dispensing valves, potting and coating are examples of other possible applications.

Materials

- UV glues
- Epoxies
- Cyanoacrylates
- Silicones
- RTV
- Abrasars creams
- Lubricants
- Hydrophilic coating
- 2-components
- PU, silicones

Dispensing application

- Catheters
- Cardiac pacemakers
- Contact lenses
- Lubrication
- Chirurgical and dental instruments
- Defibrillator
- Hearing aids
- Medicine



CONSTRUCTION

The use of bi-component adhesives, silicones, foams and coatings is often necessary for construction applications such as securing chemical anchors, repairing cracks and seals.

Gentec provides you products of the COX and MIXPAC range which makes dispensing of sealing products and embedding in sub-trade possible.

The products are manual, pneumatic or electric guns as well as numerous nozzles guaranteeing accurate dispensing and limiting rejections.

Materials

- Epoxies
- Polyurethanes
- Silicones
- Polyesters
- Lubricants
- Cements
- Methacrylates

Dispensing application

- Sealing jointures
- Chemical embeddings
- Repairing cracks
- Dispensing silicone
- Window and door seals



RENEWABLE ENERGIES

Facing the interest in environment and renewable energies by industrial constructors combined with their demand in terms of rapidity, Gentec provides you the PVA and PRECI FLUID DISPENSING range.

These products are used in numerous applications in the solar assembly process. Solder pastes, sealing systems, coatings and electric termination of a thin sealing foil and other fluids are the main application used in the fabrication of photovoltaic cells.

Gentec offers you a complete range of products to optimize your manufacture process as quick as possible and with the lowest production costs.

Starting with valve systems, really quick dispensing spurts on precise coating systems.

- The most known applications:
- Solder paste dispenser for the connection of cables of the junction box
- Board/ sealing frame
- Junction box put in a jar to protect the environment
- Encapsulation of fluid cells
- Coating of the back side with a thin layer
- Sealant electric connection/ lubricant
- Structural adhesive for fixation

Materials

- Ethanol/Phosphor
- Solder paste
- Fluxed paste
- Printable ink
- Silicones
- Conductor adhesives

Dispensing application

- Doping
- Spraying of ink on modules with thin foil
- Tabbing
- Stringing
- Frame sealing of the modules
- Line dispensing
- Engraving
- Coating



AEROSPACE

The accuracy, reliability and traceability are essential in the production and assembly of aerospace pieces.

The main actors count on Gentec equipment to mix and dispense with accuracy lubricants, solvents, mastics, adhesives and pastes.

The increase on the aerospace market which has been highly driven by the development of the civil aviation and the renewal of military equipments makes of Gentec the key supplier in this sector which leans on the quality of products and the ability to react.

The dispensing equipments of Gentec are mainly used in the following aerospace categories:

- Assembly, structure of planes and spare parts
- Manufacture of satellites and missiles
- Manufacture of research devices, detection devices and arming devices

Materials

- Lubricants
- Solvents
- Sealing products
- Adhesives
- Epoxies
- Anaerobics
- Solder pastes

Dispensing application

- Coating by selective spraying
- Communication tools
- Activation systems and remote control
- Sealing and bonding
- Record flights
- Mix of mastics
- Measuring instruments
- Military munitions
- Electric systems
- Satellites



AUTOMOTIVE

The automotive industry knows numerous distribution problems, going from coating by selective spraying, potting to dispensing sealing jointures or even the application of adhesive dots and lubricants. Gentec represents a supplier of choice for automotive manufacturers and equipment suppliers. They choose our products and our services to overcome many manufacturing problems.

The automotive industry is in permanent evolution. Their requirement in terms of effectiveness, innovations but also savings is so much higher. That is why they carefully choose their dispensing equipment supplier. For each new sensor, injector, cooling system or sun visor, the production rate and quality are more and more higher. Therefore, Gentec provides you solid, coherent and reliable machines on which manufacturers can long-term rely on.

Materials

- RTV
- Anaerobics
- Lubricants
- Cyanoacrylates
- UV adhesives
- Epoxies
- Methacrylates
- Cements

Dispensing application

- Brakes and suspensions
- Windscreens
- Airbags and wheels
- Air-conditioning
- Motors and components
- Electric systems
- Power supplies
- Lights and alarms
- Mirrors
- Cables and electric bundles
- Sensors, relays, regulators



DISPENSERS

Volumetric and pneumatic systems

PRECIFLUID CONCEPT

FEATURES

Adaptable to 2.5 oz cartridges on demand

Resistant fixing of the screw step by step using a magnetic system

Minimum volume is going until 0.06 micro liters

Pushing capacity is going higher than 500,000 cps

Instinctive use

Programmable sequences

Solid conception in anodized aluminum

Weights less than 100gr

Exists in 3 types: Standard – Integration Kit

Exists in 3 versions: 3.5, 10cc – 30cc – 55cc

All PreciFluid consumables are provided



PRESENTATION

PreciFluid is a high developed technology offering quality dispensing. This volumetric dispenser which is compatible with all types of fluids (from the most liquid to the most viscous types) combines speed and accuracy while keeping a simple and ergonomic structure.

By the motion of a stepping motor which performs a repetitive and controlled movement of a volume, this range goes beyond expectations in terms of pneumatic dispensing systems (at least 7 times more accurate) and allows remarkably more little deposits than volumetric dispensers

available on the market, with its minimum volume starting at 0.06 micro liters. This patented dispenser is the only one which guarantees you a volumetric deposit with such accuracy.

Designed and manufactured in Switzerland by PRECI FLUID DISPENSING, the electro-mechanic motion of PreciFluid guarantees an accuracy record regardless the viscous variations of the dispensed fluid.

PreciFluid provides you also a high pushing capacity going beyond 500.000 cps thanks to the torque multiplication.

- Consistent volumetric dispensing
- Compensation of the viscous variations
- Regular and smooth linear movement
- No separation of complex fluids
- Programmable dispensing speed
- Manual ergonomic/automatic gun
- Patented system

PRECIFLUID : FEATURES

DropTips Needles

- Size from 14G to 32G
- Coded and colored nozzles
- Silicone free certified

DropTube Holster

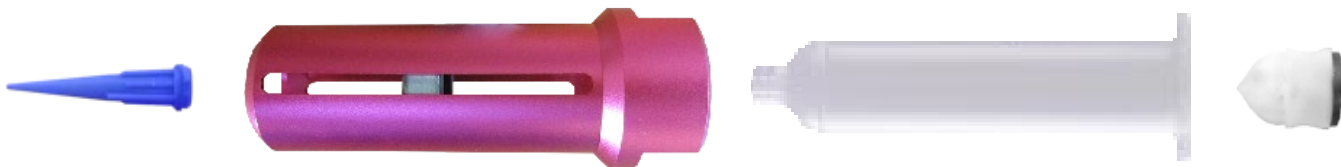
- Adaptable size
- Stabilization magnet
- Aluminum Conception

BarrelDrop Syringes

- Sizes: 3, 5, 10, 30cc
- UV protection
- Certified Silicone free

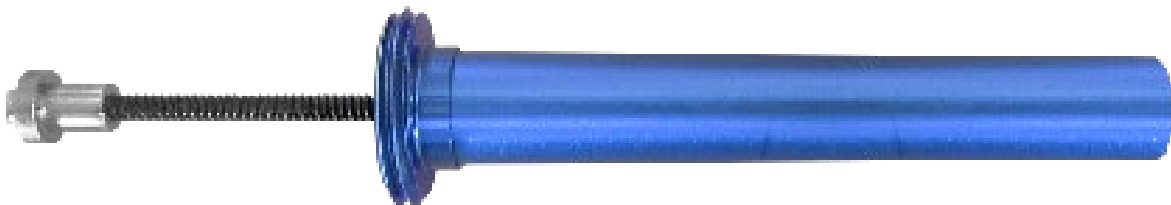
PistonDrop Piston

- Magnetic holding
- Without dripping
- Straight walls



PreciFluid Guns

The system of linear distribution with a stepping motor and a magnetic feeding augur guarantees an identical movement (forward, backward) for each deposit until the syringe is empty. Stability is the most important factor to get a consistent deposit of the fluid.



FEATURES

| | |
|-----------------|------------------|
| Command | Manual/Pedal/PLC |
| Minimal deposit | 0.06micro liters |
| Gun length | 170 mm |
| Gun weight | < 100 gr |

OPERATING

The micro-drive system operates with a linear stepping motor which generates a consistent movement of the product in the syringe.

In comparison to pneumatic dispenser which operates with air pressure, the deposit of the PreciFluid volumetric dispenser is controlled and more efficient in terms of accuracy, speed and repetition.

Moreover the outstanding performances, the use of PreciFluid remains instinctive. Sequenced by already registered programs, the push actions are regular and consistent. You only have to

numerically introduce the volume and the speed to perform the dispensing. The dispenser will make the calculations. There is no need to adjust the entries in function of the temperature and the place of dispensing conditions.

Enter numerically the volume, the requested speed of deposit and the dispenser will make the calculations.

PreciFluid is provided with a revolutionary attach system. The screw and the piston are fixed with a magnet which offers an optimal stability and push action, without any risk of shocks or warming-up of the fluid.

- No separation or warming-up
- No shocks or pressured air
- Consistent and regular pushing
- Optimal repetitiveness
- Certified without silicone
- Maximal flexibility
- Adaptable to all fluids

PRECIFLUID : ACCESSORIES

Gun Device

PreciFluid device is easy to handle and give an ergonomic use of the gun possible which is easier for its use. Completely manufactured in aluminum

DropTube holder

The holder closes strongly the syringe on the gun. They exist in 3, 5, 10 and 30cc but they are adaptable on demand in case you have specific contents.

BarrelDrop Syringes

Developed for high performances, the syringes with a round nozzle are available in 3, 5, 10 and 30cc. They are certified without silicone and are available in black or brown to protect from UV.



More accessories and consumables at : www.gentec-benelux.com

CONSUMABLES

DropTips Needles

The DropTips needles are certified without silicone and are conform to industrial demands, which is an important item for accurate dispensing. They are strongly fixed on the syringe thanks to an easy LuerLock screwing. Available diameters from 14G to 32G.

PistonDrop Pistons

In opposition with standard pistons, the PistonDrop pistons with metallic inserts are moulded with accuracy in order to obtain a regular flow and a uniform movement. However, these are equipped with a metal nozzle which guarantees a fixation with the magnetic screw of the gun.

FingerDrop Command

The FingerDrop interruptor replaces the pedal and is directly connected on the PreciFluid.

AIR - PULSE CONCEPT



PRESENTATION

The electro-pneumatic dispensers are recommended for a consistent deposit of liquid products, fluids or pastes of any kind, and this repetitively and calibrated.

The universal dispensers Air-Pulse exist in version 0-1 Bar for very liquid products and in 0-7 Bar for any other product.

They are equipped with a precise adjustment to get a consistent debit of the product and an

adjustment of dispensing time from 0.01s to 60s.

In a syringe, a constant pressure during a given time, makes it possible to deliver repetitively a quantity of product by a simple impulsion on the pedal or the push button.

A venture system (vacuum) makes it possible to maintain the product in suspension in the syringe.

| USE | 7050 | 7150 | 7250 | 7350 | 100ETC |
|---------------------------|------|------|------|------|--------|
| Thick paste | NA | ++ | ++ | ++ | ++ |
| Fluid to a liquid product | NA | ++ | ++ | ++ | ++ |
| Cyanoacrylate liquid | NA | + | + | + | + |
| Solder paste | NA | ++ | + | ++ | + |
| Bi-components | NA | ++ | ++ | ++ | ++ |
| Resins, charged products | NA | + | ++ | + | ++ |
| Micro dots | NA | ++ | ++ | ++ | ++ |
| Potting and filling | NA | + | + | + | + |
| Mixed and frozen product | NA | ++ | ++ | ++ | + |

| BASE CONTENT | 7050 | 7150 | 7250 | 7350 | 100ETC |
|-----------------------------|-----------|------|------|------|--------|
| Foot pedal | ++ | ++ | ++ | ++ | ++ |
| Manual | ++ | ++ | ++ | ++ | ++ |
| Venturi | ++ | ++ | ++ | ++ | ++ |
| Mixer | NA | O | O | O | O |
| Needles kit | NA | ++ | ++ | ++ | ++ |
| Syringes and pistons kit | NA | ++ | ++ | ++ | ++ |
| Syringe adapter | NA | ++ | O | ++ | ++ |
| Regulating filter 5 microns | In option | O | O | O | O |
| Drying-regulating filter | In option | O | O | O | O |
| Holding system | ++ | NA | NA | NA | NA |

AIR - PULSE : DISPENSER 7050 TO 7550

DISPENSER 7050 (PICK-UP)

The Pick-Up venturi systems are made in order to manipulate little pieces, small components, chips, etc. They are equipped with a vacuum-air valve which is electrically actioned with the pressure of the foot pedal.

FEATURES

| | | | |
|------------|----------------------|------------------|--------------------|
| Material | Industrial metal box | Pressure Display | Venturi adjustment |
| Models | 1.33 - 7 Bars | | |
| Dimensions | 13.9 x 17.7 x 6.6 cm | | |
| Weight | 1.14 kg | | |
| Control | Pedal | | |
| Air entry | 20 - 100 psi | | |
| AC entry | 110 or 220 VAC | | |
| Display | Pressure indicator | | |

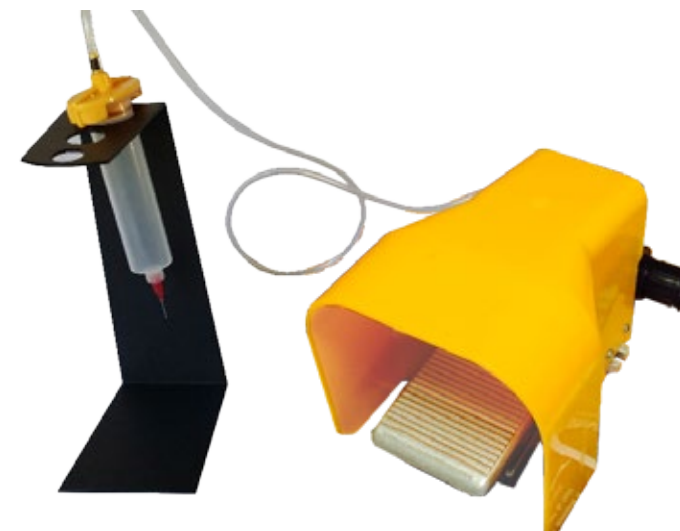
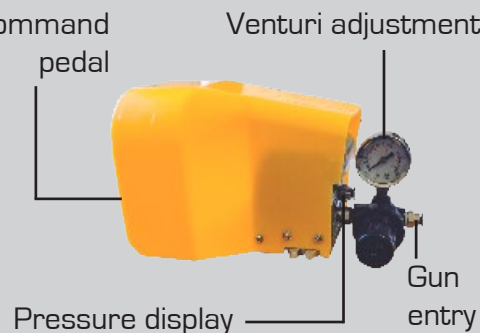


DISPENSER PEDAL

Dispensers with pedal are built to dispense product quantities which are visible by the human eye. They deliver the fluid by a simple impulsion with the pedal which makes it able to reduce or prevent manual tiredness of the user.

FEATURES

| | | | |
|------------|-------------------|---------------|--------------------|
| Material | Metal and plastic | Command pedal | Venturi adjustment |
| Models | 0 - 7 Bar | | |
| Dimensions | 25.7 x 14.2 x 13 | | |
| Weight | 1.38 kg | | |
| Control | Pedal | | |
| Air entry | 100 psi | | |
| AC entry | No | | |
| Rate | NA | | |



AIR - PULSE : DISPENSER 7050 TO 7550

DISPENSER 7250

The dispenser 7250 which only exists in 0-7 bar provides a time/pressure calibrated dispensing in more economic formats than the dispenser 7350 and is provided with a dispensing time in hundreds of seconds.



FEATURES

| | | | | |
|----------------------|------------------------|-----------------------|------------|-------------------------|
| Manual/ automatic | Pressure adjustment | Venture adjustment | Material | Industrial metallic box |
| | | | Models | 0 - 7Bar |
| | | | Dimensions | 21.9 x 15.1 x 6.7 cm |
| | | | Weight | 1.82 kg |
| | | | Control | Pedal |
| | | | Air entry | 7Bar |
| | | | AC entry | 110 - 220 VAC |
| | | | Rate | 500 cycles / minutes |

DISPENSER 7150

The dispenser 7150 exists in 0-1 bar version for very liquid products and in 0-7 bar for other products. The dispensing is auctioned by a pedal as "the operator judgement".



FEATURES

| | | | |
|---------------------|-----------------------|------------|-------------------------|
| Pressure display | Venturi adjustment | Material | Industrial metallic box |
| | | Models | 0 - 7Bar and 0 - 1Bar |
| | | Dimensions | 27 x 14.8 x 6.8 cm |
| | | Weight | 1.38 kg |
| | | Control | Finger and pedal |
| | | Air entry | 7Bar |
| | | AC entry | 110 - 220 VAC |
| | | Rate | NA |

AIR - PULSE : DISPENSER 7050 TO 7550

DISPENSER 7350

The calibrated time / pressure 7350 dispenser exists in version 0-1 bar, for highly liquid products, and 0-7 bar for other products. It is equipped by a MAC solenoid valve offering a constant flow rate and adjusting dispense time in hundreds of seconds.

FEATURES

| | |
|------------|--------------------------|
| Material | Industrial metallic box |
| Models | 0 - 7 Bar and 0 - 1 Bar |
| Dimensions | 21.9 x 15.1 x 6.7 cm |
| Weight | 2.01 kg |
| Control | Finger and pedal |
| Air entry | 7Bar |
| AC entry | 110 - 220 VAC |
| Rate | More than 600 cycles/min |

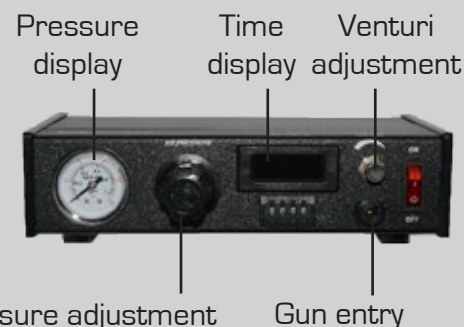


DISPENSER 100ETC

The 100ETC dispenser (digital) calibrated time / pressure exist in 0-1 bar and 0-7 bar. Equipped by a MAC solenoid valve offering a constant flow rate and adjusting dispense time in hundreds of seconds.

FEATURES

| | |
|------------|---------------------------|
| Material | Industrial metallic box |
| Screen | LED |
| Models | 0 - 7 Bar et 0 - 1 Bar |
| Dimensions | 21.9 x 15.1 x 6.7 cm |
| Weight | 1.68 kg |
| Control | Finger and pedal |
| Air entry | 0 - 100 psi et 0 - 15 psi |
| Cadences | More than 600 cycles/min |



AIR - PULSE : DISPENSER 7050 TO 7550



DISPENSER 7550

A dispenser and a Pick-Up in one. The dispenser 7550 time/pressure calibrated exists in 0-1 bar and in 0-7 bar. With its MAC solenoid valve, the dispenser makes it possible to dispense with accuracy very little quantities of products and simultaneously, it enables a movement of little pieces by aspiration (like the Pick-Up dispenser).

This double function enables you to gain time, money and place. They are delivered with a kit of starter consumables as well as an input pen.

■ Dispensing

The first function of the PDS7550 is the dispense of fluids thanks to the application of a consistent pressure during a time laps. It delivers repetitively a quantity of product by the simple impulsion of a push-button or a pedal.

■ Pick - Up

The dispenser 7550 has also a venture system which enables to maintain a small item in suspension at the top of the gun. By one easy action of the manual command or pedal, the system aspires. Once in position, you simply have to release the command to liberate the item.

FEATURES



| | |
|------------|--------------------------------|
| Material | Industrial metallic box |
| Models | 0 - 7Bar et 0 - 1Bar |
| Dimensions | 25.7 x 12.7 x 6.7 cm |
| Weight | 1,68kg |
| Control | Finger and pedal |
| Air entry | 7Bar |
| AC entry | 110 - 220 VAC |
| Rate | More than 600 cycles / minutes |

AIR - PULSE : ACCESSORIES

SYRINGE SUPPORTS

A handy and stable support which enables to hold the syringes.



FINGER SWITCH

The finger switch replaces the pedal which is directly connected to the dispenser.



TRAP FILTER

A trap filter for the syringe adapter which prevents the fluid to move back up in the dispenser.



NEEDLES KIT

A selection of 50 PosiDot needles for the Air - Pulse dispenser. Possibility of a bulk packaging to get a bigger quantity.



FILTER REGULATOR

The regulator is equipped with a drying filter which purifies air. It is recommended for dispensing cyanoacrylate.



Many other accessories and consumables are available on : www.gentec-benelux.com

CONSUMABLES

Accessories adapted on your needs





All our consumables are qualified and approved in France, precision - manufacture, without silicone and certified to be conform to the industrials demands.

SYNOPTIC

POSIDOT NEEDLES



P 22

OVAL NEEDLES



P 24

PRECISION NEEDLES



P 24

NEEDLES IN POLYPROPYLENE AND P.E.



P 24

BRUSH NEEDLES



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STAINLESS NEEDLES



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SPECIAL NEEDLES



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MIXING VALVES



P 29

AIR-PULSE CONSUMABLES



P 30

PRECIFLUID CONSUMABLES



P 31

POSIDOT NEEDLES

Straight but flexible

The needles made of polypropylene are burr-free and guarantee an accurate control of dispensing. They are recommended for use with fluids that react to metals or to avoid stripes.



| GAGE | 12.7mm | 38.1mm |
|------|---------|---------|
| 15G | Z532115 | Z534115 |
| 18G | Z532118 | Z534118 |
| 20G | Z532120 | Z534120 |
| 25G | Z532125 | Z534125 |

Perfectly straight stainless steel

PosiDot hub in polypropylene with in polished 304 stainless steel tubing out burr-free



| GAGE | 6.35mm | 12.7mm | 25.4mm | 38.1mm |
|------|---------|---------|---------|---------|
| 14G | Z511114 | Z512114 | Z513114 | Z514114 |
| 15G | Z511115 | Z512115 | Z513115 | Z514115 |
| 16G | — | Z512116 | Z513116 | Z514116 |
| 18G | Z511118 | Z512118 | Z513118 | Z514118 |
| 19G | — | Z512119 | Z513119 | Z514119 |
| 20G | Z511120 | Z512120 | Z513120 | Z514120 |
| 21G | Z511121 | Z512121 | Z513121 | Z514121 |
| 22G | Z511122 | Z512122 | Z513122 | Z514122 |
| 23G | Z511123 | Z512123 | Z513123 | Z514123 |
| 25G | Z511125 | Z512125 | Z513125 | Z514125 |
| 27G | Z511127 | Z512127 | Z513127 | Z514127 |
| 30G | Z511130 | Z512130 | N/A | N/A |

Teflon® coating

The Teflon® needles are burr-free guaranteed and assure accurate control of dispensing. They are recommended for use with fluids that react or adhere to metals like cyanoacrylates and prevent scratching.



| Ø INSIDE | 12.7mm | COLORS |
|----------|---------|--------|
| 0.51mm | Z592121 | Grey |
| 0.15mm | Z592125 | Pink |

Microdot

PosiDot hub in polypropylene with polished 304 Stainless Steel tubing out burr-free. Manufactured in a little size to dispense microdots.



| GAGE | 6.35mm | 7.92mm | COLORS |
|------|---------|---------|----------|
| 27G | — | Z518127 | Clear |
| 30G | — | Z518130 | Lavander |
| 32G | Z511132 | — | Yellow |

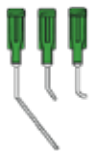
Conical HiFlow

The precision cone allows to flow a fluid without restriction reducing stringing and ooze. Polyethylene molded with UV light block. These needles are equipped with the PosiDot base.



| GAGE | FLEXIBLE | RIGID |
|------|----------|---------|
| 14G | Z520114 | Z580114 |
| 16G | Z520116 | Z580116 |
| 18G | Z520118 | Z580118 |
| 20G | Z520120 | Z580120 |
| 22G | Z520122 | Z580122 |
| 25G | Z520125 | Z580125 |
| 27G | Z520127 | Z580127 |

POSIDOT NEEDLES



Precisely Bent Stainless Steel

PosiDot hub in polypropylene with in polished 304 stainless steel tubing out burr-free. They are bent at 45 and 90 degrees angles.

| GAGE | 12.7mm 45° | 12.7mm 90° | 38.1mm 45° |
|------|------------|------------|------------|
| 14G | Z562114 | Z572114 | Z564114 |
| 15G | Z562115 | Z572115 | Z564115 |
| 16G | Z562116 | Z572116 | Z564116 |
| 18G | Z562118 | Z572118 | Z564118 |
| 19G | Z562119 | Z572119 | Z564119 |
| 20G | Z562120 | Z572120 | Z564120 |
| 21G | Z562121 | Z572121 | Z564121 |
| 22G | Z562122 | Z572122 | Z564122 |
| 23G | Z562123 | Z572123 | Z564123 |
| 25G | Z562125 | Z572125 | Z564125 |
| 27G | Z562127 | Z572127 | Z564127 |
| 30G | Z562130 | — | — |

| COLORS | GAGE | DIMENSIONS Ø ID. mm | DIMENSIONS Ø OD. mm |
|-------------|------|------------------------|------------------------|
| Olive | 14G | 1.54 | 1.83 |
| Amber | 15G | 1.36 | 1.65 |
| Dark Grey | 16G | 1.19 | n/a |
| Green | 18G | 0.84 | 1.27 |
| Light Green | 19G | 0.69 | 1.07 |
| Pink | 20G | 0.61 | 0.91 |
| Purple | 21G | 0.51 | 0.82 |
| Blue | 22G | 0.41 | 0.72 |
| Orange | 23G | 0.33 | 0.65 |
| Red | 25G | 0.25 | 0.52 |
| Clear | 27G | 0.20 | 0.42 |
| Lavander | 30G | 0.15 | 0.31 |
| Yellow | 32G | 0.10 | 0.23 |



Thick pastes

PosiDot hub in polypropylene with in polished 304 stainless steel tubing out burr-free. A length of 6,35mm designed to use thick pastes or charged pastes.

| GAGE | 6.35mm |
|------|---------|
| 18G | Z511118 |
| 20G | Z511120 |
| 21G | Z511121 |



Thin surface

PosiDot hub in polypropylene with in polished 304 stainless steel tubing out burr-free. The chamfered needle reduces surface tension and enables an easy dispensing of the fluid on thin surfaces.

| GAGE | 6.35mm |
|------|---------|
| 18G | Z511118 |
| 20G | Z511120 |
| 21G | Z511121 |



Anti-UV shield

One-piece shield slides over the tips and blocking light from penetrating the PosiDot polypropylene hub fits at the end of the syringe ideal for UV and light sensitive materials.

| SYRINGE | 12.7mm | COLORS |
|-----------|---------|--------|
| 5cc | 0993971 | Noir |
| 3.10-55cc | 0999971 | Noir |

DISPENSING NEEDLES

PRECISION NEEDLES



The conical form of these needles makes it possible to let the fluid easily flow with a progressive reduction and loss of charges. The result is that there is a bigger flow than when you use a stainless cannula needle for an identical pressure. Hereby you can work with less pressure in order to manage the material.

- Needle sizes inferior to 50 microns
- Codified and coloured needles
- High accuracy/low costs
- High flow

Code : A-100-00-00- XX (XX - Rate)

| GAGE | Ø ID | Ø OD |
|------|-------|-------|
| | mm | mm |
| 18 | 1.041 | 1.245 |
| 19 | 0.864 | 1.067 |
| 20 | 0.686 | 0.889 |
| 21 | 0.609 | 0.813 |
| 23 | 0.564 | 0.635 |
| 25 | 0.437 | 0.508 |
| 27 | 0.335 | 0.406 |
| 30 | 0.233 | 0.305 |
| 06 | 0.16 | 0.24 |
| 04 | 0.11 | 0.20 |
| 02 | 0.06 | 0.16 |



OVAL NEEDLES



These needles enable a dispensing of thick materials like putty and epoxies in flat lines.

| COLORS | GAGE | Ø OD |
|--------|------|---------------|
| Ambre | 15 | 1.98 x 0.41mm |



NEEDLES IN POLYPROPYLENE AND P.E.

Flexible needles made in polypropylene and plastic which can be cut at the requested length.



| GAGE | Ø ID |
|------|------|
| | mm |
| 14 | 1.60 |
| 16 | 1.19 |
| 18 | 0.84 |
| 20 | 0.58 |



The Teflon ® flexible needles in plastic can be cut at the requested length.



| GAGE | Ø ID |
|------|------|
| | mm |
| 15 | 1.32 |
| 18 | 0.84 |
| 20 | 0.58 |
| 25 | 0.25 |



BRUSH NEEDLES

SERIE B



PDS - 1005



PDS - 1006



PDS - 1007



PDS - 1008

| Flat | Flat | Flat | Flat |
|--|--|--|--|
| 4 mm | 5 mm | 6 mm | 6 mm |
| 42 mm x 6 mm | 42 mm x 6 mm | 42 mm x 6 mm | 42 mm x 6 mm |
| Caliber : 14,15,18,20,21, 22,23,25,27 G | Caliber : 14,15,18,20,21, 22,23,25,27 G | Caliber : 14,15,18,20,21, 22,23,25,27 G | Caliber : 14,15,18,20,21, 22,23,25,27 G |
| Flexible or rigid bristle | Flexible or rigid bristle | Soft bristle | Soft bristle |



PDS - 1009



PDS - 1010



PDS - 1011



PDS - 1012

| Flat | Flat | Flat | Conical |
|--|--|--|--|
| 7 mm | 10 mm | 11 mm | 4 mm |
| 42 mm x 6 mm | 42 mm x 6 mm | 42 mm x 6 mm | 42 mm x 6 mm |
| Caliber : 14,15,18,20,21, 22,23,25,27 G | Caliber : 14,15,18,20,21, 22,23,25,27 G | Caliber : 14,15,18,20,21, 22,23,25,27 G | Caliber : 14,15,18,20,21, 22,23,25,27 G |
| Soft bristle | Flexible or rigid bristle | Soft bristle | Soft bristle |

SERIE A

These brush needles are equipped with a luer lock hub tube in stainless steel wrapped in a nickel-plated tube. There exist 6 different bristle materials going from soft to very hard. They are available with different gages with the same international colour code as the general needles. Other sizes are available on demand.



CAMEL



SABLE



SABLE

| Stainless steel | Stainless steel | Stainless steel |
|-----------------|-----------------|-----------------|
| 16, 18, 22 G | 16, 18, 22 G | 16, 18, 22 G |



BRISTLE



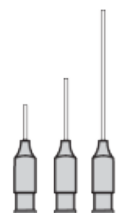
NYLON



TAKLON

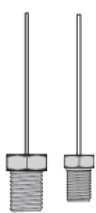
| Stainless steel | Stainless steel | Stainless steel |
|-----------------|-----------------|-----------------|
| 16, 18, 22 G | 16, 18, 22 G | 16, 18, 22 G |

STAINLESS STEEL NEEDLES



Laboratory/ Industry
Nickel-plated cannula with a polished
stainless steel 303 tube. LuerLock
connection.

| GAGE | 12.7 mm | 25.4 mm | 50.8 mm |
|------|---------|---------|---------|
| 8G | E121201 | E122201 | E124201 |
| 10G | E121191 | E122191 | E124191 |
| 11G | E121181 | E122181 | E124181 |
| 12G | E121171 | E122171 | E124171 |
| 13G | E121161 | E122161 | E124161 |
| 14G | E121151 | E122151 | E124151 |
| 15G | E121141 | E122141 | E124141 |
| 16G | E121131 | E122131 | E124131 |
| 18G | E121111 | E122111 | E124111 |
| 19G | E121101 | E122101 | E124101 |
| 20G | E121091 | E122091 | E124091 |
| 21G | E121081 | E122081 | E124081 |
| 22G | E121071 | E122071 | E124071 |
| 23G | E121061 | E122061 | E124061 |
| 25G | E121041 | E122041 | E124041 |
| 27G | E121021 | E122021 | E124021 |
| 30G | E121010 | E122010 | E124010 |



High pressure
Nickel-plated cannula prefect for high pressures.
Polished stainless steel 303 tube. Thread
1/4NPT or 1/8NPT.

| GAGE | THREAD | 12.7 mm | 25.4 mm | 50.8 mm |
|------|---------|---------|---------|---------|
| 7G | 1/4 NPT | E161211 | E162211 | E166211 |
| 8G | 1/4 NPT | E161201 | E162201 | E166201 |
| 10G | 1/4 NPT | E161191 | E162191 | E166191 |
| 11G | 1/4 NPT | E161181 | E162181 | E166181 |
| 12G | 1/4 NPT | E161171 | E162171 | E166171 |
| 13G | 1/4 NPT | E161161 | E162161 | E166161 |
| 14G | 1/4 NPT | E161151 | E162151 | E166151 |
| 15G | 1/4 NPT | E161141 | E162141 | E166141 |
| 16G | 1/4 NPT | E161131 | E162131 | E166131 |
| 18G | 1/4 NPT | E161111 | E162111 | E166111 |
| 19G | 1/4 NPT | E161101 | E162101 | E166101 |
| 20G | 1/4 NPT | E161091 | E162091 | E166091 |
| 7G | 1/8 NPT | E151211 | E152211 | E156211 |
| 8G | 1/8 NPT | E151201 | E152201 | E156201 |
| 10G | 1/8 NPT | E151191 | E152191 | E156191 |
| 11G | 1/8 NPT | E151181 | E152181 | E156181 |
| 12G | 1/8 NPT | E151171 | E152171 | E156171 |
| 13G | 1/8 NPT | E151161 | E152161 | E156161 |
| 14G | 1/8 NPT | E151151 | E152151 | E156151 |
| 15G | 1/8 NPT | E151141 | E152141 | E156141 |
| 16G | 1/8 NPT | E151131 | E152113 | E156113 |
| 18G | 1/8 NPT | E151111 | E152111 | E156111 |
| 19G | 1/8 NPT | E151101 | E152101 | E156101 |
| 20G | 1/8 NPT | E151091 | E152091 | E156091 |



Stainless steel needles are made for high or low pressure syringes, dispensers and valves.



These stainless steel needles can be used with high or low pressure dispensers or valves.

SPECIAL NEEDLES

Special dispensing needles designed par DL Technology are manufactured in one stainless steel block which enables to have the smoothest internal profile and to improve the liberated flow. Their outputs of chamfered needles have an embossed design to enable a close dispensing to the component during the dispensing and it enables to totally control the liberated quantity.

NEEDLES FOR A "DOUBLE" MICRO DISPENSING

- Applications : solder pastes, filled epoxies and other fluids which need a fixed distance between the needle and the substrate.
- Available sizes: 12 to 32G.
- Length: 6.35mm and 8.89mm



NEEDLES FOR SINGLE MICRO DISPENSING

- Applications: dispensing in electronics of solder pastes and filled epoxies.
- Available sizes: 12 to 32G.
- Length: 6.35mm and 8.89mm.



ENCAPSULATION NEEDLES

- Applications: encapsulation and under fill
- Available sizes: 12 to 28G.
- Length: 6.35mm and 8.89mm.



LUER NEEDLES

- Applications: epoxy dispensing, solder pastes and solder masks, filled adhesives.
- Available sizes: 22 to 28G.
- Length: 6.35mm



X FORM NEEDLES

- Applications: x form is designed to dispense filled epoxies in "die bonding" applications
- Sizes are going from 0.5x5mm to 5x5mm.
- Length: 6.35mm



CONICAL NEEDLES

- Applications: any types of application, they are perfect for very loaded or viscous fluids.
- Available sizes: 18 to 21G.
- Length: 6.35mm



CERAMIC NEEDLES

Ceramic needles are available in standard or Luer Lock version. They are non-porous similar to glass and allow a as fluids flow.

- Applications: Filled epoxies and other fluids.
- Available sizes: 22 to 28G.
- Length: 6.35mm














PERSONNALIZED NEEDLES

We are able to manufacture needles on request such as multiple outlets, with a specific angle, length and diameter.



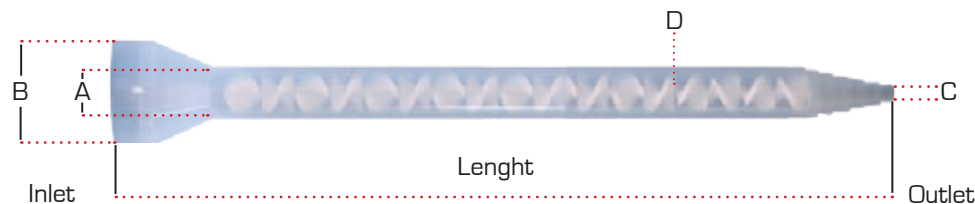
SELECTION GUIDE

| MM | V cc | | MM | V cc | |
|-----|---------|---|------|-------|---|
| 0.5 | 0.00003 |  | 7.6 | 0.116 |  |
| 0.8 | 0.0001 |  | | | |
| 1.0 | 0.0003 |  | 8.9 | 0.184 |  |
| 1.3 | 0.0005 |  | | | |
| 1.8 | 0.001 |  | 10.2 | 0.275 |  |
| 2.3 | 0.003 |  | | | |
| 2.8 | 0.006 |  | 11.4 | 0.391 |  |
| 3.3 | 0.009 |  | | | |
| 3.8 | 0.014 |  | 12.7 | 0.536 |  |
| 4.3 | 0.021 |  | | | |
| 4.8 | 0.029 |  | 19.1 | 1.210 |  |
| 5.6 | 0.046 |  | | | |
| 6.1 | 0.059 |  | | | |

| APPLICATIONS | CONIC | METAL | FLEXIBLE | TEFLON® |
|--------------------------|-------|-------|----------|---------|
| Very low viscosity fluid | | ✓ | ✓ | ✓ |
| Particle charged paste | ✓ | ✓ | ++ | |
| Micro-deposit | | ✓ | ++ | ✓ |
| Reactive fluid to metal | ✓ | | ✓ | ✓ |
| Deposits cavity | ++ | ✓ | ✓ | ++ |
| Product spreading | ✓ | ++ | ✓ | ++ |
| Fast setting adhesive | ✓ | ++ | ✓ | ✓ |
| Stripes, lines | ✓ | ✓ | ✓ | ++ |
| Fragile surface | ✓ | ++ | ✓ | ✓ |

| FLUIDS | CONIC | METAL | FLEXIBLE | TEFLON® |
|---------------------------|-------|-------|----------|---------|
| Adhesive | ✓ | ✓ | ✓ | ✓ |
| Anaerobic | ✓ | ++ | ✓ | ++ |
| Coating product | ✓ | ++ | ++ | |
| Cyanoacrylate | ✓ | ++ | ✓ | ✓ |
| Cyanoacrylate Gel | ✓ | ++ | ✓ | ++ |
| Epoxie | ✓ | ✓ | ✓ | |
| Grease | ✓ | ✓ | ✓ | |
| Light sensitive adhesives | | ++ | ++ | |
| Oil | ++ | ✓ | ✓ | ++ |
| Painting | ++ | ✓ | ✓ | |
| Silver epoxy | | ++ | | |
| Solder paste | ✓ | ✓ | ++ | |
| Solder mask | ✓ | ✓ | ++ | |
| Solvent | | ✓ | ✓ | ✓ |
| UV adhesive | ✓ | ++ | ++ | ++ |

STATIC MIXERS

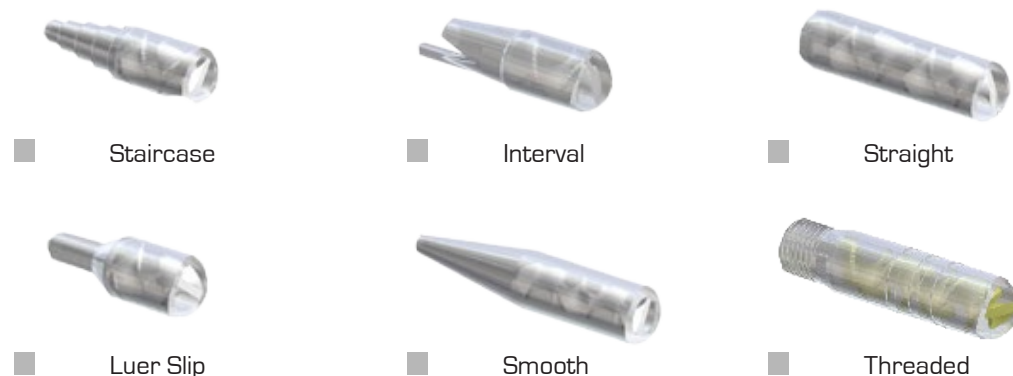


Elements to define: A: Inside diameter / B: Inlet Diameter
C: Outlet diameter / D: Number of inside elements

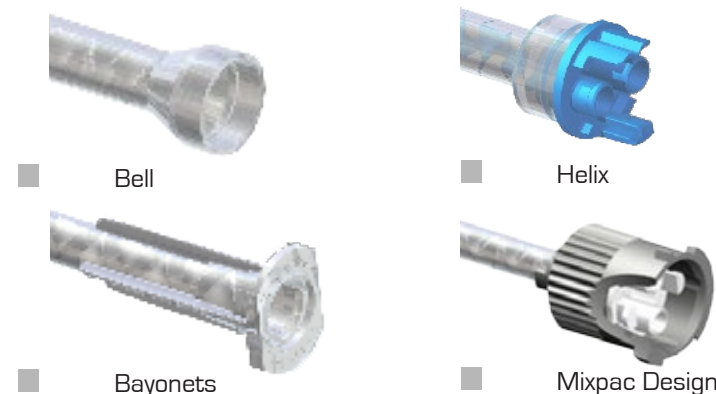
The choice of the mixer is made in function of many parameters:

- Viscosity difference between two mixed products
- The difference in the ratio between the two components
- The expected rate, the length and diameter

OUTLET TYPES



INLET TYPES



PRESENTATION

Static mixers have a long and narrow shape and are screwed to the extremity of the two-component cartridges.

Designed for rapid mixing of two-component fluids, they are made disposable. With the integrated mixing device, the two components are mixed through the elements in order to obtain perfect homogeneity. The contact between the two components is made only a few seconds before the application. The result is an uniform and perfectly controlled dispensing. There are all kinds of inlet and outlet types and sizes.

The turbo version being shorter, reduces space with a similar result.

Static mixers 50ml

The series of static plastic mixers MA and MX series are designed with a simple connection system : the twist-lock mounting. These mixers are intended primarily for cartridges (or syringes) 50 ml double with Parts A and B separated.

Different models available in function of your mixing ratios and the type of product : epoxy, silicone, urethane, acrylic, polyester etc.

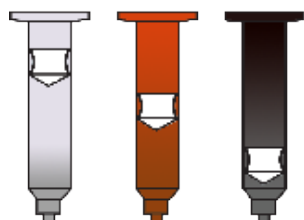
Static mixers 200 / 400ml

The series of static plastic mixers MC and MCX series is designed with a simple mounting system: 7 / 8- 9 thread.

These mixers are intended primarily for cartridges (or needles) Dual 200 ml and 400ml with Parts A and B separated. Different models to suit your mixing ratios and the type of product: epoxy, silicone, urethane, acrylic etc.

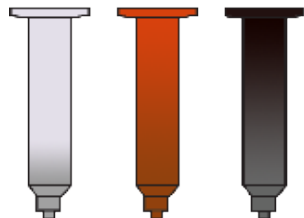
AIR - PULSE CONSUMABLES

SYRINGES WITH PLUNGER



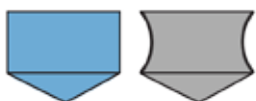
- Clear for normal fluids
 - Amber for UV sensitive fluids
 - Black for sensitive to visible light fluids
- Same number of syringes and plunger, protected by an anti-static bag.
Packed in boxes or bulk.

SYRINGES WITHOUT PLUNGER



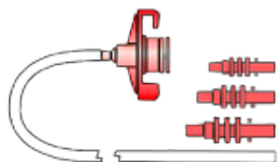
- Clear for normal fluids
 - Amber for UV sensitive fluids
 - Black for sensitive to visible light fluids
- Protected by an anti-static bag. Packed in boxes or bulk.

PLUNGER



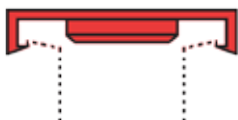
- The pistons push the product while scraping the walls of the syringe. They also maintain the product in the syringe to prevent leakage from the needle.
- No drip for thin to thick fluids
 - Right walls for very thick fluids

SYRINGES ADAPTER



- Made in polypropylene, the adapter in one piece allows to attach the syringe to the dispenser.
- The system includes a polyurethane tube of 1/8 inch and a connection lock.

WATERPROOF CAPS



- Caps available in 3, 5, 10, 30 and 55cc
- Free-contaminant pressure caps
- Available in orange and blue

| SIZE | CLEAR | AMBER | BLACK | Qty/PACK |
|------|---------|---------|---------|----------|
| 3cc | 0102051 | 0102061 | 0102071 | 50 |
| 5cc | 0103131 | 0103141 | 0103151 | 40 |
| 10cc | 0104171 | 0104181 | 0104191 | 30 |
| 30cc | 0106211 | 0106221 | 0106231 | 20 |
| 55cc | 0107471 | 0107481 | 0107491 | 15 |

| SIZE | CLEAR | AMBER | BLACK | Qty/PACK |
|------|---------|---------|---------|----------|
| 3cc | 0012051 | 0012061 | 0012071 | 50 |
| 5cc | 0013131 | 0013141 | 0013151 | 40 |
| 10cc | 0014171 | 0014181 | 0014191 | 30 |
| 30cc | 0016211 | 0016221 | 0016231 | 20 |
| 55cc | 0017471 | 0017481 | 0017491 | 15 |

| SIZE | DRIPFLOW | SWFLOW | Qty/PACK |
|------|----------|---------|----------|
| 3cc | 0022051 | 0032051 | 50 |
| 5cc | 0023131 | 0033131 | 40 |
| 10cc | 0024171 | 0034171 | 30 |
| 30cc | 0026211 | 0036211 | 20 |
| 55cc | 0027211 | 0097211 | 15 |

| SIZE | TUBE 0,9m | TUBE 1,9m | 3pi WITH FILTER |
|------|-----------|-----------|-----------------|
| 3cc | B820111 | B800111 | B840111 |
| 5cc | B820211 | B800211 | B840211 |
| 10cc | B820311 | B800311 | B840311 |
| 30cc | B820411 | B800411 | B840411 |
| 55cc | B820511 | B800511 | B840511 |

| SIZE | REFERENCE | Qty/PACK |
|------|-----------|----------|
| 3cc | 0272051 | 50 |
| 5cc | 0273131 | 40 |
| 10cc | 0274171 | 30 |
| 30cc | 0276211 | 20 |
| 55cc | 0277471 | 15 |



All our consumables are qualified and approved France, precision - manufacture, silicone-free and certified conform to industrial requirements.

| SIZE | CLEAR | AMBER | BLACK | Qty/PACK |
|------|---------|---------|---------|----------|
| 3cc | BD03CNR | BD03UVN | BD03UON | 50 |
| 5cc | BD05CNR | BD05UVN | BD05UON | 40 |
| 10cc | BD10CNR | BD10UVN | BD10UON | 30 |
| 30cc | BD30CNR | BD30UVN | BD30UON | 20 |
| 55cc | BD55CNR | BD55UVN | BD55UON | 15 |

| SIZE | REFERENCE | Qty/PACK |
|------|-----------|----------|
| 3cc | BDET003 | 1 |
| 5cc | BDET005 | 1 |
| 10cc | BDET010 | 1 |
| 30cc | BDET030 | 1 |
| 55cc | BDET055 | 1 |

| SIZE | ORANGE | BLUE | GREEN | Qty/PACK |
|------|---------|-------------|-------------|----------|
| 3cc | BDEC03N | BDEC03N - B | BDEC03N - G | 50 |
| 5cc | BDEC05N | BDEC05N - B | BDEC05N - G | 40 |
| 10cc | BDEC10N | BDEC10N - B | BDEC10N - G | 30 |
| 30cc | BDEC30N | BDEC30N - B | BDEC30N - G | 20 |
| 55cc | BDEC55N | BDEC55N - B | BDEC55N - G | 15 |

| SIZE | BLUE | Qty/PACK |
|--------|---------|----------|
| Unique | BDEB050 | 50 |

PRECIFLUID CONSUMABLES

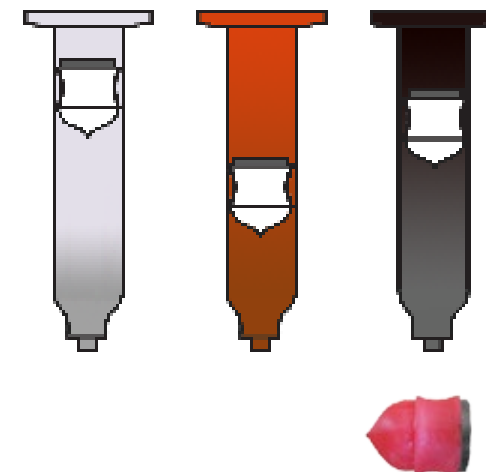
BarRELDROP SYRINGES WITH PLUNGERS

- Clear for normal fluids
- Amber for UV sensitive fluids
- Black for sensitive to visible light fluids

The rounded design of BarrelDrop improves fluid flow and minimizes turbulence and shear stress during filling and dispensing.

Packed in boxes or bulk.

Metal scraps PistonDrop pistons are molded accurately for uniform movements and a secure connection.



DROPTUBE HOLDER

The unique design of the DropTube locks the position of the syringe to the gun. They are available in 3,5,10 and 30cc, and are available upon specific request.



CAP

- Caps available in 3, 5,10, 30 and 55cc.
- Available in orange, blue and green



TIP CAP

- Caps for contaminant proof sealing
- Available in blue





VALVE

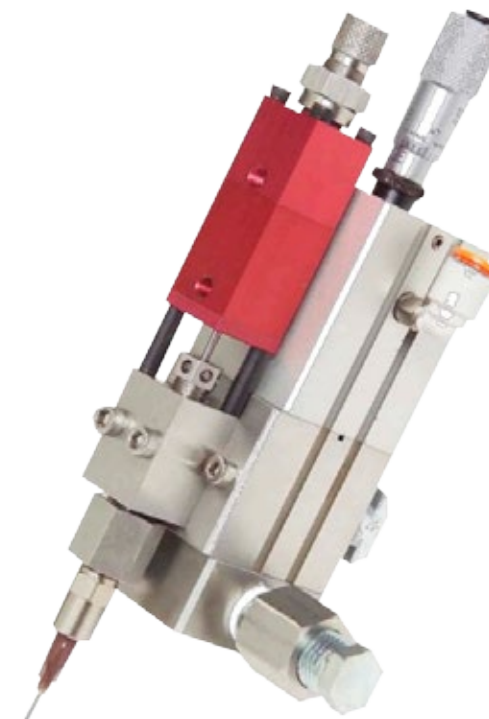
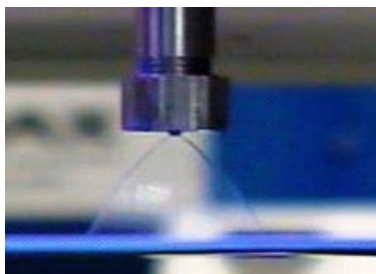
Where precision drives production

VALVES SYSTEMS

■ For all fluids

Acrylic / Activator / Glue / Anaerobic / Paste Solder / Chip Bonder /
Cyanoacrylate / Epoxy / Epoxy filled / RSS / Grease / Inks / Hiding /
Oil / Paint / Primer / Reatice RTV / Silicone / Solder paste / Solvents /
Urethane / UV Glue / Water

* List of non-limiting example



PRESENTATION APPLICATIONS REMARKS

In order to optimize your performance, Gentec offers a wide range of valves with all appropriate control systems, and also all tanks, pumps or pressurized cartridge holders.

Ideal for assembly lines, online production and manufacturing that require high autonomy and high fluid pressure, our volumetric metering valves allow the production of tens of millions cycles without interruption, nor drop formation nor maintenance.

To better meet your degrees of precision, your dispensing volume and your variety of fluids that require full compatibility, we have extended the range to specific valves models.

We are able to dose all kinds of fluids.

Each of our valves are tested in our manufacturing plant.

| | | |
|---|-------------|-------|
| ■ | Micro point | |
| ■ | Lines | |
| ■ | Potting | |
| ■ | Gluing | |
| ■ | Spraying | |
| ■ | Coating | |

SELECTION GUIDE

Front Closing Valve

Micro Valve

Two Component
Valve

Film

Suck Back
Valve



OPTIONS

| | FC100 | FC300 | FC300-C | FCM100 | FCM200 | VPX - 450 | VPX - 2K | FC100CF | SB200 | SB200 - C |
|------------------------|-------|-------|---------|--------|--------|-----------|----------|---------|-------|-----------|
| Micrometer Option | ✓ | ✓ | ✓ | S | S | | | S | | |
| Interchangeable Nozzle | | | | ✓ | ✓ | | ✓ | ✓ | | |
| Handheld Operation | ✓ | ✓ | ✓ | ✓ | | | | | ✓ | ✓ |

APPLICATION

| | FC100 | FC300 | FC300-C | FCM100 | FCM200 | VPX - 450 | VPX - 2K | FC100CF | SB200 | SB200 - C |
|---------------|-------|-------|---------|--------|--------|-----------|----------|---------|-------|-----------|
| Micro Dots | | | | ✓ | ✓ | ✓ | | | | |
| Dots | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ |
| Bead / Gasket | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ |
| Potting | ✓ | ✓ | ✓ | | | ✓ | ✓ | | ✓ | ✓ |
| Bonding | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ |
| Spray | | | | | | | | | | |
| Coating | | | | | | | | ✓ | | |

SELECTION GUIDE

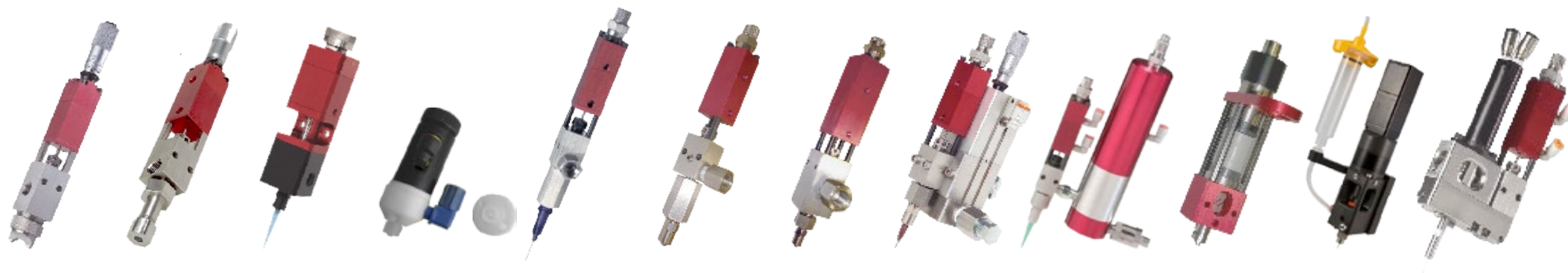
Front Closing
Spray Valve

Diaphragm Valve

Metering Valve

Auger Valve

Jetting



| FCS300 | FCS300ES | CA300 | CA753 | MV200 | MV250 | MV300 | MV500 | MV600 | SV200 | SVX | RC |
|--------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-----|----|
|--------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-----|----|

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|--|--|---|---|--|
| S | S | ✓ | | ✓ | S | ✓ | | | | ✓ | |
| ✓ | ✓ | ✓ | S | ✓ | ✓ | ✓ | | | ✓ | | |

| FCS300 | FCS300ES | CA300 | CAM200 | MV200 | MV250 | MV300 | MV500 | MV600 | SV200 | SVX | RC |
|--------|----------|-------|--------|-------|-------|-------|-------|-------|-------|-----|----|
|--------|----------|-------|--------|-------|-------|-------|-------|-------|-------|-----|----|

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | ✓ | ✓ | ✓ | | | | ✓ | ✓ |
| | | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | ✓ | ✓ |
| | | ✓ | ✓ | | | | ✓ | ✓ | ✓ | ✓ | ✓ |
| | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| ✓ | ✓ | | | | | | | | | | |
| ✓ | ✓ | | | | | | | | | | ✓ |

Many others models on : www.gentec-benelux.com

TO ORDER, PLEASE CALL +32 2 351 1800

| | Front Closing Dispense Valve | | | Micro Valve | | Two Component Valve | | Film | Suck Back Valve | |
|--------------------|------------------------------|-------|---------|-------------|--------|---------------------|----------|---------|-----------------|-----------|
| FLUIDE | FC100 | FC300 | FC300-C | FCM100 | FCM200 | VPX - 450 | VPX - 2K | FC100FC | SB200 | SB200 - C |
| Acrylic | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Activator | ✓ | | | ✓ | ✓ | ✓ | ✓ | | | |
| Adhesive | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | | ✓ | |
| Anaerobic | | | | | | | | | | |
| Brazing Paste | | | ✓ | | | ✓ | | | | ✓ |
| Chip Bonder | | | | ✓ | ✓ | ✓ | | | | |
| Conformal Coating | ✓ | | | ✓ | ✓ | | | ✓ | | |
| Cyanoacrylate | | | | | | | | | | |
| Epoxy | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | | ✓ | |
| Filled Epoxy | | | ✓ | | | ✓ | ✓ | | | ✓ |
| Flux | ✓ | | | ✓ | ✓ | ✓ | | | | |
| Grease | ✓ | ✓ | ✓ | | | ✓ | | | ✓ | ✓ |
| Heat Sink Compound | | | ✓ | | | ✓ | | | | ✓ |
| Ink | ✓ | | | ✓ | ✓ | ✓ | | ✓ | | |
| Masking | ✓ | ✓ | | | | ✓ | | | ✓ | |
| Oil | ✓ | ✓ | | ✓ | ✓ | ✓ | | | ✓ | |
| Paint | ✓ | ✓ | | | | ✓ | | | ✓ | |
| Primer | ✓ | | | ✓ | ✓ | ✓ | | ✓ | | |
| Reactive | ✓ | | | ✓ | ✓ | ✓ | | | | |
| RTV | ✓ | ✓ | ✓ | | | ✓ | | | ✓ | ✓ |
| Silicone | ✓ | ✓ | ✓ | | | ✓ | ✓ | | ✓ | ✓ |
| Solder paste | | | ✓ | | | | | | | ✓ |
| Solvent | ✓ | | | ✓ | ✓ | ✓ | | ✓ | | |
| Urethane | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| UV Curable | ✓ | ✓ | | ✓ | ✓ | ✓ | | ✓ | ✓ | |
| Water | ✓ | | | ✓ | ✓ | ✓ | | ✓ | ✓ | |

TO ORDER, PLEASE CALL +32 2 351 1800

METERING VALVES (MV)

MV metering valves are linear motion valves. The MV series (200, 250, 300 and 500) offer great precision dispensing and are ideal for one-component material dispensing as dosing, filling, potting or assembly.

Made with quality materials : stainless steel fluid chamber, seals in Viton or Teflon®, divorced valve control body in anodized aluminum.

Each valve is precisely manufactured with high quality standards to ensure the reliability of operations and are laboratory tested before shipment. The design is durable, the maintenance is easy and the calibration is quick.

COMPATIBLE PRODUCTS

Glue / Activator / Lubricants / Oils / RTV / Epoxy/
Solvent / Alcohol / Fluid grease / Inks / Painting

DISPENSING NEEDLES

The performance of the dispensing system also depends on the precision of needles. A starter kit (free silicone) is supplied with the valve.

IN OPTION

- XYZ automated dispensing robot :
These 3 or 4 axes tables offer excellent repeatability of the drops.
- Tank under pressure from 1 to 200 L
- Extrusion pump from 1KG to 200KG
- Pressurized cartridge holder

MV200



- Micro-deposits (0,0015cc to 0,0120cc)
- Liquids, fluids and pastes
- Minimum repeatability of $\pm 2\%$
- Manual or automatic applications
- Simple and easy to calibrate
- Applications requiring high precision

| | |
|------------------------|------------------------|
| Dimension | 160mm x 19mm |
| Weight | 340g |
| Maximum pressure fluid | 26,6 Bar |
| Pressure control | 4,8 Bar |
| Volume filled | 0,0015cc - 0,0120cc |
| Fluid chamber | 303 stainless steel |
| Valve body | Hard anodized aluminum |
| Rate | > 600 cycles / min. |

MV250



- Small deposits (0,0001cc to 0,0120cc)
- Liquids, fluids and pastes
- Minimum repeatability of $\pm 2\%$
- Simple and easy to calibrate
- Manual or automatic applications
- Provides excellent repeatability of the drops

| | |
|------------------------|------------------------|
| Dimension | 162mm x 19mm |
| Weight | 227g |
| Maximum pressure fluid | 20,7 Bar |
| Pressure control | 4,8 Bar |
| Volume filled | 0,0015cc - 0,0120cc |
| Fluid chamber | 303 stainless steel |
| Valve body | Hard anodized aluminum |
| Rate | > 600 cycles / min. |

METERING VALVES (MV)



MV300

- Average deposits [0,010cc to 0,125cc]
- Liquids, fluids and pastes
- Minimum repeatability of $\pm 1\%$
- Simple and easy to calibrate
- Manual or automatic applications
- Applications requiring high precision



MV400

- Large deposits [0,15cc to 4,5cc]
- Liquids, fluids and pastes
- Minimum repeatability of $\pm 2\%$
- Simple and easy to calibrate
- Semi-automatic or manual applications
- Applications requiring high precision



MV500

- Large deposits [0,10cc to 4 cc]
- Liquid, fluid, pasty and very thick
- A minimum repeatability of $\pm 2\%$
- Reinforced pressure system for emptying the fluid chamber for very thick product
- 5: 1 boost

| | |
|------------------------|------------------------|
| Dimension | 203mm x 29,2mm |
| Weight | 277g |
| Maximum pressure fluid | 20,7 Bar |
| Pressure control | 4,8 Bar |
| Volume filled | 0,010cc - 0,125cc |
| Fluid chamber | 303 stainless steel |
| Valve body | Hard anodized aluminum |
| Rate | > 600 cycles / min. |

| | |
|------------------------|------------------------|
| Dimension | 229,1mmx121,2mm |
| Weight | 1361g |
| Maximum pressure fluid | 82,7 Bar |
| Pressure control | 5,5 to 8 Bar |
| Volume filled | 0, 15cc -4,5cc |
| Fluid chamber | 303 stainless steel |
| Valve body | Hard anodized aluminum |
| Rate | > 600 cycles / min. |

| | |
|------------------------|------------------------|
| Dimension | 159mm x 59 mm |
| Weight | 1361g |
| Maximum pressure fluid | 34,47Bar |
| Pressure control | 5,5 to 8Bar |
| Volume filled | 0,10cc - 4cc |
| Fluid chamber | 303 stainless steel |
| Valve body | Hard anodized aluminum |
| Rate | > 600 cycles / min. |

DIAPHRAGM VALVES (CA)

CA dispensing valves are diaphragm valves. The CA series (300, 200 and 100) offer great precision dispensing and are ideal for the determination of mono-component products for dosing, filling, potting or assembly.

Made with quality materials: Delrin and Teflon® for the fluid chamber, seals in Teflon® or Viton and a patented diaphragm silicone covered with a Teflon film. The valve body is hard-anodized aluminum with an ergonomic shape and size. Each valve is precisely machined with high quality standards to ensure the reliability of operations and are laboratory tested before shipment. The design is durable, maintenance is easy and calibration is quick.

COMPATIBLE PRODUCTS

Cyanoacrylates / Anaerobic / Glue / Activator / Lubricants / Oils / Epoxies / Solvents - Alcohols / Fluid Grease / Ink - Painting / Electrolyte

DISPENSING NEEDLES

The performance of the dispensing system also depends on the precision of needles. A starter kit (free silicone) is supplied with the valve.

IN OPTION

- XYZ automated dispensing robot : These 3 or 4 axes tables offer excellent repeatability of the drops.
- Tank under pressure from 1 to 200 L
- Extrusion pump from 1KG to 200KG
- Pressurized cartridge holder



CA300

- Small to medium quantities
- Liquids fluids
- Ideal for automated applications
- Steering dual effect
- Accurate and repeatable with a perfect seal
- Automatic applications or pedal
- Only the drive of the diaphragm is moving, which implies a very low maintenance

| | |
|------------------------|-------------------------|
| Dimension | 128mm x 29.21mm |
| Weight | 265,2g |
| Maximum pressure fluid | 4,1 bar |
| Control pressure | 4,1 – 6,9 bar |
| Fluid chamber | Delrin® and Teflon® |
| Valve body | Hard anodized aluminum |
| Diaphragm | Silicone coated Teflon® |
| Rate | > 600 cycles / min. |



CAM200

- 100% manual. Dispense by «operator judgement»
- Small to large quantities
- Liquids fluids
- Ideal for applications that require operator action filed by constant rate
- Ergonomic grip
- Simple and quick to start up. Few maintenance.
- Only 100gr

| | |
|------------------------|-------------------------|
| Dimension | 163.83 mm x 55.88 mm |
| Weight | 105g |
| Maximum pressure fluid | 7 bar |
| Control pressure | 4,1 – 6,9 bar |
| Fluid chamber | Delrin® and Teflon® |
| Valve body | Hard anodized aluminum |
| Diaphragm | Silicone coated Teflon® |
| Rate | NA |

DIAPHRAGM VALVES (CA)



REMARKS

CA753

- Small to large quantities
- Liquid fluids
- Rate more than 600 cycles per minute
- Lightweight and compact
- Few or no maintenance
- Ideal for dispensing cyanoacrylates, anaerobic and other reactive fluids.

| | |
|------------------------|------------------------|
| Dimension | 86.02 mm x 43.90 mm |
| Weight | 174.1 |
| Maximum pressure fluid | 7 bar |
| Control pressure | 5 - 6.9 bar |
| Fluid chamber | Acetal |
| Valve body | Hard anodized aluminum |
| Diaphragm | Inert polymer |
| Rate | > 600 cycles / min. |

HIGH PRESSURE VALVES (FC) (SB 200)

FC metering valves and SB 200 are high-pressure valves. The FC and SB 200 series valves were designed specifically for products with high / medium viscosity and have a very good resistance to very high pressures.

Designed with quality materials: 303 stainless steel (316 on request) for the fluid chamber, seals in Viton or Teflon®, divorced valve control body in anodized aluminum

Each valve is precisely manufactured with high quality standards to ensure the reliability of operations and are laboratory tested before shipment. The design is durable, the maintenance is easy and calibration is quick.

COMPATIBLE PRODUCTS

Grease / Sealant / Lubricant / RTV / Epoxy / Silicone / Glue

DISPENSING NEEDLES

The performance of the dispensing system also depends on the precision of needles. A starter kit (free silicone) is supplied with the valve.

IN OPTION

- XYZ automated dispensing robot :
These 3 or 4 axes tables offer excellent repeatability of the drops.
- Tank under pressure from 1 to 200 L
- Extrusion pump from 1KG to 200KG
- Pressurized cartridge holder



FC100

- Medium quantities
- Liquids, fluids and pastes.
- High resistance to pressure (241bar)
- Minimum repeatability $\pm 5\%$
- Simple and easy to calibrate
- Manual or automatic applications
- Suck - Back

| | |
|------------------------|------------------------|
| Dimension | 152mm x 19,5mm |
| Weight | 170,2g |
| Maximum pressure fluid | 241bar |
| Control pressure | 2,5 à 7 bar |
| Fluid chamber | Stainless Steel |
| Valve body | Hard anodized aluminum |
| Joints | Viton and Teflon® |
| Fluid input | 1 / 8NPT editable |
| Rate | > 600 cycles / min. |



FC300

- Significant quantities
- Liquids, fluids and pastes.
- High resistance to pressure (241bar)
- Minimum repeatability $\pm 5\%$
- Simple and easy to calibrate
- Manual or automatic applications
- Suck - Back

| | |
|------------------------|------------------------|
| Dimension | 201mm x 29,21mm |
| Weight | 539g |
| Maximum pressure fluid | 241 bar |
| Control pressure | 2,5 à 7 bar |
| Fluid chamber | Stainless Steel |
| Valve body | Hard anodized aluminum |
| Joints | Viton and Teflon® |
| Fluid input | 1 / 4 NPT |
| Rate | > 600 cycles / min. |

NO CONTACT VALVE (FCM)



SB 200

- High pressure type «snuff back»
- Average high viscosity products
- 2x more speed higher than the valves of the FC series
- For fluids with aggressive expansion
- Provided with a carbide stem to improve the usury resistance

| | |
|------------------------|--------------------------------------|
| Dimension | 115mm x 25mm |
| Weight | 430g |
| Maximum pressure fluid | > 100 Bar |
| Control pressure | 4.1 à 6.9 Bar |
| Fluid chamber | Inox |
| Valve body | Hard anodized aluminum |
| Inlet | 1/4" NPT Female |
| Outlet | Male Luer Lock or 1/4" NPT Female |

The FCM100 is a non contact valve for dispensing dots and lines of low to medium viscosity material with a substrate.

The complete system includes an FCM average deposits valve, a simple or expanded controller (trigger pedal or 5V signal), as well as fittings, hoses and other accessories.

Usually a tank, a cartridge or pump provides the feeding to this valve. The quality of each component, the inspection and quality control ensure reliable overall performance and durability. Simple and easy to calibrate, FCM valve is used in automatic applications on platforms

APPLICATIONS FCM100 ET RC200

Silicone deposited before insertion of a piston in a syringe. Dispense solvent in a syringe. Dispense paint in a tube.

DISPENSING NEEDLES

The performance of the dispensing system also depends on the precision of needles. A starter kit (free silicone) is supplied with the valve.

IN OPTION

- XYZ automated dispensing robot :
These 3 or 4 axes tables offer excellent repeatability of the drops.
- Tank under pressure from 1 to 200 L
- Extrusion pump from 1KG to 200KG
- Pressurized cartridge holder



FCM100

- Amount of very small volume deposits
- Valve designed for jetting. Dots and lines.
- Low to medium viscosity
- Minimum accuracy of $\pm 2\%$
- Distance: 1 to 100 mm from the support
- High speed dosing

| | |
|------------------------|------------------------|
| Dimension | 152 mm x 19 mm |
| Weight | 340 g |
| Maximum pressure fluid | 240 bar |
| Control pressure | 2 à 7 Bar |
| Fluid chamber | Inox 303 |
| Valve body | Hard anodized aluminum |
| Range of viscosity | 1 cps - 20 000 cps |
| Fluid input | 1 / 8 NPT |
| Rate | > 600 cycles / min. |

AUGER VALVE (FCS) (RC200)

LOW VOLUME LOW PRESSURE : LVLP TECHNOLOGY

FCS series valves and RC 200 were specifically designed to uniformly perform a film of product without residual elements.

They are ideal for dispensing low to medium viscosity single component materials and mark-tracking applications. These low-pressure spray valves are stainless steel and incorporate the technology of double-acting valves associated with a compact pneumatic motor and a custom spray nozzle.

Designed with quality materials: 303 stainless steel for the fluid chamber, or Viton seals Teflon® separated valve body in anodized aluminum.

COMPATIBLE PRODUCTS

Coating / Fluid Grease / Marking Ink / Lubricant / Oil / Silicone / Solvent - Alcohol / Adhesive / Ink - Painting / Activator

DISPENSING NEEDLES

The performance of the dispensing system also depends on the precision of needles. A starter kit (certified silicone) is supplied with the valve.

IN OPTION

- XYZ automated dispensing robot :
These 3 or 4 axes tables offer excellent repeatability of the drops.
- Tank under pressure from 1 to 200 L
- Extrusion pump from 1KG to 200KG
- Pressurized cartridge holder



FCS300

- Small to medium quantities
- Works on the principle of low pressure - low volume
- Separation of fluid and air to the valve output
- Points of 5 mm diameter
- Manual or automatic applications

| | |
|------------------------|---------------------|
| Dimension | 168.4 mm x 22 mm |
| Weight | 170g |
| Maximum pressure fluid | > 200 bar |
| Control pressure | 2,1 à 7 bar |
| Fluid chamber | Inox 303 |
| Joints | Viton and Teflon |
| Efficiency | 99% |
| Rate | > 600 cycles / min. |



RC 200

- Depositing neat film and uniform films
- Liquid and fluid products
- Minimum accuracy of + -2%
- 360 ° coverage
- Interchangeable nose
- Homogeneous distribution

| | |
|------------------------|------------------------|
| Dimension | 229,1mmx121,2mm |
| Weight | 1361g |
| Maximum pressure fluid | > 80 Bar |
| Control pressure | 5,5 à 8 Bar |
| Fluid chamber | Inox 303 |
| Valve body | Hard anodized aluminum |
| Rate | > 600 cycles / min |

AUGER VALVE (SV200) (SVX)

The SV200 series valves have been designed specifically for charged products containing particles and specific viscosity materials that may for example deteriorate under pressure. The pressure on the product being very low serves only to drive the product into the pitches.

Micro Valve SVX is specifically designed to dispense the micro volumes product in an accurate and repeatable manner.



*Exist in 8, 16 et 32 pitch



COMPATIBLE PRODUCTS SV200

Cyanoacrylates / Anaerobic / Glue / Activator /
Lubricants / Oils / Epoxies / Solvents - Alcohols / Fluid
Grease / Ink - Painting / Electrolyte

DISPENSING NEEDLES SV200

The performance of the dispensing system also depends on the precision of needles. A starter kit (free silicone) is supplied with the valve.

IN OPTION SV200

- XYZ automated dispensing robot :
These 3 or 4 axes tables offer excellent repeatability of the drops.

- Very small to medium amounts
- Charged products, solder pastes, adhesives, epoxies
- Deposits of about 0,0001cc
- Minimum 3% accuracy
- 3 versions : very hard stainless steel screws in 32, 16 and 8 pitch depending on the size of the filler and the viscosity

| | |
|------------------------|---------------------------|
| Dimension | 139.7 mm x 69mm |
| Weight | 265g |
| Maximum pressure fluid | 6,9 Bar |
| Fluid chamber | SS |
| Engine | 24V DC Servo |
| Yield | 99% |
| Auger Screw | Reinforced Steel hardness |
| Rate | > 400 cycles / min. |

SVX

- Designed for micro volumes
- The brushless motor controls the rotation of the screw
- Programmable encoder
- More than 57,000 increment per 360degree revolution
- Fixed distribution or footed needle
- Auger and fluid chamber in carbide

| | |
|------------------------|---------------------------|
| Dimension | 167 mm x 72 mm |
| Weight | 367g |
| Maximum pressure fluid | 6,9 Bar |
| Fluid chamber | Inox |
| Engine | Servo Motor |
| Yield | 0.13mm |
| Worm | Steel reinforced hardness |
| Rate | > 600 cycles / min. |

TWO COMPONENT VALVES (PC) (MD2)

PC series valves are ideal for the dispensing of points, cords, potting or encapsulation. They can be integrated with an automated dispenser or mixer according to your operations and are compatible with static mixers. In addition, the valves are separated to avoid a possible contamination of the control part.

MD2 distribution valve mixes and dispenses precisely waterproof products and multi-component adhesives. It has a full modular design adapted to different installation requirements and no special tools are required.

COMPATIBLE PRODUCTS

Epoxies / Urethanes / Silicones and other viscous products

DISPENSING NEEDLES

The performance of the dispensing system also depends on the precision of needles. A starter kit (free silicone) is supplied with the valve.

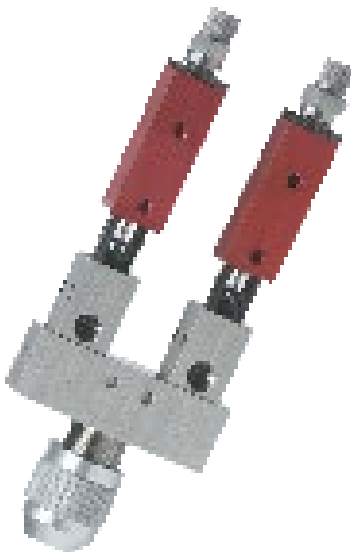
IN OPTION

- XYZ automated dispensing robot :
These 3 or 4 axes tables offer excellent repeatability of the drops.
- Tank under pressure from 1 to 200 L
- Extrusion pump from 1KG to 200KG
- Pressurized cartridge holder
- Gears pump

PC100

- Stainless steel fluid body
- Divorced valve to avoid possible contamination
- Fluid part and portion control completely separated to prevent pollution and residue
- Reversible valve seat
- Closing the valve assisted by spring for secure distribution
- High pressure capability. Uniform treatment
- For single ratios 1: 1

| | |
|--------------------|---------------------|
| Dimensions | 167.64mm x 22.23 mm |
| Weight | 623g |
| Range of viscosity | 1 cps – 400,000 cps |
| Control pressure | 2,1 à 7 bar |
| Maximum pressure | 34.7bar |
| Fluid chamber | Inox |



MD2

- Suitable for a wide range of products
- Reduces maintenance time and costs while maximizing uptime
- Designed with fewer parts. Easy to clean
- Streamlines maintenance and servicing
- Fully modular design which adapts to different installation requirements
- No specific tools needed




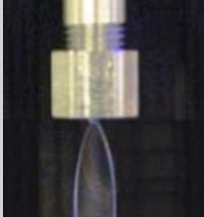
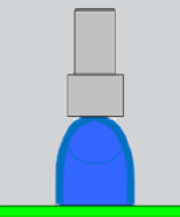


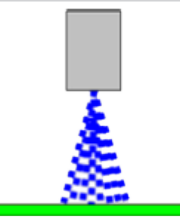



More information about this valve in chapter



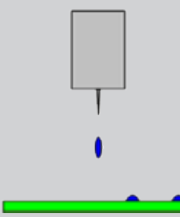


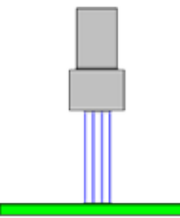


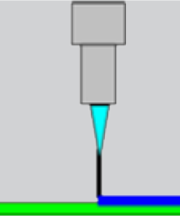
Dispensing systems

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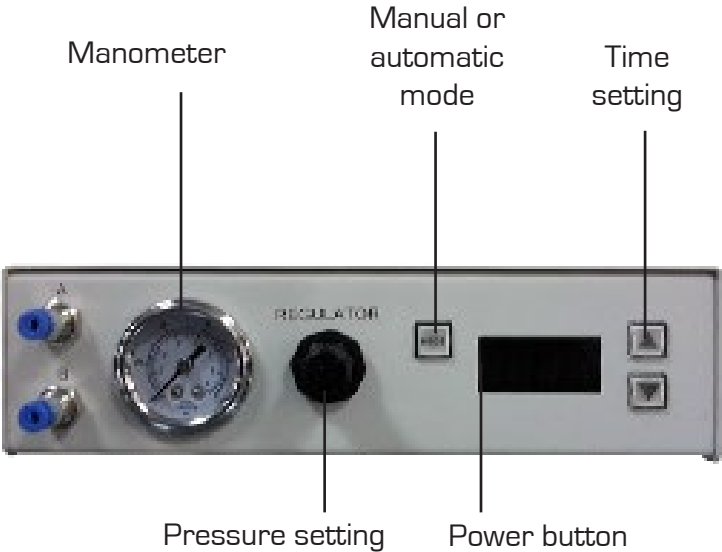
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SELECTION GUIDE : COATING VALVE

| VALVE | IMAGE | DISPENSE | PATTERN | APPLICATION |
|---|--|--|--|---|
| FC100-CF Film Coat Valve |  |  |  | For Solvent Based Material or Low Viscosity Fast Large Area Coating to PCB Side Selective Coating to Leads of QFP, SOP |
| FCS300-ES Atomizing Spray Valve |  |  |  | For All Coatings Fine Edge Definition Thin Coating Thickness Covering 3D Shaped Component Selective Spray Coating |
| FCS300-F Atomizing Spray Valve |  |  |  | For All Materials Thin Thickness Coating Covering 3D Shaped Component Wide Spray Pattern |

| VALVE | IMAGE | DISPENSE | PATTERN | APPLICATION |
|---|--|--|--|---|
| FCM100 Micro Dispense Valve |  |  |  | For Solvent Based Material or Low Viscosity «Non-Contact» Dispensing Small Dots, Thin Line |
| FC100C4 Flow Coat Valve |  |  |  | For Solvent Based Material or Low Viscosity Fast, Large Area Coating Shower for 3D Shaped Component |
| FC100- MC Needle Dispense Valve |  |  |  | For All Materials Outline Dispense before Area Coating Dam & Fill Dispense Beads or Dots |

STANDARD CONTROLLER : ST100



PRESENTATION

ST100 valve controller is used for the majority of the valves. Using a preset time during the application provides a precise quantity of fluid, repeatable, from low to high viscosity products.

Valve controllers can be used either manually or inserted in automatic lines. Controllers combined with the use of the valve, ensure the control of the dispense with high accuracy.

The dispense is repeatable with a precise setting of the digital time, a very short response time and high-quality electronical components.

No programming, mechanical modification, the adjustment is quick and easy, and does not require production shutdown.

All communicates with any PLC or interface by simply exchanging dry-5V-24V contact.

- MV
- CA
- FC
- SB 200
- FCM
- RC 200

SPECIFICATIONS

| | |
|----------------|---------------------------|
| Input Voltage | 90-120 VAC and 220 VAC |
| Dimensions | 25,7cm x 15,08cm x 2,63cm |
| Weight | 1,68kg |
| Cadence | > 600 cycles/min. |
| Control signal | 5v-24v |
| Air inlet | 5,6 à 7 bar |
| Opening | Within 4mm connector |
| Closing | Within 4mm connector |
| Air Supply | Within 6mm connector |

SPECIFIC CONTROLLERS



VALVE CONTROLLER : FCS SERIES

This valve controller is used to control the spray valves of the FCS series.

It has a second solenoid valve to control the atomization and precise adjustment of the pressure, and also the size of the spray jet. The result is an exceptional spraying control without mechanical adjustment or programming.

SPECIFICATIONS

| | |
|---------------------|---------------------------|
| Input Voltage | 90-120 VAC et 220 VAC |
| Dimensions | 25,7cm x 15,08cm x 2,63cm |
| Weight | 1,79kg |
| Atomization (Spray) | 0 - 7 bar et 0 - 2 bar |
| Control signal | 5v-24v |
| Air inlet | 5,6 à 7 bar |
| Opening | Within 4mm connector |
| Closing | Within 4mm connector |
| Air Supply | Within 6mm connector |



VALVE CONTROLLER : VALVE SV200

The SVC100 controller can control the SV200 valve. The controller adjusts the rotational speed of the screw, the snuff-back by reversing the direction of rotation and the pressure of the pilot on the container (syringe or cartridge). The controller comes with a foot pedal for manual use.

The steering can be performed by a controller or a cartesian table using either serial port (9pin) or outlet pedal.

SPECIFICATIONS

| | |
|------------------|-----------------------|
| Input Voltage | 115VAC et 230VAC |
| Dimensions | 24.1cm x 16.8cm x 7cm |
| Weight | 2,27 kg |
| Internal voltage | 24V DC |
| Repeat | 0.005 sec |
| Air inlet | 6,9 Bar |
| Opening | Within 4mm connector |
| DCosing | Within 4mm connector |
| Air Supply | Within 6mm connector |



PROGRAMMABLE CONTROLLER

In addition of collecting all the standard controller functions, this advanced controller features a memory system that allows you to record your programs and get exactly the same results.

This controller can benefit specific development according to your requests. Thus, each parameter can be modified to suit your needs.

BENEFITS

| |
|--------------------------------|
| End of cycle signal |
| Robust and efficient |
| Emergency stop |
| Ergonomic grip |
| Malfunction alarm |
| Specific developement |
| 15 customizable programs |
| Advanced information exchange |
| Multi-function steering valves |



GRACO

PR70

DISPENSING SYSTEMS

Two-component dispenser

DISPENSING SYSTEM PR70

BENEFITS

Fixed or variable ratio

Dispensing accuracy of 1%

Accuracy ratio 1%

Perfectly volumetric

Different pump sizes and ratios

Two-component system at affordable price

Wide range of options available (heating - agitation etc.)

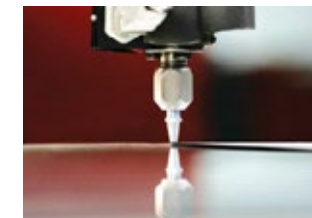
All stainless steel system for a long term use

Requires no maintenance

Optimisation of tightness

Adjustable power

Reinforcement of steel parts in Chromex™



PRESENTATION

Major actor in the field of fluid transfer systems, Graco™ focused since many years on the technical excellence of his products.

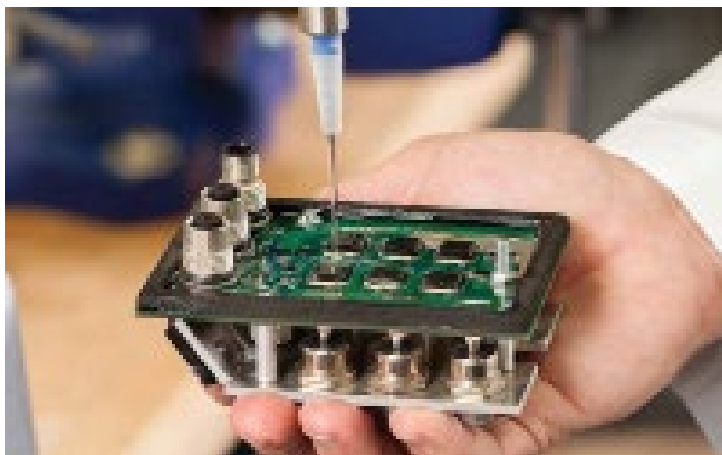
Main distributor of the brand in the Benelux, Gentec offers systems with fixed and variable ratios of all PR70 range, dispense systems recognized for their quality with a unanimous success throughout all users. The complete serie of dispense systems PR70, dispenses, mixes and distributes accurately two components material, of a high-low viscosity, for the flows, gaskets, sealing, pottings, coatings and filling of the syringe.

So all the features you want are grouped into a single, compact and modular machine.

INDUSTRIES

- | | |
|-------------------------|------------------------|
| ■ Electronics | ■ Consumer electronics |
| ■ Composites | ■ Sporting goods |
| ■ Aeronautics | ■ Appliances |
| ■ Automotive components | ■ Medical |
| ■ Equipment assembly | |

DISPENSING SYSTEM PR70



PR70 E (LCM)



PR70 (DM)

PR70 (ADM)



PR70 V (ADM)

| System | System configuration | No | Yes | Yes | Yes |
|--------------|--|-------------|-------------|-------------|-------------|
| Ratio | Fixed ratio | 1:1 to 12:1 | 1:1 to 12:1 | 1:1 to 12:1 | NA |
| | Variable ratio | NA | NA | NA | 1:1 to 24:1 |
| Doses | Number of doses | 1 | 5 | 50 | 50 |
| | Doses based upon percentage of the piston stroke | Yes | No | No | No |
| | In weight doses | No | Yes | Yes | Yes |
| | Dispense > to the piston stroke | No | Yes | Yes | Yes |
| | Sequencing of dispense | No | In option | Yes | Yes |
| Supervision | Pressure control | No | In option | In option | In option |
| | Control ratio | No | In option | In option | In option |
| Data Control | Local control module (lcm) | Yes | No | No | No |
| | Display module (dm) | No | Yes | No | No |
| | Advanced display module (adm) | No | In option | Yes | Yes |
| | Gel timer | No | Yes | Yes | Yes |
| | Plc compatibility | No | Yes | Yes | Yes |
| | Usb download | No | In option | Yes | Yes |

DISPENSING SYSTEM : PR70



MD2 Valve

High-pressure accuracy with multiple seat styles and adjustable snuffback for clean, precise dispensing

Intuitive User Interface

Digital shot size entry, machine monitoring and feedback for total control

Compact Benchtop Unit

Stable, strong machine base for secure installation. Small footprint saves valuable space

Long-Life Design

Optimized pump support, seal design, and Chromex rods provide twice the life of other systems

Multiple Feed Systems

A variety of feed package options are available :

- Polyethylene tanks
- Stainless steel tanks
- Off-board tanks for high-volume applications and reduced material refills
- Accumulators for high-viscosity materials

Fluid Control Module

Offers a simplified wiring system and board-level diagnostics
Modular approach is easier to operate, easier to maintain

Proven Ratio Accuracy

Multiple tube sizes to pinpoint specific target ratios and deliver ratio accuracy to $\pm 1\%$

Vacuum



A standard basic machine with standard optional elements

PERFORMANCES PR70 ET PR70V

■ Rugged, reliable and durable

- Long-lasting wear parts mean lower cost of ownership
- Cast pump bodies for improved seal alignment
- Chromex™ shafts and Severe Duty™ cylinders combined with stainless steel fittings provide long pump life with no corrosion
- Shaft seals designed for extended life and easy replacement
- Preventive maintenance counter to plan system rebuilds around your production schedule
- Linear thrust bearings eliminate side loading to maximize seal life and performance

■ Handles most two-component materials

- Stainless steel design reduces the chance of a material incompatibility
- Positive displacement pumps deliver ratio accuracy to $\pm 1\%$
- Linear transducer monitors piston velocity to provide ratio assurance, and reduce scrap and re-work
- Shot size ranges from 2 to 70 cc's
- Ratio range from 1:1 to 24:1 with variable drive

DISPENSE SYSTEMS : PR70 V



Variable ratio system

Changes the machine with different ratios. Supports all formulations



Optional accumulator

Allows you to manipulate high viscosity products

Advanced Display Module

- Advanced Control screen for extended functions, including:
- Recirculation
 - Programmable distribution, including independent sequences and up to 50 doses
 - Cycle counters
 - Keypad for easy data entry

Option dispensing valve

Choose between a fixed installation or a manually operated handle for better adaptation to your application

PERFORMANCES PR70 ET PR70V

REMARKS

■ Reliability and durability to maximize system performance

- Body molded pumps for better alignment of seals.
- The piston rods Chromex and Severe Duty cylinders piston associated with stainless steel fittings ensure a long service life of the pump without corrosion.
- Seals piston rods designed for extended life and easy replacement.
- Preventive maintenance counter to advise

- maintenance of the unit based on the production schedule.
- Linear thrust bearings which eliminate side loads to maximize the lifetime and the performance of seals.

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DISPENSING SYSTEM : PR70 E



Multiple Feed Systems

- Polyethylene tanks
- Stainless steel tanks
- Off-board tanks for high-volume applications and reduced material refills

Compact Benchtop Unit

Stable, strong machine base for secure installation
Small footprint saves valuable space

Long-Life Design

Optimized pump support, seal design, and Chromex rods provide twice the life of existing systems

MD2 Valve

High-pressure accuracy with multiple seat styles and adjustable snuffback for clean, precise dispensing

Local Control Module (LCM)

Digital shot size entry

Proven Ratio Accuracy

Multiple tube sizes to pinpoint specific target ratios and deliver ratio accuracy to $\pm 1\%$

PERFORMANCES

■ The entry system

The PR70 E is the ideal model for anyone who is looking for a simple and intuitive dispense system, but providing reliable and accurate performance at a much lower cost than the PR70 or PR70 V.

Indeed, all the major functions you need are in this compact and modular design. The PR70E, mixes and dispenses the precise shot from low to medium viscosity for molding, sealing, coating and filling syringe.

REMARKS

■ Included :

- Fixed ratio basis
- Pipe 0.8 m long
- PE tank 8L
- MD2 valve
- Local Control Module (LCM)

PR70 - PR70V : SPECIFICATIONS



Stainless Steel Tank
(SST)

■ Tank size

- Capacity 3 to 7.5 liters (stainless steel, AI)
- Capacity 8 liters (polyethylene, PE + AI)
- Capacity 30 to 60 liters (separated + AI)

■ Our options for tanks

- Covers for agitation kits
- Covers for degassing kits
- Covers for drying kits
- Dust covers

■ Machine options

- Control gear
- Fluid recirculation
- Power systems
- Heating piping and tank
- Auto - filling tanks
- Input / Output

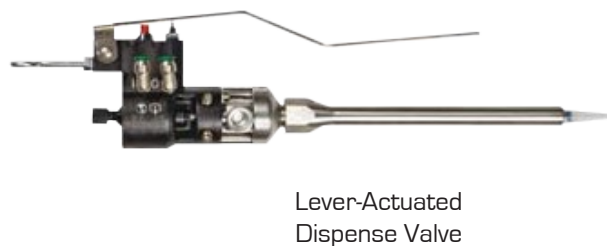
INSTRUCTIONS MANUALS

| | |
|--|--------|
| PR70 with Display Module Operation & Maintenance | 312393 |
| PR70/PR70v with Advanced Display Module | 312759 |
| MD2 Valve Instructions and Parts | 312185 |
| PR70/PR70v Repair and Parts | 312760 |
| PR70/PR70v Feed System | 312394 |
| PR70v Integrated Heat | 312761 |

SPECIFICATIONS

| | |
|-----------------------------------|--|
| Metering Pump Effective Area | 0.124 – 1.49 in2 (80 – 960 mm2) per side |
| Small Air Cylinder Effective Area | 7.07 in2 (4560 mm2) |
| Large Air Cylinder Effective Area | 15.9 in2 (10260 mm2) |
| Maximum Stroke Length | 1.50 in (38.1 mm) |
| Minimum Stroke Length | 0.23 in (5.8 mm) |
| Volume per Cycle | 0.12 – 4.3 in3 (2 – 70 cc) |
| Pump Cycles per 1L [.26 gal] | 500 - 14.3 |
| Ratios (fixed) | 1:1 to 12:1 depending on cylinders selected |
| Ratios (variable) | 1:1 to 24:1 depending on cylinders selected |
| Maximum Fluid Working Pressure | 3000 psi (207 bar, 20.7 MPa) |
| Maximum Air Input Pressure | 100 psi (7 bar, 0.7 MPa) |
| Maximum Cycle Rate | 30 cpm |
| Maximum Operating Temperature | 70° C (160° F) nylon pistons 50° C (120° F) UHMWPE pistons or PE tanks |
| Air Inlet Size | 1/4 NPT(f) |
| Pump Fluid Outlet Size | -03, -04, -06, -08 or -12 JIC fittings for 3/16 in (4.8 mm), 1/4 in (6.4 mm), 3/8 in (9.5 mm), 1/2 in (12.7 mm), 3/4 in (19.1 mm) hoses |
| Wetted Parts | 303/304, 17-4 PH, hard chrome, Chromex™, carbide, chemical resistant O-rings, PTFE, nylon, UHMWPE |
| Weight – PR70 | 120 lb (55 kg) typical with two 7.5 l tanks 330 lb (150 kg) typical with two 60 l tanks |
| Weight – PR70v | 160 lb (73 kg) typical with two 7.5 l tanks 370 lb (168 kg) typical with two 60 l tanks |
| Weight – PR70e | 100 lb (46 kg) typical without tanks |
| Electrical Power | 100-240V 50/60Hz 1 phase for machine – 80 watts 208–240V 50/60Hz 1 phase for heat – 10 kW max 120 or 240V 50/60Hz 1 phase for on-board agitators |
| Compressed Air | < 10 scfm typical (varies with cycle time) |

MD2 DISPENSING VALVE



Minimizes maintenance time and costs while maximizing dispense time

Designed with fewer parts and is easy to clean

Streamlines maintenance and service

Complete modular design adapts to different installation needs

No unique tools required

Adjustable Snuff-back Control

Dispenses material only where you need it

Independant Air Cylinder

Improves mean time to repair (MTTR)

Chromex™ Shafts

Extends shaft life to better handle abrasive materials

Grease Isolation Chamber

Ideal for moisture-sensitive materials
Accessible grease fittings for easy maintenance

All-SST Wetted Section

Maximizes material compatibility



Adjustable Inlet Position

Flexibility during system installation
Minimizes dead spaces in fluid path

HFR METERING SYSTEM



SPECIFICATIONS

| | |
|-----------------------------------|---|
| Dimensions | 122 x 150 x 86 cm (48W x 59H x 34D in) |
| Mix ratio range | Fixed ratio, 1:1 to 16:1, shot to continuous flow |
| Ratio tolerance range | Up to +1% |
| Fluid filtration | 20 mesh standard |
| Minimum Flow rates | 7.5 cc/s (0.12 gpm) |
| Maximum Flow rates | 316 cc/s (5.0 gpm) |
| Fluid inlets without feed kits | 3/4 npt |
| Max. mixed fluid working pressure | 207 bar, 20,7 MPa (3000 psi) |
| Min. pump inlet fluid pressure | 0.3 bar, 0,03 MPa (50 psig) |
| Max. ambient temperature | 49°C (120°F) |
| Weight Base machine | 287,6 kg (634 lb) |
| Weight Fully configured | 393,7 kg (868 lb) |
| Wetted parts : | |
| Pumps (A and B) | Stainless steel, PTFE, UHMWPE, tungsten carbide |
| Manifold | Aluminum or stainless steel |
| Applicator | Varies based on applicator chosen |
| Primary heaters | Aluminum, carbon steel |
| Fluid viscosity range | Until 30 000 cp |

PRESENTATION

The piston rods Chromex and Severe Duty cylinders associated with stainless steel fittings ensure a long service life of the pump without corrosion. Seals piston rods designed for extended life and easy replacement. Preventive maintenance counter to predict maintenance of the unit based on the production schedule. Linear thrust bearings which eliminate side loads to maximize the lifetime and the performance of seals.

With the Graco HFR Metering System, you accurately measure a specific ratio and volume – first time, every time. As the machine dispenses material, it automatically fine-tunes and adjusts to achieve a consistent material flow or pressure. With a +1% ratio accuracy, you reduce scrap and rework with accurate, on-ratio dispensing.

The Graco HFR Metering System is a high-quality meter, mix and dispense system that offers more technology and functionality – at a lower price than traditional custom RIM systems. A low initial investment allows you to participate in the marketplace where it may not have been possible before.

The system's horizontal pumps can be rebuilt at your facility, eliminating costly rebuilds and the need for backup pumps. Less downtime, reduced maintenance costs, and lower parts inventory mean more profits for your company.

HFR : PERFORMANCES

Advanced Display Module

Provides easy setup, monitoring and system diagnostics
USB drive for data reporting
Stores 100 shot sizes and five sequences of 20 positions each

IsoGuard Select System

Prevents isocyanate crystallization – less maintenance, more uptime



Fully Configurable

Select what you need for your material and application - no more, no less
Shorter lead time than custom solutions
Standard wear parts are quickly available



Motor Control Module

In constant communication the Advanced Display and Motor Control Modules make real-time adjustments to deliver a highly precise dispense

Power Distribution Box

Modular assembly replaces complex wiring

Graco Z-Series Horizontal Pumps

Provide precision control to eliminate pressure spikes
Positive displacement pumps are easy to service with easy-to-replaced cartridge packings, seals and pumps seats

Compact Design

Small footprint saves valuable space in your plant
122 x 150 x 86 cm (48W x 34D x 59H in)

ADVANTAGES

A modular design gives you the freedom and flexibility to configure the components that are essential for your specific application requirements – no more, no less. Standard configured equipment can be delivered to your door much faster than a custom solution.

And with Graco's established global distribution network, service is there when you need it.



- Provides precision control to eliminate pressure spikes
- Positive displacement pumps are easy to service
- "Real" positive displacement pump
- Elastomeric seals and positive ball checks
- Wide variety of materials – Fillers, high viscosity, abrasive fluids
- Close loop control on pressure and flow

REMARKS

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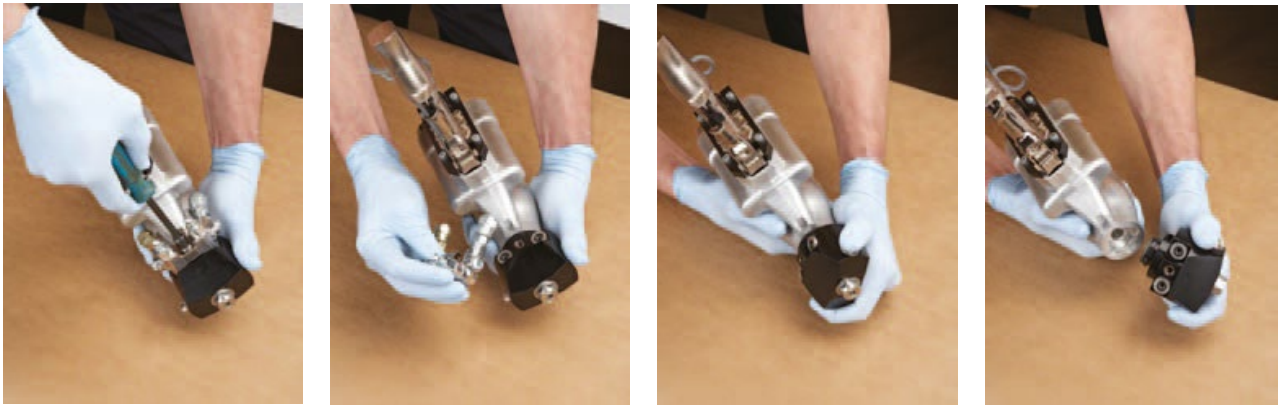
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GRACO EP POUR GUN



Easy Mixhead Rebuilds

PRESENTATION

The Graco EP Pour Gun is sure to change the way the industry thinks about mixheads. That's because it's engineered to be reliable, light and versatile with features and technology that reduce your cost of ownership in the long run.

The Graco EP Pour Gun is truly an innovative advancement for the polyurethane processing industry. First of all, it's engineered with technology that allows for on-site rebuilds. Which means significantly less downtime and no more expensive backup mixheads. Secondly, it's affordable, with a low initial investment. Best of all, the Graco EP Pour Gun provides accurate on-ratio dispensing and handles a variety of materials.

- | | |
|---|---|
| ■ Low initial investment | ■ Maintains accurate mix ratio |
| ■ Updated technology allows for on-site rebuilds | ■ Responsive trigger delivers repeatable and accurate shots |
| ■ Reduces downtime | ■ Weighs 6.4 to 7.4 lb (2.9 to 3.4 kg) |
| ■ Eliminates expense of backup mixheads | ■ Manual and automated capabilities |
| ■ Processes both rigid and flexible polyurethanes | ■ Graco HFR Metering System™ |
| ■ Handles filled materials | |

PR70 - HFR : ADVANCED DISPLAY MODULE

MATERIALS

Polyurethane foams

Polyurethane elastomers

Epoxies

Silicones

Polyureas

Soft filled materials

APPLICATIONS

Polyurethane processing

Coating

Potting

Encapsulating

Vacuum infusion



ADVANCED DISPLAY MODULE

The Graco HFR Metering System features intuitive user interfaces based on the Graco Control Architecture,™ a modular system of processing and control components. Products using Graco Control Architecture provide similar interface functionality across your plant and simplify training. Maintenance and service is easier too, thanks to built-in troubleshooting tools and simple, modular part replacement.

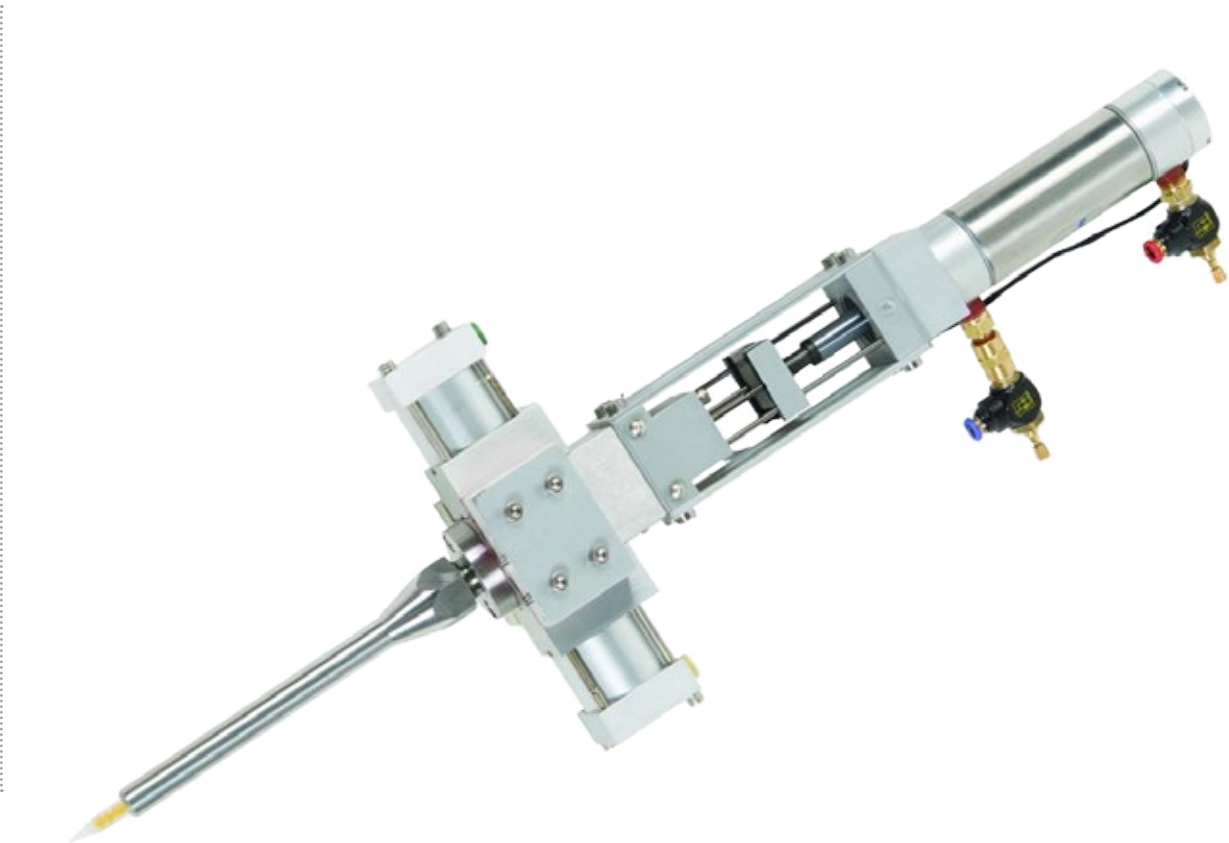
Material dispensing reaches a new level of precision due to proprietary algorithms and adaptive technology. The Graco

Metering System uses advanced controls to monitor the system and control the dispensing and material conditioning processes. The system is capable of producing either a constant pressure material output or a constant flow rate material output.

The advanced Display Mode is easy to understand and operate. Because it's easy to use, you spend less time on training and reduce operator error as well.

- Programmable shot sizes and sequencing
- Easy configuration of integrated temperature controls
- Immediate access to error/event history
- Material usage and pump cycle counter
- Simple interface for machine calibration
- Allows you to archive valuable setup parameters

PD44 DISPENSING SYSTEM : HIGH PERFORMANCE VALVE



BENEFICES

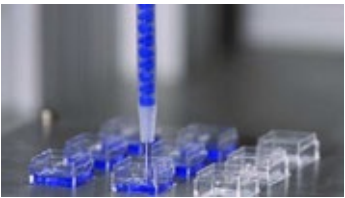
The PD44 is specifically designed to dispense small amounts of water thin to paste viscosity materials from 0.005cc's to 5cc's. The metering rods are matched with machined seals for improved seal life. There are no material hoses between the rod pump outlets and mixer inlet which eliminates potential ratio or shot size problems (phasing) due to hose expansion and contraction.

Improved low viscosity spool design

Rod positive displacement metering

Precise mix ratio and shot repeatability

Eliminates cleaning and potential hardening of materials in the valve



PRESENTATION

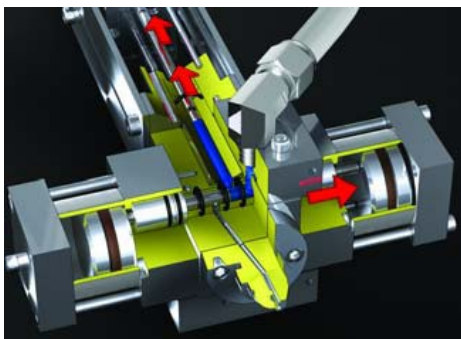
The patented PD44 valve features balanced inlet/outlet spool assemblies that do not displace material while shifting from the reload to the dispense position. This allows pressure feeding of the "A" and "B" components up to 1200 psi during reloading while isolating the materials from the mixer inlet. Upon shifting to the dispense position without any material displacement, an accurate volume of "A" and "B" components is injected into the disposable mixer inlet by rod displacement metering technology.

The PD44 provided by Gentec is specifically designed to dispense small amounts of thin water to paste viscosity materials from 0.005cc's to 5cc's. The metering rods are matched with machined seals for improved seal life. There are no material hoses between the rod pump outlets and mixer inlet which eliminates potential ratio or shot size problems (phasing) due to hose expansion and contraction.

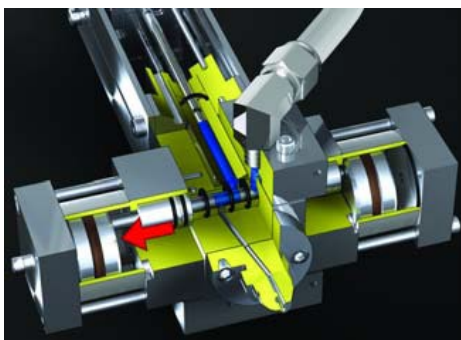
REMARKS

PD44: HOW IT WORKS

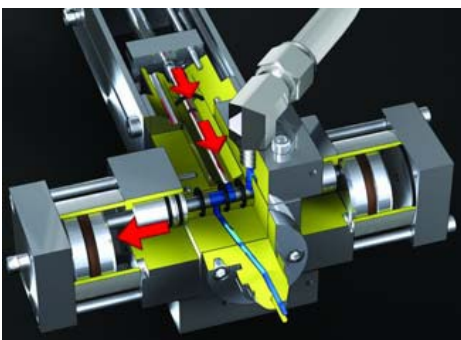
RELOAD



SHIFT



DISPENSE



RELOAD

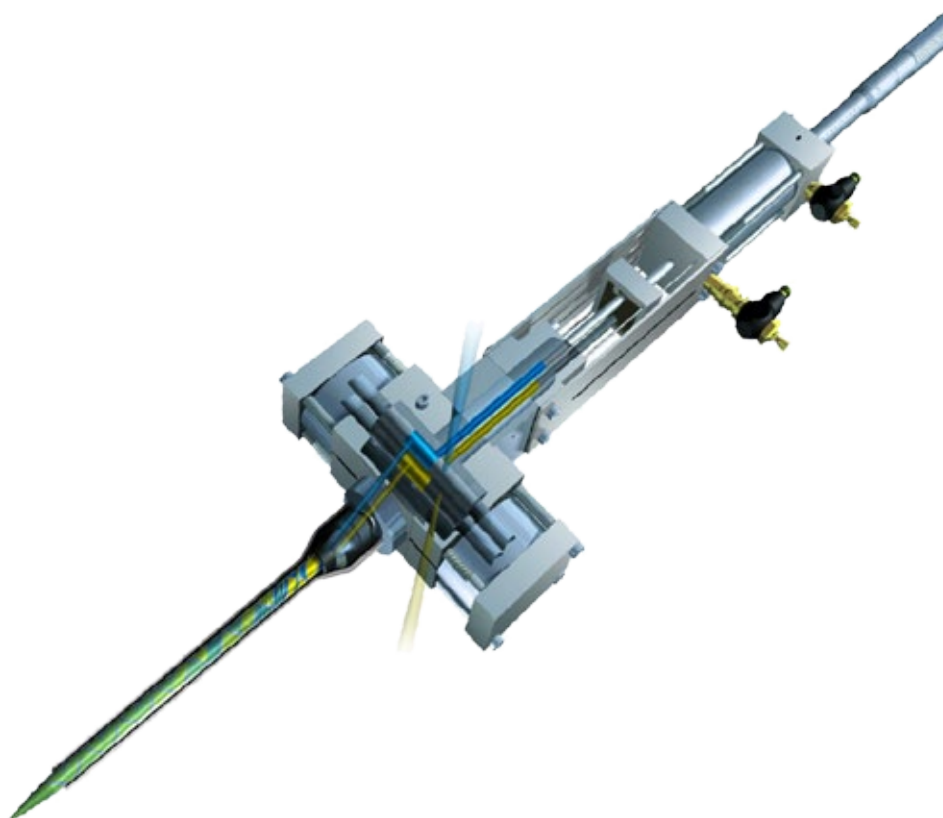
- Spools shift to the right
- Material feed inlets are opened
- Materials are transferred into the metering chambers by a pressurized feed system
- Outlet ports are blocked
- Metering rods are retracted to a precise position determining the volume of each material

SHIFT

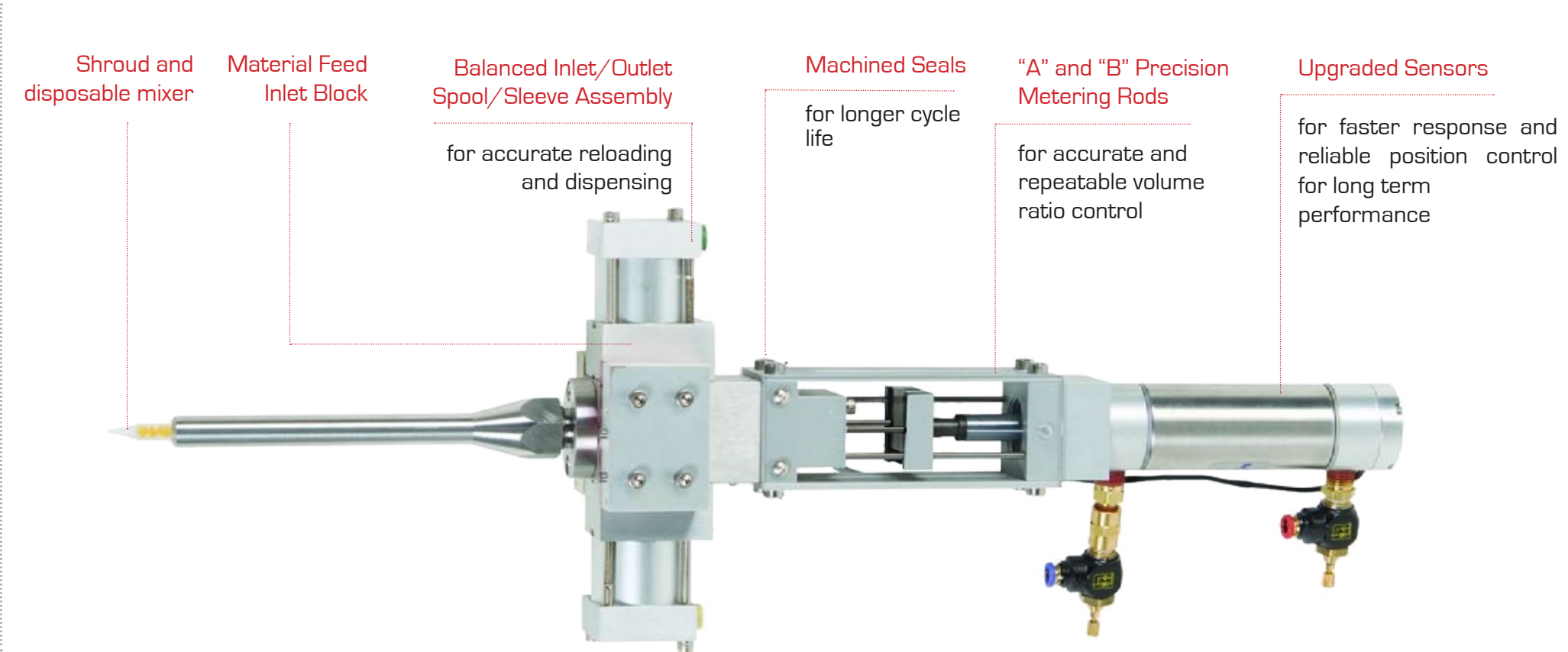
- The balanced spool assemblies shift to the dispense position
- Material path to the mixer inlet is opened
- Material feed inlet ports are blocked
- Metering rods remain in the retracted position

DISPENSE

- Metering rods drive down
- A and B materials are simultaneously dispensed from the metering chamber into the disposable mixer
- A and B materials are dispensed at the predetermined ratio
- Upon completion of the dispense stroke, the metering rod and spool assemblies shift back to the reload position



PD44 : VALVE



PATENTED PD44 METERING VALVES

Manual control of shot size



Pneumatically-driven valves have micrometer adjuster to easily set the desired shot size. The micrometer features a locking mechanism to fix the selected shot size

Programmable Shot size control



Linear actuator provides shot size control.

Useful feature when a different programmable shot size is required.

Programmable flow and shot size control



Electric drive motor allows programmable shot size and flow rate. This is important when adapting the PD44 valve to X-Y-Z motion tables and to provide precise flow rate control when applying continuous beads of material.

| | |
|--|--|
| "A" and "B" Metering Rods | <p>A wide selection of standard size metering rods are available depending on the ratio and shot sizes desired. Custom sized metering rods can be machined to accommodate most material ratios.</p> <p>The standard construction of the main body is 303/304 stainless steel.</p> <p>The standard construction of the metering assembly is a nitrided tool steel rod and a nitrided tool steel tube.</p> <p>Optional materials include stainless steel rod with UHMW polyethylene tube and a tungsten rod with UHMW polyethylene tube.</p> |
| Ratio Range | 1:1 to 25:1 by volume depending on the size of the metering rods selected. |
| Shot Size Capability | 0.005 cc's to 5.0 cc's depending on the size of the metering rods selected. |
| Cycle Rate | <p>Up to 60 cycles per minute with pneumatic drive</p> <p>Max cycle depends on the length of the stroke, size of metering rods, material viscosity, mixer, outlet needle employed and any back pressure or flow limitations created by the product into which material is being dispensed.</p> |
| Balanced Inlet/Outlet Spool Assemblies | <p>The pneumatically actuated spool assemblies keep the «A» and «B» materials separate in the valve and isolate the material inlets from the outlets to the mixer. The standard construction of the spool assembly is a nitrided tool steel spool and a nitrided tool steel sleeve.</p> <p>Optional materials include stainless steel spool with UHMW polyethylene sleeve and a tungsten spool with UHMW polyethylene sleeve.</p> |
| Material Feed System | <p>Pressure feed systems including cartridges, tanks and transfer pumps, can be employed to feed «A» and «B» components up to 1200 PSI.</p> <p>The appropriate selection of feed equipment is dependent on material viscosity and processing requirements.</p> |
| Accessories | Level controls, agitators, follower plates, vacuum degassing, nitrogen blanketing, etc. are readily available |
| Mixers | <p>Disposable Posimixers are available in sizes from 1/8" (3.175mm) to 3/8" (9.525mm) in diameter and in a various number of elements to provide through blending of most reactive resin systems.</p> <p>Lab tests may be required to determine the specific mixer required for a particular application.</p> |
| Disposable Needles | <p>From 14 gauge to 30 gauge.</p> <p>A variety of Luer Lock needle sizes are available to adapt to the Posimixer outlets.</p> |
| Metering Drives | <p>The standard drive is an air cylinder with a precise manual stroke adjustment.</p> <p>Additional drive options include:</p> <p>A linear resistive transducer air cylinder providing electronic shot size control.</p> <p>A stepper or servo ready lead screw actuator for precise shot and flow control</p> |
| Machine Controls | <p>Free standing table-top control panels are available for air cylinder and motor driven valves.</p> <p>Standard hardware includes: Monochrome touch screen, audio alarm and foot switch.</p> <p>Standard features include: Purge timer, cycle counter and totalizer.</p> <p>Motor driven controls include a NEMA 23 stepper motor featuring shot size and flow rate control</p> |
| Dimensions | <p>Body - 15" (381mm) H x 4 1/8" (105mm) L x 7 9/16" (192mm) Width</p> <p>Mixer - Add 4" (100mm) to 14 3/4" (375mm) H to the height.</p> <p>Pneumatic Controller - 15" (381mm) W x 12" (305mm) D x 13" (330mm) Height</p> <p>Electric Controller - 20" (508mm) W x 8" (203mm) D x 20" (508mm) Height</p> |
| Weight | <p>PD44 valve only - 6.35 kg - 6.80 kg (depends on drive).</p> <p>PD44 bench stand and controller - 22.68kg to 34.02kg (depends on options)</p> |
| Service Requirements | <p>Normal industrial compressed air supply - 0.1 (0.0028 m³/min) to 2.58 CFM (0.07m³/min) at 80psi (5.62 Kg/cm²).</p> <p>Electric - 120/230V, 50/60Hz</p> |

CONTROLLER



PNEUMATIC CONTROLLER

- Used for Manual and Programmable dispensing
- Shot Size Control

Sensors in the valve monitor the position of the spool assemblies and metering rods. These sensors interface with the control panel to assure proper valve operation. PD44 systems can help you save material and labour costs for a variety of dispensing applications, whether you are using manual, semi-automated or automated manufacturing processes.



ELECTRIC CONTROLLER

- Used for Programmable dispensing
- Flow and Shot Size

This free-standing table-top controller includes a NEMA 23 stepper motor for precise flow and shot control. Other features include:

- A monochrome touch screen, audio alarm and foot switch
- Seven programmable shot sizes and flow rates
- Customer I/O connections for integration with auxiliary equipment.

SYSTEMS

■ Cartridge Feed Systems

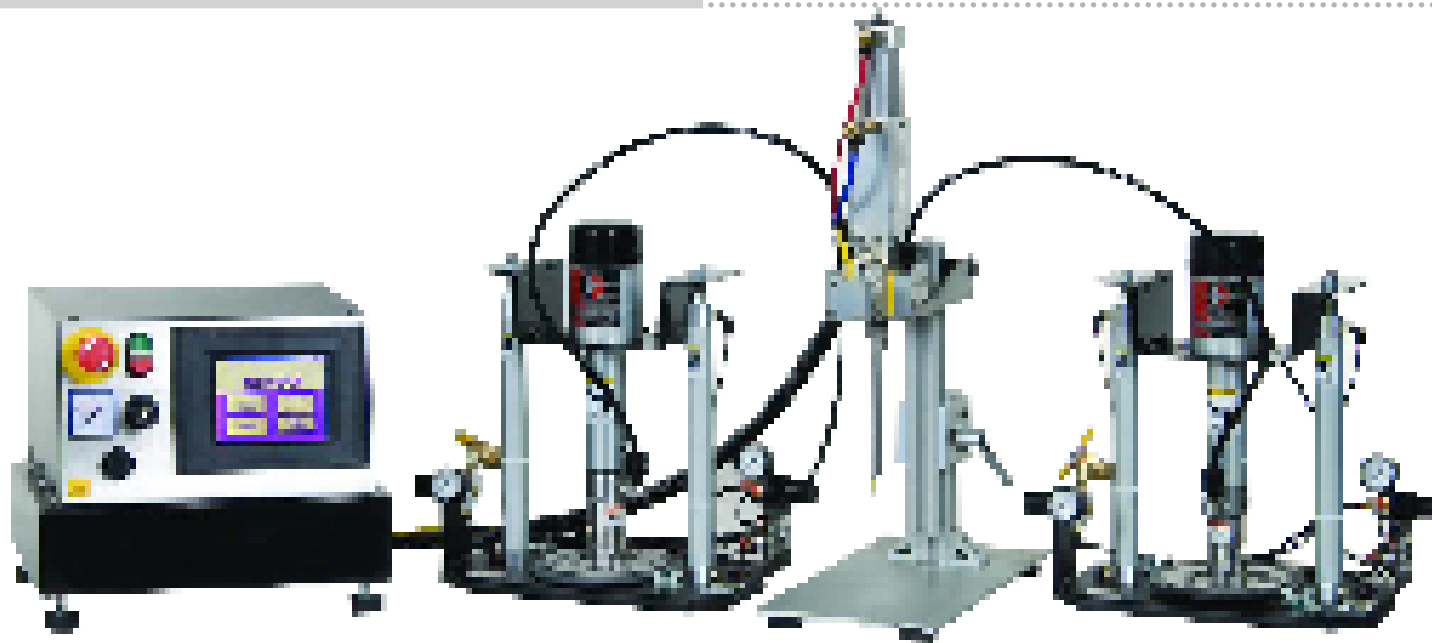
Cartridges of various sizes can be placed in pressurized retainers to allow low to medium viscosity materials to transfer to the PD44 valve

■ Transfer Pumps and Rams

Low to high viscosity materials can be pumped directly from bulk containers using pail and drum rams, transfer pumps and feed hoses as required.

■ Reservoir Tanks

Various sized reservoir tanks can be used to transfer low to medium viscosity materials to the PD44 valve.



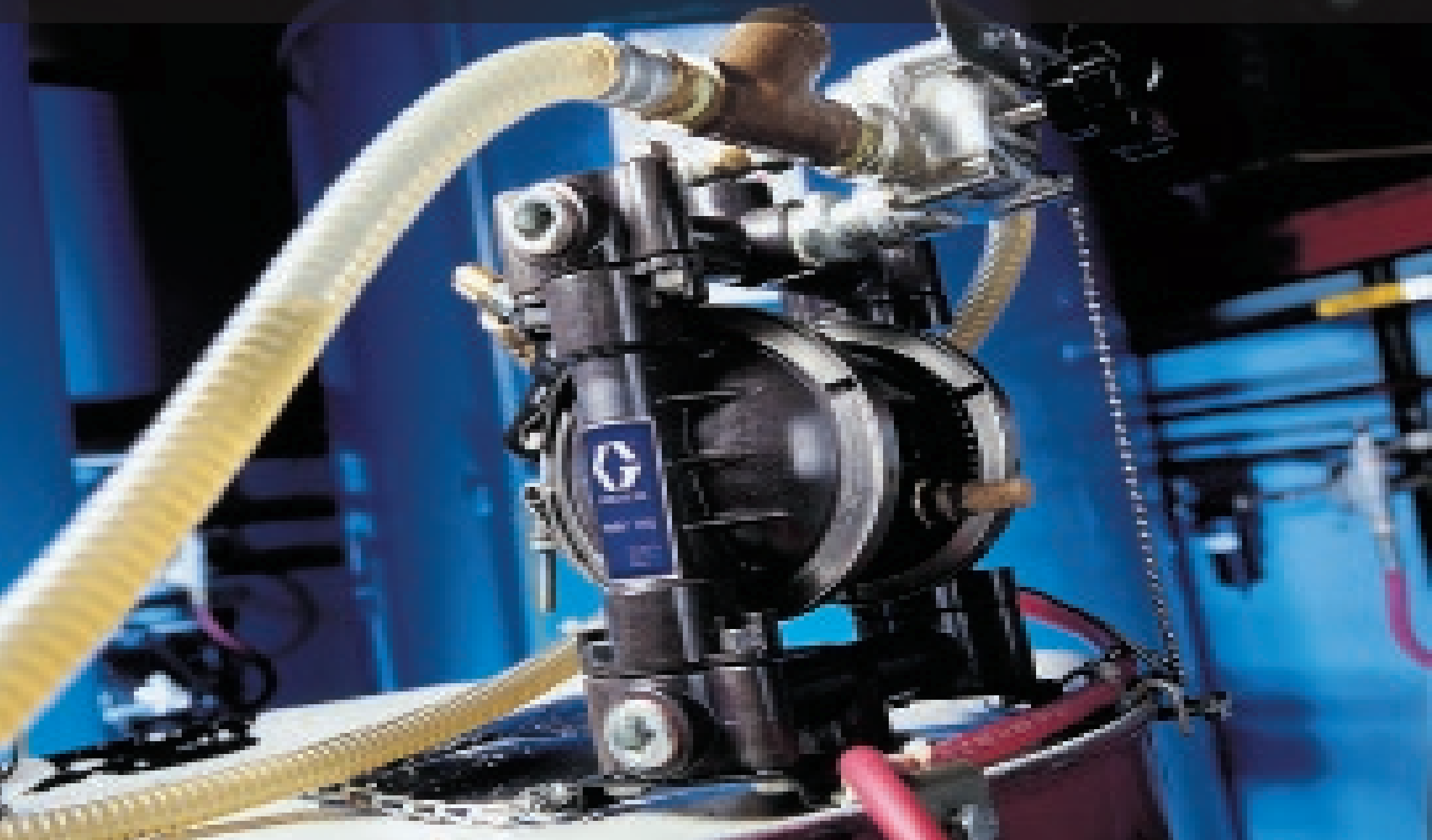
■ Complete System

PD44 with pneumatic controller, manual micrometer shot adjuster and dual one gallon transfer pump feed package.

More informations at power units and devices chapter or at
www.gentec-benelux.com

DEVICES

SYSTEM SUPPLY PRODUCT AND TRANSFER



DEVICES AND ACCESSORIES

PRESSURE TANKS



P 78

FLOWMETERS



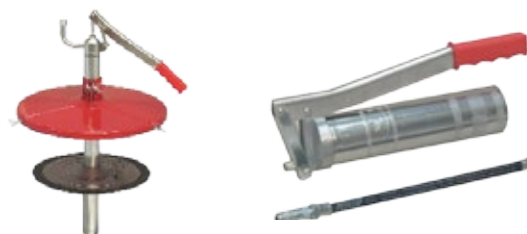
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PNEUMATIC PUMPS



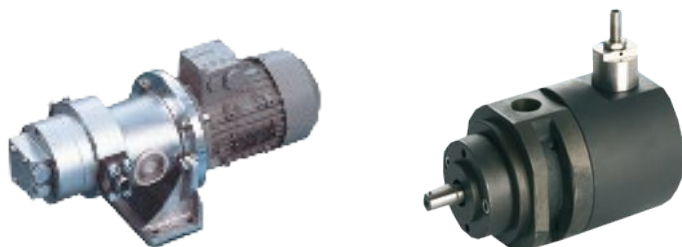
P 71

MANUAL PUMPS



P 70

GEAR PUMPS



P 76

MATO MANUAL PUMP

Gentec provides all the Mato lubricating device programs. Products like grease or hydraulic oil is handled through a system of intelligent pumps with accessories. The two most common models are the Eco-Fill filler and standard grease gun Lube-Shuttle®

FILLER STANDARD ECOFILL



Grease filler pumps with standard lid 3 side screw tightening, follower plate for grease NLGI 000-2 class.
(Supplied without grease gun)

MODELS

| |
|---|
| ECOFILL 5-s for 5 kg bucket ø-int. 165 - 200 mm |
| ECOFILL 10-s for 10 kg bucket ø-int. 215 - 230 mm |
| ECOFILL 15-s for 15 kg, ø-int. 255 - 282 mm |
| ECOFILL 18/20-s for 18/20 kg bucket ø-int. 265 - 285 mm |
| ECOFILL 20-s for 20 kg, ø-int bucket 285 - 300 mm |
| ECOFILL 25-s for 25 kg, ø-int bucket 300 - 335 mm |
| ECOFILL 50-s for 50 kg, ø-int bucket 355 - 387 mm |

- The most economical and simple solutions
- Easy grip for user
- Solid material that prevents leaks
- Long life and low maintenance
- Quantity to collect accurate
- Minimal waste of product
- Ergonomics for ease of movement

PUMP FOR GREASE LUBE - SHUTTLE®.....



Grease Cartridges Lube-Shuttle® system galvanized high quality steel. Ergonomic handle, ecological cardboard packaging. Operating pressure 400 bar high pressure up to 800 bar. TÜV approvals, DLG, BLT

MODELS

| |
|---|
| Lube-Shuttle® without accessories , thread R1/8» |
| Lube-Shuttle® with rigid connector E4024, thread R1/8» |
| Lube-Shuttle® with flexible PH-30C, thread R1/8» |
| Lube-Shuttle® with flexible RH-30C, thread R1/8» |

- Opening of the cartridge without tools
- Fast and clean loading of the grease cartridge without opening the pump
- Control of the grease level and fast identification of the grease type without unscrewing the cartridge
- Maximum grease using with a functional follower piston
- Possible filling of empty cartridges with filler pumps ECOFILL type and the Lube-Shuttle® adapter

PNEUMATIC PUMP : DYNA - MITE (1 - 3KG)

SPECIFICATIONS

| | |
|---|--|
| Maximum fluid pressure output | 6,0 MPa (60 bars) |
| Air supply pressure range | 243–700 kPa (2,4–7,0 bars) |
| Maximum viscosity of the product | 600 000 cps |
| Stroke volume (distribution only on downstroke) | 5 cc |
| Advised in continuous operation regime | 40 cpm |
| Maximum pump speed recommended | 60 cpm |
| Maximum flow (250,000 cps product) | 940 cc/mn; Used air 0,162 m3/mn to 0,7 MPa (7 bars) |
| Race | 19 mm |
| Maximum operating temperature | 60° C |
| Air inlet | 1/4 npt(f) |
| Product outlet | 1/4 npt(f) |
| Weight | Approx. 8,4 kg |
| Parts in contact with the product | Stainless Steel 304 and 17–4 pH; PTFE, Viton, |
| Sound pressure at 0.7 MPa (7 bar) 40 cpm | 64,12 dB(A) |
| Sound power at 0.7 MPa (7 bar) 40 cpm | 70,84 d B(A) |



PRESENTATION

The Dyna-Mite pump 190 designed by Graco is the perfect solution for your small quantity applications, like glue or sealant in a container from 1 to 3 liters. The installation of a pump allows you to apply these products through a distribution valve, either manual or automatic.

Its positive displacement process, operated by a priming piston facilitates the loading of a wide

range of very viscous or pasty fluids, used in the assembly of precision parts.

The Dyna-Mite 190 pump is a compact, and lightweight pump that requires little work space and can easily adapt to a production line.

Made of stainless steel, the pump is quite solid and sturdy to withstand the toughest conditions in industrial work.

- Extrusions of viscous fluid from a 0.95 to 3.79 L pot
- Made of stainless steel. Compact and lightweight
- High precision fluid dispensing
- Robust design for the toughest conditions
- Glue
- Potting
- Encapsulants
- Greases
- Inks
- Dyes

PNEUMATIC PUMP : CHECK MATE (3 - 200KG)



Ground fixing



Pneumatic elevator

| Serie | 14:1 * | 26:1 | 29:1 | 55:1 * | 63:1 * | 68:1 * |
|--------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Volume per cycle | 500 cc | 500 cc | 250 cc | 250 cc | 200 cc | 200 cc |
| Flow rate of 60 cpm * l / min. | 26,0 | 26,0 | 13,0 | 13,0 | 5,2 | 10,4 |
| Max pressure product (bar) | 96,5 | 179,3 | 200,0 | 379,2 | 310,3 | 356,5 |
| Engine size | NXT 3400 | NXT 6500 | NXT 3400 | NXT 6500 | NXT 3400 | NXT 6500 |
| Air inlet (bar) | 6,9 | 6,9 | 6,9 | 5,2 | 5,0 | 5,4 |
| Line length | Jusqu'à 30,5 m | Jusqu'à 76 m | Jusqu'à 76 m | Jusqu'à 76 m | Jusqu'à 76 m | Jusqu'à 152 m |
| Annual consumption | Jusqu'à 9 072 kg | Jusqu'à 9 072 kg | Jusqu'à 9 072 kg | Jusqu'à 9 072 kg | Jusqu'à 9 072 kg | Jusqu'à 9 072 kg |
| Points distribution | 1 | 1 à 2 | 4 ou plus | 1 à 2 | 1 à 2 | 1 à 2 |

*The Check-Mate NTX Pump is available with ground fixing or pneumatic elevator

GREASE PUMP CHECK MATE

Gentec provides the Check-Mate pumps, equipped with NXT technology that will boost your productivity. This system designed by Graco offers the best quality - price ratio, faster repairs and a longer lifespan.

Equipped with the Data Trak system, the control level is optimal and the stopping of the pump is automatical when there is no more product or when a flexible has broken. Thanks to a precise measure of output, the DataTrak system ensures quality control and eliminates

product loss. It monitors and displays the product usage level, the volume flow and also indicates the amount of product remaining in the drum.

The pump provides his own diagnosis for easy maintenance, monitoring and indicates when this must be done.

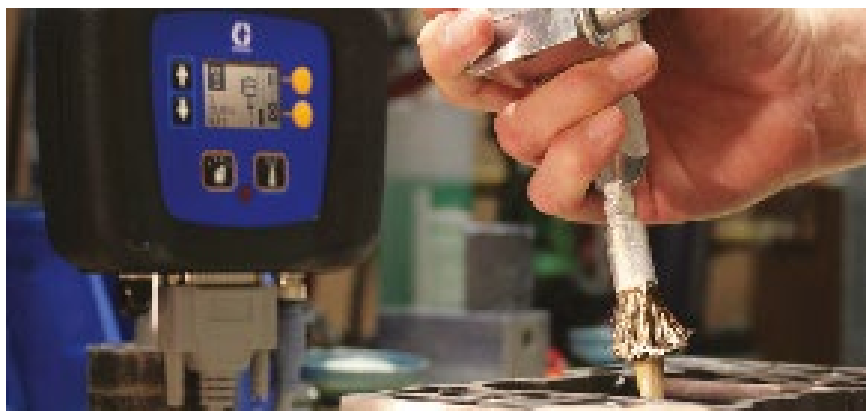
Its DataTrak system also permits the diagnosis of the bottom of the pump by indicating if the race is up or down.

- Delivers up to 26 kg of grease per minute
- Intuitive controls, providing pump running diagnostics to trace the product and schedule routine maintenance
- Durability - Results of the Check-Mate pumps have been tested through time and have been proven
- Reduces the noise - the new NXT air motor is up to 50% quieter than previous models
- Controls the lift and integrated pump, easy to use

SMARTWARE TECHNOLOGY

SPECIFICATIONS

| | |
|--------------------|---|
| Volume capacity | 6 cc to 3,785 l |
| Precision | From 0,25 to 4 % depending of the product |
| Power requirements | 110 or 220 VCA |
| Manual | 3A0294 |



DataTrak Control

Protection - Pump diagnostics - Tracking

Local control module

Offer a sequential mode to deliver a series of varying doses - up to 14 different
The dispensing mode shows a single dose and indicates the quantity dispensed

Pressure sensor

Guarantees a precise distribution



PRESENTATION

The metered dispensing kit SmartWare lets you turn your Graco pump into an economic and accurate metering system, allowing you to dispense a preset amount of product. It is a great alternative to manual methods such as mechanical counters, scales or custom systems and ensures more savings than fully automated systems.

The system guarantees accurate metering without flow meter, or gear flow meter in the fluid flow. Instead, a sensor detects the position of the pump so that the latter operates as a flow meter. The dispensed quantity is thus based on the pump size.

Compatible with DuraFlo or Check-Mate pumps equipped with technology and most Graco supply systems.

- Metering a predetermined amount of product with your Graco pump
- An economical alternative to automatic systems
- The volumes of the discharge ranges are 6cm³ to 3785 liters (1000 gal)
- The accuracy of the ranges is from 0.25 to 4%, depending on the product and the size of the discharge
- Filling
- Cast
- Encapsulation
- Molding
- Batch

PNEUMATIC : HUSKY SERIE (+200KG)



Graco doesn't have limits when it comes to designing pumps that exceed your expectations. Air-Operated double diaphragm pumps are the optimal answer to the most diverse pumping problems. The diaphragm pumps are used for transfer, dispense or fluid mixture and allow the pumping of viscous, abrasive or corrosive products and also accept some liquids which contain particles. They will enable you to perform your transfers in a precise period of time and with maximum efficiency.

BENEFITS

| |
|--|
| Low internal volume reduces waste and makes clean-up easy |
| Patented pneumatic valve |
| Durable high precision and replaceable parts |
| Common exhaust port preventing vapors from attacking pneumatic motor seals |
| Outer building reinforced corrosion resistant, leak-proof |
| Concept of perfect sealing |
| High-strength washers thus preventing costly downtime |
| Long rod with excellent resistance to corrosion |
| Easy alignment |
| Wide range of seats and balls for excellent compatibility with your fluids |

ACCESSOIRES HUSKY

■ CycleFlo remote

The CycleFlo is a microprocessor control system designed to computerize batch processing functions and dispensing of the Husky pumps which is remotely controllable. Built when the pumps are controlled remotely, the CycleFlo counts the pump strokes and measures the amount of product dispensed.

■ Anti - rams

The anti-ram reduces pressure spikes caused by the pumping diaphragm pumps. Placed at the entrance of the pump, the anti-rams compensate pressure fluctuations and acceleration loss that can lead to cavitation.

■ Leak detector

Designed to detect and prevent leakage on double diaphragm pumps, it retrieves the ejected product from the escapement when a diaphragm breaks. Two versions :

- Parties in polypropylene
- Parties in stainless steel product

■ Kit stop valve

Prevents penetration of product into the leak detector of the pump station. The kit includes: Pipe connection 1/4"[6.35 mm] x 1/8" closure sleeve, 3/4"[19.05 mm] in stainless steel, brass T sleeve without sleeve.

HUSKY SERIE : SPECIFICATIONS

| | HUSKY 205 | HUSKY 307 | HUSKY 515 | HUSKY 716 | HUSKY 1050 | | HUSKY 1590 | | HUSKY 2150 | | HUSKY 3300 | |
|------------------------------|----------------------------|----------------------------|----------------------------|----------------------------|--------------------------------------|--|-----------------------------|-------------------|-----------------------------|---------------------------------|---------------------------|-----------------------------|
| matter | Plastique | Plastique | Plastique | Métal | Plastique | Métal | Plastique | Métal | Plastique | Métal | Plastique | Métal |
| dimension connections | 6,3 mm | 9,4 mm | 12,7 and 19,1 mm | 19,1 mm | 25,4 mm | 25,4 mm | 38,1 mm | 38,1 mm | 50,8 mm | 50,8 mm | 76,2 mm | 76,2 mm |
| Thread Type | NPT or BSP | NPT or BSP | NPT or BSP | NPT or BSP | Bride ANSI/DIN | NPT or BSP | Bride ANSI | NPT or BSP | Bride ANSI | NPT or BSP | DIN/ANSI | NPT and BSP DIN/ANSI |
| Air Valve | Standard distance | Standard | Standard distance | Standard distance | Standard, intelligent and à distance | | Standard and à distance | | Standard distance | | Standard | Standard |
| Max speed | 19 l/mn [5 gpm] | 26 l/mn [7 gpm] | 57 l/mn [15 gpm] | 61 l/mn [16 gpm] | 189 l/mn [50gpm] | | 379 l/mn [100 gpm] | | 568 l/mn [150 gpm] | | 1 059 l/mn [280 gpm] | 1 135 l/mn [300 gpm] |
| Maximum pressure delivery | 7,0bars [0,7 MPa, 100 psi] | 7,0bars [0,7 MPa, 100 psi] | 7,0bars [0,7 MPa, 100 psi] | 7,0bars [0,7 MPa, 100 psi] | 8,6 bars [0,9 MPa, 125 psi] | | 8,3 bars [0,8 MPa, 120 psi] | | 8,3 bars [0,8 MPa, 120 psi] | | 7 bars [0,7 MPa, 100 psi] | 8,6 bars [0,9 MPa, 125 psi] |
| Available building materials | PP, PVDF, acetal | PP, acetal | PP, PVDF, acetal | Alu, SS 316 | PP, PP conducteur, PVDF | Aluminium, SS 316, Hastelloy | PP, PVDF | Aluminium, SS 316 | PP, PVDF | Aluminium, SS 316, ductile iron | PP | Aluminium, SS 316 |
| Available central section | PP | PP | PP | PP | PP and PP conducteur | Aluminium coated, PP and PP conducteur | Coated Aluminium, SS, 316 | | Aluminium revêtu, SS 316 | | PP | Aluminium, PP |
| Weight of the pump | 0,9 kg PP | 2,2 kg Acétal | 2,9kg PP | 3,9 kg Aluminium | 8,2 kg PP | 10,4 kg Aluminium | 16 kg PP | 15,2 kg Aluminium | 22 kg PP | 26,3 kg Aluminium | 90,7 kg | 68 kg Aluminium |
| | Max solids. | 2,4 kg PP | 3,5 kg Aceta | 8,2 kg SS | 11,8 kg PVDF | 16,5 - 18,6 kg SS | 22 kg PVDF | 40 kg SS | 31 kg PVDF | 50,3 kg SS | | 115,6 kg SS |
| | 1,3 kg PVDF | | 3,9 kg PVDF | | | 18,6 kg Hastelloy | | | | 59 kg ductile iron | | |
| | 1,5 mm | 1,6 mm | 2,5 mm | 2,5 mm | 3,2 mm | 3,2 mm | 4,8 mm | 4,8 mm | 6,3 mm | 6,3 mm | 12,7 mm | 12,7 mm |

GEAR PUMP : BEINLICH



| | SERIE ZPA | SERIE ZPB | SERIE ZPD | SERIE ZPDA | SERIE ZPI |
|--------------|---|---|-----------------------------|-----------------------------|---|
| Type | Transfer pumps, lubrication and hydraulic | Transfer and lubrication pumps for highly viscous liquids | Dosing and transfer pumps | High precision dosing pumps | Transfer pumps, lubrication and hydraulic |
| Gears | External/Outer | External/Outer | External/Outer | External/Outer | |
| Displacement | 0,1...2 600 cc/tr | 0,1...900 cc/tr | 0,1...2 600 cc/tr | 0,1...26 cc/tr | 1...207 cc/tr |
| Max pressure | 200 bar | 100 bar | 200 bar | 150 bar | 100 Bar |
| Viscosity | 10...1 000 cSt | 10...1 000 000 cSt | 1 000 000 cSt | 10...150 000 cSt | 10... 100 cSt |
| Temperature | -40...+120°C | -40...+120°C | -55...+400°C | -10...+200°C | -10...+200°C |
| Specificity | Cast iron or steel body | Connection to the intermediate plate | For dispensing applications | High accuracy | Extremely quiet operation |

PRESENTATION

Beinlich gear pumps are declinables in several series, depending on the nature of the application (hydraulic, dosing, transfer, lubrication etc.). Thanks to the very precise adjustment of the play operation, it is possible to pump all types of liquids, from low to the high viscosity, and thus to ensure a minimum internal leakage.

Depending on the fluid, Gentec offers you many types of materials for pump structure and strategic parts : cast iron, steel, stainless steel standard, steel 316L, Hastelloys, bronze, titanium etc. In parallel, there are also various

options for the treatment of parts : nickel, PTFE, DLC etc.

Sealing is an ongoing concern. Depending on the application, several options are available, from simple lip seal with magnetic coupling through the gland, the seal chamber, gasket mechanical contact.

For more demanding applications, many options are available, such as integrated flowmeter converter, tachometer, transmitters etc.

Applications areas:

- Hydraulic
- Skydrol
- Lubrication
- PU foams (polyols, TDI, MDI)
- Agri - Food
- Silicone
- Resins
- Vehicle fire
- Test bench
- Machine tools etc.

POSITIVE DISPLACEMENT FLOWMETER

| SIZE | MEASURING RANGE | | FACTOR K | |
|---------|-----------------|-------------------|----------|-----------|
| | l/min | GPM | Imp./l | Imp./Gal. |
| VS 0.02 | 0,002.....2 | 0,0005.....0,53 | 50 000 | 189 272 |
| VS 0.04 | 0,004.....4 | 0,0011.....1,06 | 25 000 | 94 636 |
| VS 0.1 | 0,01..... 10 | 0,0026..... 2,64 | 10 000 | 37 854,4 |
| VS 0.2 | 0,02.....18 | 0,0053.....4,76 | 5 000 | 18 927,2 |
| VS 0.4 | 0,03..... 40 | 0,0079.....10,57 | 2 500 | 9 463,6 |
| VS 1 | 0,05..... 80 | 0,0132.....21,13 | 1 000 | 3 785,44 |
| VS 2 | 0,1..... 120 | 0,0264.....31,70 | 500 | 1 892,72 |
| VS 4 | 1..... 250 | 0,2642.....66,00 | 250 | 946,36 |
| VS 10 | 1,5.....525 | 0,3963.....138,69 | 300 | 1 135,63 |



PRESENTATION REMARKS

■ Volumetric flowmeter series VS

Positive displacement flowmeters VS are devices able to measure the volumetric flow of liquids using the principle of sprockets.

Two perfectly calibrated sprockets take place in a cavity machined accurately. The rotation of the wheels is detected by a contactless sensor system. Each tooth generates a digital pulse. Hollow teeth, once prisoners of the cavity, are the measuring chambers. Thus, the liquid that flows is broken down into discrete volumes. Each discrete volume is a volume measurement per pulse [Vm] and its unit is cm³ / imp. It is used to set the size of the flowmeter.

■ VSI high-resolution systems

The preamplifier of VSI flowmeters delivers digital signal in high resolution.

Depending on the program selected, it is possible to appreciate an angular step divided by a factor between 4 and 64, a maximum frequency multiplier 16, and a K factor multiplied by 64. At full rate, the frequency maximum can reach 26 kHz.

REMARKS

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GRACO PRESSURE TANKS



| MODEL (1.05 - 7bars) | | 8 LITER | 19 LITER | 38 LITER | 57 LITER |
|--------------------------|-------------|---------|----------|----------|----------|
| Models with agitators | Height [cm] | 66 | 77.5 | 88 | 113.2 |
| | Weight [kg] | 17 | 34 | 39 | 46 |
| Models without agitators | Height [cm] | 65.5 | 77.5 | 88 | 132.2 |
| | Weight [kg] | 14 | 30 | 35 | 42 |

A new optional air regulator kit gun can be added to all tanks.
All 19, 38, 57 l (5, 10 and 15 gallons) tanks are equipped with agitators reducers.

PRESENTATION

Pressure Pots are a crucial element of the finishing system and can be used in a variety of applications including:

Fluid Supply Systems for Air Spray or Feeding Other Equipment : They provide pulse-free, ultra-precise fluid delivery at low pressures and flow rates that are not reliably obtained with pumps and other equipment. This is ideal for customers that demand reliable, affordable and easy fluid delivery.

Sealed Reservoir for Moisture Sensitive or

Corrosive Materials : Store your catalyst and other moisture sensitive materials in our sealed pressure tanks to protect humidity sensitive materials. Pressure tanks are ideal for supplying 2K proportioners with resin or catalyst to ensure an effective and consistent sealing surface for your finishing operation.

Vacuum Tank: When you need to remove entrapped air from material for precision mixing, Graco pressure tanks provide a great degassing option to eliminate foam from your material to reduce surface defects and pitting .

- Heavy-duty gear-reduced agitator provides more power for high solids
 - Improved access with a bottom outlet kit reduces material waste
 - Polyethylene tank liners available for quick color change
 - Stainless steel construction allows for use with all materials
 - Inexpensive, flexible, and easily upgraded to add functionality
- compared to other systems

PVA PRESSURE TANKS

SPECIFICATIONS

| | |
|---------------------|--|
| Internal dimensions | 13.33 x 29.84 |
| External dimensions | 20.32 x 35.56 |
| Tank body | Black anodized aluminum |
| Joints | Teflon ® encapsulated Viton ® O-rings |
| Air pressure | 01 07bars (0-105 PSI) |
| Air inlet | Metal quick assembly connection |
| Materials output | 1/4" outside diameter tube compression body 3/8" outside diameter tube optional |



PRESENTATION REMARKS

The pressurized 1 liter tank designed PVA intended for small quantities have a significant contribution to the performance of the dispensing system.

To use it, remove the two threaded screws and lift the tank lid. Insert the container (as uncapped material) inside the tank and replace the cover on top of the pressure tank, ensuring that the dip tube is positioned inside.

Tighten both screws evenly, connect all the air lines feeding the pressure in the tank.

- Available in 1, 2 and 5 liters
- Air safety valve 70 psi
- Accepts bottled packaged materials
- Full opening
- Easy to use with UV and anaerobic materials

REMARKS

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DOSING ROBOTS

Automated dispensing solutions

DOSING ROBOT

| ADVANTAGES | BENEFITS |
|---|-------------------------------------|
| System in accordance with the European Directive 2006/42 / EC | Accurate and repeatable dispensing |
| Integrated control systems and metering | Higher production yield |
| Rigid structure | Precision and reliability guarantee |
| Interface production line | Economic automation |
| Emergency stop and reset | High quantity treatment process |
| Camera option | Frees operators for other tasks |
| Different communication modes | Integrated and autonomous system |



PRESENTATION

With its integration partner MA Systeme (since 2009), Gentec has a complete and efficient expertise on dosing robot solutions ready for use.

Robots Janome offer a competitive advantage by increasing the quality and productivity of their manufacturing process. By providing you with these high performance devices, Gentec put the costs reduction as priority with a range of new generation robots that eliminate expensive automation and reduce human intervention.

Innovative and versatile manufacturer, Janome produced patented industrial equipment since 20 years.

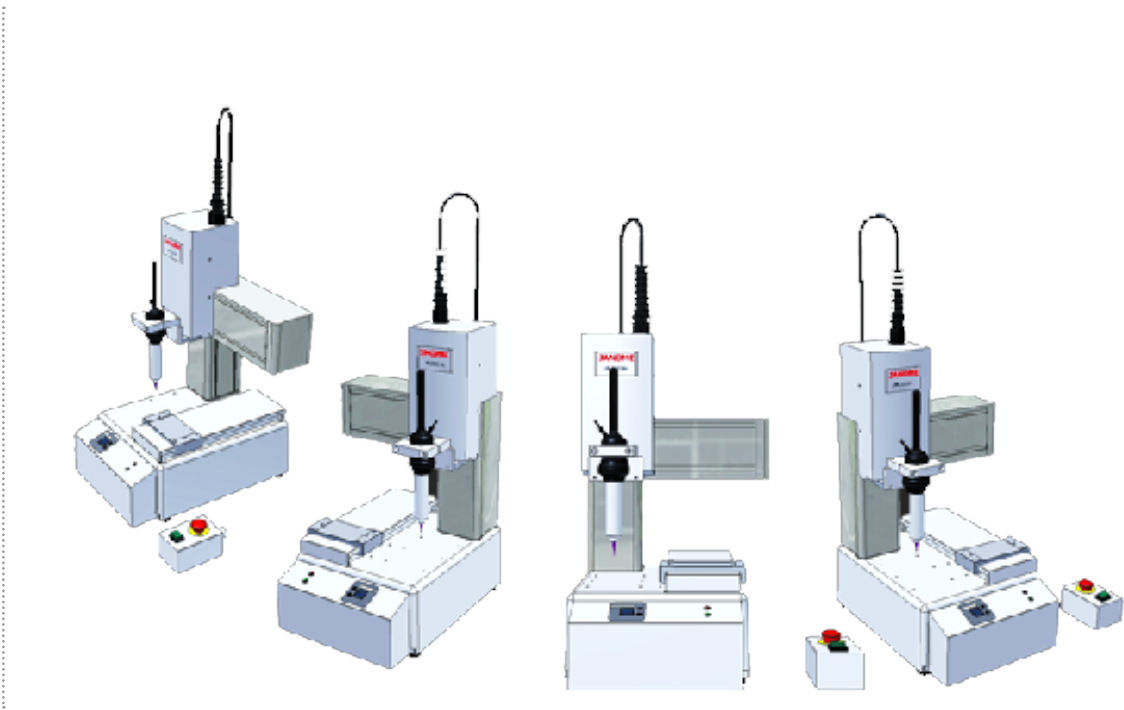
The robots can be used in many sectors: electronics, automotive, aerospace, medical or cosmetic.

Associated with the appropriate application system, they can perform several types of applications: points, lines, potting, dam & filling, underfilling, encapsulation, coating, jetting etc.

■ Cartesian robot
These tables available in version 3 or 4 axes have displacement capacities ranging from 200 to 600 mm. Mainly used for dispensing, screwing and grip, they are very accurate.

■ Scara robot
They have an action field of 250 to 550 mm and a working area of 650 to 1000 mm. The weight carried by the Z axe is from 4 to 20 kg. Welding applications, gluing and displacement are suitable for these types of robots. Their CPU has 37E and 40S to handle related functions.

CARTESIAN ROBOTS : JRN SERIES



CARTESIAN ROBOTS

| PART NUMBER | AXE X, Y | AXE Z | AXE R |
|-------------|--------------|--------|-------|
| JR2203N | 200 x 200 mm | 50 mm | |
| JR2204N | 200 x 200 mm | 50 mm | ±360° |
| JR2303N | 300 x 320 mm | 100 mm | |
| JR2304N | 300 x 320 mm | 100 mm | ±360° |
| JR2403 | 400 x 400 mm | 150 mm | |
| JR2404N | 400 x 400 mm | 150 mm | ±360° |
| JR2503N | 510 x 510 mm | 150 mm | |
| JR2504N | 510 x 510 mm | 150 mm | ±360° |
| JR2603N | 510 x 620 mm | 150 mm | |
| JR2604 | 510 x 620 mm | 150 mm | ±360° |

Points - Lines - Potting - Dam & Filling - Underfilling - Encapsulation - Sealing
- Coating - Jetting

PRESENTATION

Gentec offers a complete range of dosing robots to respond to your more specific demands in terms of positioning and dispensing. These dosing robots operate with syringes and valve systems, to a working area from 200 mm x 200 mm to 510 mm x 620 mm. So these robots are the ideal solution for optimizing precision works and reducing production costs.

Designed to be easy to program, a software has been specifically created to make the handling of the device accessible by avoiding the use of a

complex programming language. In addition, the interface is programmable via a control unit or PC [Dispensing software included].

The Cartesian robot tables have robust and reliable units in aluminum ensuring the rigidity whatever operation is performed.

They offer a wide range of work areas for a small obstruction. These devices are ideal for autonomous operations and can easily be integrated on automated assembly lines.

- Optical encoders of displacement control
- Auto shutdown in case of error detection
- No time wasted and maximization of the productivity
- Heavy-duty aluminum structure
- Memory capacity : 30 000 points or 255 programs
- Modular RS232 C interface to connect to a PC, RS-422 port for learning case and I / O system

CARTESIAN ROBOT : JR2200N

| SPECIFICATIONS | | JR 2203N | JR 2204N |
|---------------------------|------------|--|--------------------|
| Axes | X | 200 mm | 200 mm |
| | Y | 200 mm | 200 mm |
| | Z | 50 mm | 50 mm |
| | R | | ±360° |
| Speed | PTP (X,Y) | 5-550 mm/sec | 5-550 mm/sec |
| | PTP (Z) | 2,5-250 mm/sec | 2,5-250 mm/sec |
| | PTP (R) | | 6-600°/sec |
| | CP (X,Y,Z) | 0,1-500 mm/sec | 0,1-500 mm/sec |
| Accuracy of repeatability | Axe X, Y | ±0,01 mm | ±0,01 mm |
| | Axe Z | ±0,01 mm | ±0,01 mm |
| | Axe R | | ±0,02° |
| Weight load | Piece | 7kg | 7kg |
| | Tool | 3,5kg | 3,5kg |
| Acceptable Inertia Moment | | | |
| Learning method | | Distance Learning (JOG) or manual data input (MDI) | |
| Learning System | | JR C-Points software designed for the user via the I / O | |
| Interpolation function | | Three-dimensional interpolation of lines and arcs | |
| Training System | | Stepper motor / 5 phases | |
| Control system | | PTP and CP | |
| Number of axis | | 3 | 4 |
| External interface | | RS 232C 1 channel for PC, 2 channels for external device optional RS422 box only for learning | |
| External I / O | | I / O-SYS Input: 16 / Output: 16-input: 5 / output 7 are free | |
| PLC function | | I / O-1 - Input: 8 / Output: 8 (4 relay contacts) - all free | |
| Capacity programs | | 100 programs (1000 steps / 1 program) | |
| Memory Capacity | | 255 programs | |
| Dimensions (W x D x H) | | 320 x 377 x 536 mm | 320 x 377 x 655 mm |
| Weight | | 18 kg | 18 kg |
| Power Source | | CA 180-250 V, 50 Hz, 200 VA | |



PRESENTATION

The JR2200N model is the first representative of a large series of innovative cartesian robots. With a size of only 320 x 387,5mm, the device is very compact. Like all models in these series, it is easy to program the system by using the software.

Cartesian dosing robots provided by Gentec are used to interpolate lines and curves automatically in all axes. The JR2204N version is equipped with a fourth axis of rotation for 3D movement. The programming software, easy to use, allows you to create programs quickly thanks to its support system. Within a few minutes, the device is ready for use. The system is equipped with an I / O signal interface (16 x inputs / 16 x outputs) to allow you to control external systems.

CARTESIAN ROBOT : JR2300N



PRESENTATION

The robot JR2300N series is the most popular of the range of robotic tables. The Cartesian dosing robot has a working area of 300 x 320 mm.

Cartesian dosing robots provided by Gentec are used to interpolate lines and curves automatically in all axes. The JR2304N version is equipped with a fourth axis of rotation for 3D movement.

The programming software, easy to use, allows you to create programs quickly thanks to its support system. Within a few minutes, the device is ready for use. The system is equipped with a signal interface I / S (16 x inputs / 16 x outputs) to allow you to control external systems.

| SPECIFICATIONS | | JR 2303N | JR 2304N |
|---------------------------|------------|--|--------------------|
| Axes | X | 300 mm | 300 mm |
| | Y | 320 mm | 320 mm |
| | Z | 100 mm | 100 mm |
| | R | | ±360° |
| Speed | PTP [X,Y] | 8-800 mm/sec | 8-800 mm/sec |
| | PTP [Z] | 3,2-320 mm/sec | 3,2 – 320 mm/ sec |
| | PTP [R] | | 8-800°/sec |
| | CP [X,Y,Z] | 0,1-800 mm/sec | 0,1-800 mm/sec |
| Accuracy of repeatability | Axe X, Y | ±0,01 mm | ±0,01 mm |
| | Axe Z | ±0,01 mm | ±0,01 mm |
| | Axe R | | ±0,02° |
| Weight load | Piece | 11kg | 11kg |
| | Tool | 6kg | 6kg |
| Acceptable Inertia Moment | | 90 kg . Cm² | |
| Learning method | | Distance Learning (JOG) or manual data input (MDI) | |
| Learning System | | JR C-Points software designed for the user via the I / O | |
| Interpolation function | | Three-dimensional interpolation of lines and arcs | |
| Training System | | Stepper motor / 5 phases | |
| Control system | | PTP and CP | |
| Number of axis | | 3 | 4 |
| External interface | | RS 232C 1 channel for PC, 2 channels for external device optional RS422 box only for learning | |
| External I / O | | I / O-SYS Input: 16 / Output: 16-input: 5 / output 7 are free | |
| PLC function | | I / O-1 - Input: 8 / Output: 8 (4 relay contacts) - all free | |
| Capacity programs | | 100 programs (1000 steps / 1 program) | |
| Memory Capacity | | 255 programs | |
| Dimensions (W x D x H) | | 560 x 529 x 649 mm | 560 x 529 x 840 mm |
| Weight | | 35 kg | 35 kg |
| Power Source | | CA 180-250 V, 50 Hz, 200 VA | |

| SPECIFICATIONS | | JR 2403N | JR 2404N |
|---------------------------|------------|---|--------------------|
| Axes | X | 400 mm | 400 mm |
| | Y | 400 mm | 400 mm |
| | Z | 150 mm | 150 mm |
| | R | | ±360° |
| Speed | PTP [X,Y] | 8-800 mm/sec | 8-800 mm/sec |
| | PTP [Z] | 3,2-320 mm/sec | 3,2-320 mm/sec |
| | PTP [R] | | 8-800°/sec |
| | CP [X,Y,Z] | 0,1-800 mm/sec | 0,1-800 mm/sec |
| Accuracy of repeatability | Axe X, Y | ±0,01 mm | ±0,01 mm |
| | Axe Z | ±0,01 mm | ±0,01 mm |
| | Axe R | | ±0,02° |
| Weight load | Piece | 11kg | 11kg |
| | Tool | 6kg | 6kg |
| Acceptable Inertia Moment | | 90 kg . Cm ² | |
| Learning method | | Distance Learning (JOG) or manual data input (MDI) | |
| Learning System | | JR C-Points software designed for the user via the I / O | |
| Interpolation function | | Three-dimensional interpolation of lines and arcs | |
| Training System | | Stepper motor / 5 phases | |
| Control system | | PTP and CP | |
| Number of axis | | 3 | 4 |
| External interface | | RS 232C 1 channel for PC, 2 channels for external device optional RS422 box only for learning | |
| External I / O | | I / O-SYS Input: 16 / Output: 16-input: 5 / output 7 are free | |
| PLC function | | I / O-1 - Input: 8 / Output: 8 (4 relay contacts) - all free | |
| Capacity programs | | 100 programs (1000 steps / 1 program) | |
| Memory Capacity | | 255 programs | |
| Dimensions (W x D x H) | | 584 x 629 x 799 mm | 584 x 629 x 890 mm |
| Weight | | 42 kg | 42 kg |
| Power Source | | CA 180-250 V, 50 Hz, 200 VA | |

CARTESIAN ROBOT : JR2400N



PRESENTATION

With its large working area of 400 x 400 mm, the JR2400N dispensing robot takes less than 629 mm² workspace. This robot has an opening on the side for easy handling unhardy objects in and around the work area.

Cartesian dosing robots provided by Gentec are used to interpolate lines and curves automatically in all axes. The JR2404N version is equipped with a fourth axis of rotation for 3D movement.

The easy-to-use software program allows you to create programs quickly thanks to its support system. Within minutes, the device is ready for use. The system is equipped with an I / O signal interface (16 x inputs / 16 x outputs) to allow you to control external systems.

CARTESIAN ROBOT : JR2500N



PRESENTATION

Offering a wide working area of 510 x 510 mm, the robot JR2500N dosing yet takes less than 727 mm² workspace. The JR2500N robot has an opening on the side for easy handling unhardy objects in and around the work area

Cartesian dosing robots provided by Gentec are used to interpolate lines and curves automatically in all axes. The JR2504N version is equipped with a fourth axis of rotation for 3D movement.

The easy-to-use programming software allows you to create programs quickly thanks to its support system. Within a few minutes, the device is ready for use. The system is equipped with an I / O signal interface (16 x inputs / 16 x outputs) to allow you to control external systems.

| SPECIFICATIONS | | JR 2503N | JR 2504N |
|---------------------------|------------|--|--------------------|
| Axes | X | 510 mm | 510 mm |
| | Y | 510 mm | 510 mm |
| | Z | 150 mm | 150 mm |
| | R | | ±360° |
| Speed | PTP [X,Y] | 8-800 mm/sec | 8-800 mm/sec |
| | PTP [Z] | 3,2-320 mm/sec | 3,2-320 mm/sec |
| | PTP [R] | | 8-800°/sec |
| | CP [X,Y,Z] | 0,1-800 mm/sec | 0,1-800 mm/sec |
| Accuracy of repeatability | Axe X, Y | ±0,01 mm | ±0,01 mm |
| | Axe Z | ±0,01 mm | ±0,01 mm |
| | Axe R | | ±0,02° |
| Weight load | Piece | 11kg | 11kg |
| | Tool | 6kg | 6kg |
| Acceptable Inertia Moment | | 90 kg . Cm² | |
| Learning method | | Distance Learning (JOG) or manual data input (MDI) | |
| Learning System | | JR C-Points software designed for the user via the I / O | |
| Interpolation function | | Three-dimensional interpolation of lines and arcs | |
| Training System | | Stepper motor / 5 phases | |
| Control system | | PTP and CP | |
| Number of axis | | 3 | 4 |
| External interface | | RS 232C 1 channel for PC, 2 channels for external device optional RS422 box only for learning | |
| External I / O | | I / O-SYS Input: 16 / Output: 16-input: 5 / output 7 are free | |
| PLC function | | I / O-1 - Input: 8 / Output: 8 (4 relay contacts) - all free | |
| Capacity programs | | 100 programs (1000 steps / 1 program) | |
| Memory Capacity | | 255 programs | |
| Dimensions [W x D x H] | | 676 x 728 x 799 mm | 676 x 728 x 890 mm |
| Weight | | 43 kg | 43 kg |
| Power Source | | CA 180-250 V, 50 Hz, 200 VA | |

| SPECIFICATIONS | | JR 2603N | JR 2604N |
|---------------------------|------------|--|--------------------|
| Axes | X | 510 mm | 510 mm |
| | Y | 620 mm | 620 mm |
| | Z | 150 mm | 150 mm |
| | R | | ±360° |
| Speed | PTP [X,Y] | 8-800 mm/sec | 8-800 mm/sec |
| | PTP [Z] | 3,2-320 mm/sec | 3,2-320 mm/sec |
| | PTP [R] | | 8-800°/sec |
| | CP [X,Y,Z] | 0,1-800 mm/sec | 0,1-800 mm/sec |
| Accuracy of repeatability | Axe X, Y | ±0,01 mm | ±0,01 mm |
| | Axe Z | ±0,01 mm | ±0,01 mm |
| | Axe R | | ±0,02° |
| Weight load | Piece | 11kg | 11kg |
| | Tool | 6kg | 6kg |
| Acceptable Inertia Moment | | 90 kg . Cm ² | |
| Learning method | | Distance Learning (JOG) or manual data input (MDI) | |
| Learning System | | JR C-Points software designed for the user via the I / O | |
| Interpolation function | | Three-dimensional interpolation of lines and arcs | |
| Training System | | Stepper motor / 5 phases | |
| Control system | | PTP and CP | |
| Number of axis | | 3 | 4 |
| External interface | | RS 232C 1 channel for PC, 2 channels for external device optional RS422 box only for learning | |
| External I / O | | I / O-SYS Input: 16 / Output: 16-input: 5 / output 7 are free | |
| PLC function | | I / O-1 - Input: 8 / Output: 8 (4 relay contacts) - all free | |
| Capacity programs | | 100 programs (1000 steps / 1 program) | |
| Memory Capacity | | 255 programs | |
| Dimensions (W x D x H) | | 788 x 731 x 800 mm | 788 x 731 x 800 mm |
| Weight | | 44 kg | 44 kg |
| Power Source | | CA 180-250 V, 50 Hz, 200 VA | |

CARTESIAN ROBOT : JR2600N



PRESENTATION

With its large working area of 620 x 510 mm, the JR2600N dispensing robot takes less than 787 mm² workspace. The JR2600N robot has an opening on the side for easy handling unhardy objects in and around the work area.

Cartesian dosing robots provided by Gentec are used to interpolate lines and curves automatically in all axes. The JR2604N version is equipped with a fourth axis of rotation for a 3D displacement.

The programming software, easy to use, allows you to create programs quickly thanks to its support system. Within few minutes, the device is ready for use. The system is equipped with an I / O signal interface (16 x inputs / 16 x outputs) to allow you to control external systems.

CARTESIAN ROBOT : JR2000NE (ENCODER)



BENEFITS

Version 3 or 4 axes. Stepper motor with encoder

Integrated control systems and metering

Solid structure to ensure accuracy

Interface production line

Emergency stop and reset

Choose from 10 different display languages

Switch between the coordinate values displayed

Extended Memory Up to 255 programs and 30 000 points

Possibility of an established system or standalone

PRESENTATION

Dosing robot JRNE series, sister of JRN series, is a Cartesian robot equipped with an encoder, allowing feedback on the actual position. This ensures an even more precise positioning.

5 different model ranges are available, with an operating size from 200x200mm to 510x510mm.

These robots work with dispensing syringes and valve systems and is the best way to optimize your most sensible precision works. Equipped with the same programming software as the JRN series, the JRNE series is just as intuitive and easy to program as the JRN serie.

- Rigid structure : extruded aluminum column, base in aluminum molded under pressure
- Mechanism labyrinth : Prevents intrusion of foreign objects under the work table
- Smooth movement : microstepped control system
- Simple learning : Software «JRC-Points» allowing the user to easily figure out the robot or to create original programs
- Embedded optical encoders continuously control the axis movement and automatically stop the operation by detecting position errors
- Simple Sequencer : single sequencer functions are built independently, allows up to 1000 steps

JR2000NE SERIE : SPECIFICATIONS

| SPECIFICATIONS | | 3 AXES [SYNCHRONOUS CONTROL] | | | | 4 AXES [SYNCHRONOUS CONTROL] | | | |
|--------------------|-------------------------------------|---|------------------|------------------|------------------|--------------------------------|------------------|------------------|------------------|
| | | JR2203NE | JR2303NE | JR2403NE | JR2503NE | JR2204NE | JR2303NE | JR2404NE | JR2504NE |
| Axes | X | 200 | 300 | 400 | 510 | 200 | 300 | 400 | 510 |
| | Y | 200 | 320 | 400 | 510 | 200 | 320 | 400 | 510 |
| | Z | 50 | 100 | 150 | 150 | 50 | 100 | 150 | 150 |
| | R (degrees) | | | | | ±360 | ±360 | ±360 | ±360 |
| Weight load | Piece [kg] | 7 | 11 | 11 | 11 | 7 | 11 | 11 | 11 |
| | Tool [kg] | 3,5 | 6 | 6 | 6 | 3,5 | 6 | 6 | 6 |
| Speed [max] PTP | Axe X Y [mm/sec] | 700 [7-700] | 800 [8-800] | 800 [8-800] | 800 [8-800] | 700 [7-700] | 800 [8-800] | 800 [8-800] | 800 [8-800] |
| | Axe Z [mm/sec] | 250 [2,5-250] | 320 [3,2-320] | 320 [3,2-320] | 320 [3,2-320] | 250 [2,5-250] | 320 [3,2-320] | 320 [3,2-320] | 320 [3,2-320] |
| | Axe R [degré/sec] | | | | | 600 [6-800] | 800 [8-800] | 800 [8-800] | 800 [8-800] |
| Speed [max] CP | Axes X,Y,Z combined [mm/ sec] | 500 [0,1-500] | 800 [0,1-800] | 800 [0,1-800] | 800 [0,1-800] | 500 [0,1-500] | 800 [0,1-800] | 800 [0,1-800] | 800 [0,1-800] |
| Dimensions | Width | 320 | 560 | 584 | 676 | 320 | 560 | 584 | 676 |
| | Depth | 387 | 529 | 629 | 728 | 387 | 529 | 629 | 728 |
| | Height | 540 | 649 | 799 | 799 | 655 | 840 | 890 | 890 |
| Robot weight [kg] | | 18 | 35 | 42 | 43 | 18 | 35 | 42 | 43 |
| Power Source | | CA 90 - 132 V / CA 180 - 250 V | | | | | | | |
| Output | | 200 W | | | | | | | |
| Learning System | | Points JR-C programming designed for the user via the I / O | | | | | | | |
| Learning method | | Direct input via teach pendant [optional]. Offline - Learning via PC [optional] | | | | | | | |
| Capacity programs | | 255 programs | | | | | | | |
| Storage capacity | | 30,000 items | | | | | | | |
| Languages | | English / German / French / Spanish / Italian / Chinese / Japanese | | | | | | | |

SCARA ROBOT : JS SERIE



| SPECIFICATIONS | | JS250 | JS350 | JS450 | JS550 |
|---------------------------|-----|--|-------|-------|-------|
| Acceptable Inertia | | 0.1 kg. M² | | | |
| Detection position | | Absolute encoder | | | |
| Control system | | PTP command [point to point]. CP control [continuous path] | | | |
| Interpolation function | | Three-dimensional interpolation of lines and arcs | | | |
| Learning method | | Direct learning / Distance Learning (JOG) / Manual Data Entry (MDI) | | | |
| External interface series | E/S | I / O - SYS Input: 15 / Output: 14 - all covered | | | |
| | | I / O - 1 - input: 18 output: 22 (4 relay contacts) - all free | | | |
| | | Optional I / O - H Input: 4 / Output: 4 (2 relay contacts) - all free | | | |
| | | 1 channel for PC (COM1), 2 channels for external devices (Com 2 COM 3) | | | |
| Locking | | Reverse Lock Signal | | | |

PRESENTATION

The Scara robot [Selective Compliance Assembly Robotic Arm] proposed by Gentec is the ideal answer to your automation on assembly line needs. They bring you the flexibility to work either as stand-alone systems or as key components of an automated dispensing solution.

It consists of an articulated arm mounted on a vertical axis, which allows to cover a very large area of work and make rapid and accurate movements. Versatile and compact, it is easy to program and integrate into a production line.

JS series uses an exclusive Janome bearing configuration

coupled with AC servomotors to allow high movement speed and optimum precision.

Integrated in automation, it offers the ability to control a variety of external equipment and communicate with complex controllers.

I / O preconfigured connections allow an easy integration of a syringe or a dispensing valve system while the built-in sequencer simplifies installation of a dosing arm on online transfer systems, rotary tables or pallets assembly lines.

- Increased precision thanks to double-shaft mechanism
- Memory up to 255 programs or 30 000 points
- Speed standard cycle time: 0.4 seconds on average
- Maximum speed: 6,300 mm / Sec7
- Programming method JR C-Points software, easy to use
- Digital imaging in option
- Automatically detect and correct height, ideal for dispensing

SCARA ROBOT: JS SERIE

| SPECIFICATIONS | | JS250 | JS350 | JS450 | JS550 |
|--|--------------|--|----------------|----------------|----------------|
| Axes | | 4 (synchronous control) | | | |
| Arm length | Arm J1 | 100 mm | 125 mm | 225 mm | 325 mm |
| | Arm J2 | 150 mm | 225 mm | 225 mm | 225 mm |
| | Arm J1 et J2 | 250 mm | 350 mm | 450 mm | 550 mm |
| Operating range (in a X Y square form) | | 206 mm | 210 mm | 306 mm | 349 mm |
| Operating range | Arm J1 | ±130° | ±130° | ±130° | ±130° |
| | Arm J2 | ±145° | ±150° | ±145° | ±150° |
| | Axe Z | 150 mm° | 150 mm° | 150 mm° | 150 mm° |
| | Axe R | ±360° | ±360° | ±360° | ±360° |
| Portable maximum weight | | 4kg | 6kg | 6kg | 6kg |
| Top speed | J1 and J2 | 4.200 mm/sec | 6.300 mm/sec | 5.600 mm/sec | 6.200 mm/sec |
| | Axe Z | 1.400 mm/sec | 1.850 mm/sec | 1.850 mm/sec | 1.850 mm/sec |
| | Axe R | 1.750 °/sec | 1.900 °/sec | 1.900 °/sec | 1.900 °/sec |
| Accuracy of repeatability | Axe X and Y | ± 0.01 mm | ± 0.01 mm | ± 0.015 mm | ± 0.015 mm |
| | Axe Z | ± 0.01 mm | ± 0.01 mm | ± 0.01 mm | ± 0.01 mm |
| | Axe R | ± 0,01 ° | ± 0,01 ° | ± 0,01 ° | ± 0,01 ° |
| Standard cycle time | | 0.39 sec (1kg) | 0.38 sec (1kg) | 0.39 sec (1kg) | 0.41 sec (1kg) |
| Simple sequencer | | 100 programs | | | |
| Aberrante detection | | Auto function - Diagnostic | | | |
| Installed alimentation | | AC 180-250 V (single phase) | | | |
| Installed power | | 950 VA | 1.050 VA | | |
| Temperature | | 0 to 40 ° C, 20-95% relative humidity (non-condensing) | | | |
| Weight | | 27 kg | 28 kg | 28 kg | 29 kg |
| Control box weight | | 20 kg | | | |

SCARA ROBOT : JS SERIE



| SPECIFICATIONS | | JS650 | JS750 | JS880 | JS1000 |
|---------------------------|--------|--|-------|-------|--------|
| Acceptable inertia moment | | 0.2 kg. M² | | | |
| Detection position | | Absolute encoder | | | |
| Control system | | PTP command (point to point). CP control (continuous path) | | | |
| Interpolation function | | Three-dimensional interpolation of lines and arcs | | | |
| Learning method | | Direct learning / Distance Learning (JOG) / Manual Data Entry (MDI) | | | |
| Learning System | | Janome Software: JR - R Points | | | |
| Programming capability | | 255 programs or 30000 points | | | |
| External interface series | E/S | I / O - SYS Input: 15 / Output: 14 - all covered | | | |
| | | I / O - 1 - input: 18 output: 22 (4 relay contacts) - all free | | | |
| | | Optional I / O - H Input: 4 / Output: 4 (2 relay contacts) - all free | | | |
| | RS232C | 1 channel for PC (COM1), 2 channels for external devices (Com 2 COM 3) | | | |
| Lock | | Reverse Lock Signal | | | |
| Wiring and pipes | | 14 cables for signals, 4 air ducts | | | |

PRESENTATION

Easy to program and to implement in the production chain, the multi-axis dispensing robot Scara proposed by Gentec is ideal for use with conveyors or for heavy or bulky products.

Although it offers a small obstruction space with its «all-in-one» compact structure and integrated control unit, the materials it is made by allow it to be rigid and strong in order to be able to exploit effectively your heaviest materials.

Its flexible interface allows you to easily program your specific operations with expanded memory up to 255 programs and 30,000 points recorded. It is accessible and easy to learn even without major knowledge in computer science.

- A unique software avoids the use of a complex programming language
- Programmable interface via a control unit or a PC
- Compact size and built-in sequencer allows easy integration of automated assembly lines
- Robust and reliable units
- Ideal for operations in autonomous and automated mode
- Possibility of making samples before buying the product

SCARA ROBOT : JS SERIE

| SPECIFICATIONS | | JS650 | JS750 | JS880 | JS1000 |
|--|--------------|----------------------------|----------------|----------------|----------------|
| Axes | | 4 (synchronous control) | | | |
| Arm length | Arm J1 | 300 mm | 400 mm | 400 mm | 520 mm |
| | Arm J2 | 350 mm | 350 mm | 480 mm | 480 mm |
| | Arm J1 et J2 | 650 mm | 750 mm | 880 mm | 1000 mm |
| Operating range (in the form of XY square) | | 436 mm | 505 mm | 602 mm | 748 mm |
| Operating range | Arm J1 | ±130° | ±130° | ±130° | ±130° |
| | Arm J2 | ±150° | ±150° | ±160° | ±160° |
| | Axe Z | 200 mm° | 200 mm° | 200 mm° | 200 mm° |
| | Axe R | ±360° | ±360° | ±360° | ±360° |
| Portable maximum weight | | 20 kg | 20 kg | 20 kg | 20 kg |
| Top speed | J1 and J2 | 6.700 mm/sec | 7.200 mm/sec | 6.500 mm/sec | 7.000 mm/sec |
| | Axe Z | 2000 mm/sec | 2000 mm/sec | 2000 mm/sec | 2000 mm/sec |
| | Axe R | 1.800 °/sec | 1.800 °/sec | 1.800 °/sec | 1.800 °/sec |
| Accuracy of repeatability | Axe X and Y | ± 0.02 mm | ± 0.02 mm | ± 0.025 mm | ± 0.025 mm |
| | Axe Z | ± 0.01 mm | ± 0.01 mm | ± 0.01 mm | ± 0.01 mm |
| | Axe R | ± 0,01 ° | ± 0,01 ° | ± 0,01 ° | ± 0,01 ° |
| Standard cycle Time | | 0.44 sec (1kg) | 0.46 sec (1kg) | 0.47 sec (1kg) | 0.50 sec (1kg) |
| Simple sequencer | | 100 programs | | | |
| Aberrante detection | | Auto function - Diagnostic | | | |
| Installed alimentation | | CA 180 - 250 V | | | |
| Installed power | | 1.900 VA | | | |
| Weight Robot | | 65 kg | 67 kg | 68 kg | 70 kg |
| Weight Control unit | | 27 kg | | | |

SCARA ROBOT : JSR



PRESENTATION

Accurate and easy to use, the Scara robot motor stepper JSR4400N series offers a convenient and inexpensive way to automate your workflow. Its innovative technology ensures a smooth and precise movement. Also meet the environmental standards, it is designed to maintain extremely low power levels. Featuring an intuitive and accessible teaching method, it allows you to save considerable time savings by programming the device.

Applications :

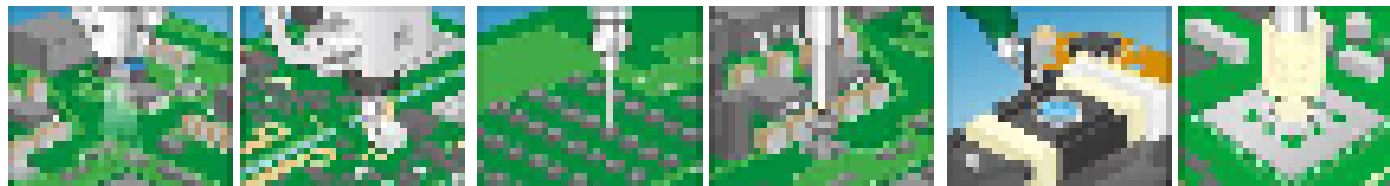
- Dispensing
- Pick-Up
- Assembly
- Palletization
- Removing
- Welding

| SPECIFICATIONS | | JSR4403N | JSR4404N |
|---------------------------|---|-------------------------|--------------------|
| Arm length | Axe | 3 | 4 |
| | Arm J1 | 260 mm | 260 mm |
| | Arm J2 | 180 mm | 180 mm |
| Operating range | Arm J1 and J2 | 440 mm | 440 mm |
| | Arm J1 | ±90° | ±90° |
| | Arm J2 | ±150° | ±150° |
| Top speed | Axe Z | 100 mm | 100 mm |
| | Axe R | ±360° | ±360° |
| | J1 and J2 | 1500 mm/sec (1kg load) | 1500 mm/sec |
| Accuracy of repeatability | Axe Z | 1400 mm/sec (3kg load) | 1400 mm/sec |
| | Axe R | 1300 mm/sec (5 kg load) | 1300 mm/sec |
| | Axe Z | 320 mm/sec | 320 mm/sec |
| Learning method | Axe R | | 900° /sec |
| | Axe X and Y | ±0,02 mm | ±0,02 mm |
| | Axe Z | ±0,01 mm | ±0,01 mm |
| Training System | Axe R | | ±0,02 mm |
| | Direct Learning, Distance Learning (JOG), manual data input (MDI) | | |
| | Stepping motor in 5 steps (controlled by encoder) | | |
| Control system | PTP command (point to point), continuous path control (PC) | | |
| | 3D linear interpolation and bows | | |
| | RS232C 3 Channels for external control box + PC | | |
| External interface | I / O External | | |
| | I / O-SYS Input: 16 / Output: 16-Input 2 / Output: 6 free I / O-1 - Input: 8 / Output: 8 (4 relay contacts) - available | | |
| | 255 Programs | | |
| Storage capacity | 30,000 points or 255 programs | | |
| | CPU | | |
| | 32 Bits | | |
| Dimensions (W x D x H) | 880 x 773 x 840 mm | | 880 x 858 x 840 mm |
| | Weight | | |
| | 41 kg | | 41 kg |
| Power supply | CA 180-250 V, 50 Hz, 200 VA | | |

APPLICATIONS

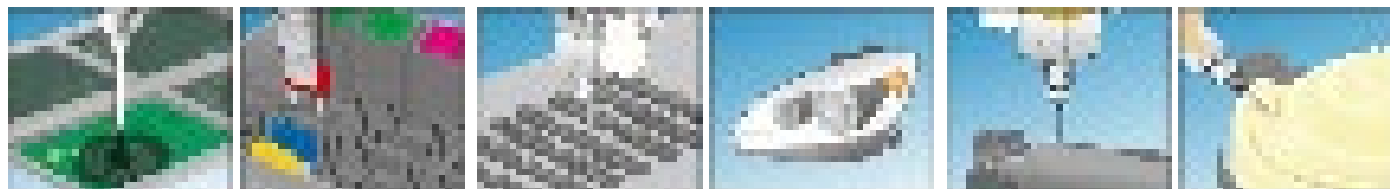
ELECTRONICS

- Coating for printed circuits
- Distribution glue for mobile device circuit
- Distribution paste for control circuit
- Clamping screw
- UV glue dispensing
- Pick and place small parts



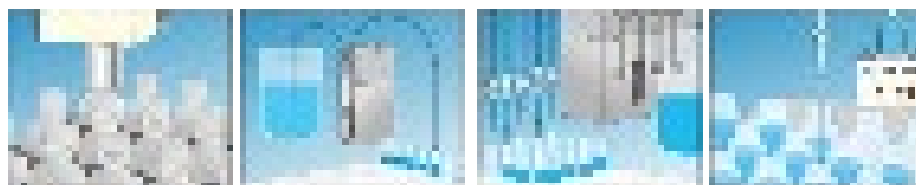
CARS

- Spray
- Pick and place fuse box
- Epoxy resin deposited by car relay
- Sealing for vehicle lighting part
- Joint casting for the engine
- Lubrication of air conditioner parts



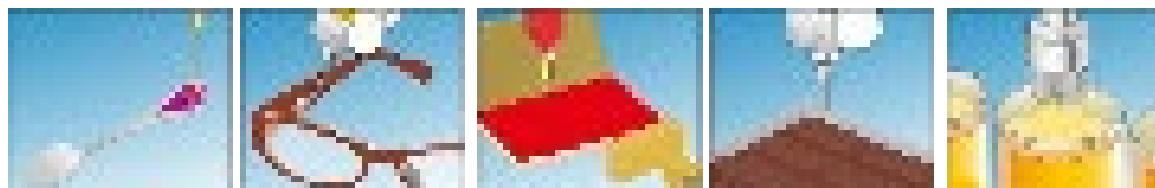
MEDICAL

- Capping system
- Fill solutions
- Many heads of dispensing system
- Weight management system



OTHERS

- Ink application on spoons, glasses
- Removal of red ink in the database
- Fill molds with chocolate
- Cans fill with syrup



— UV CURING SYSTEMS

OmniCure UV Curing Lamp & LED Systems



OMNICURE UV CURING LAMP

OmniCure® S Series UV light curing systems are used for precision adhesive curing in industries such as medical device bonding, electronic assembly, and optoelectronics applications. Due to the accuracy requirements and critical nature of these devices, a repeatable process with reliable UV curing equipment is essential to product performance.

OmniCure S Series delivers stronger, faster cures of UV adhesives resulting in improved product quality, rapid production and reduced manufacturing costs. Significant UV light curing systems expertise and innovative design goes into every curing machine to ensure peace-of-mind when selecting the most reliable spot curing equipment in the industry.

S1500

High Pressure 200 Watt Mercury Vapor Short Arc

2000 hours [guaranteed]

Available Filters : Standard : 320-500nm

Optional : 250-450nm *, 365nm, 320-390nm, 400-500nm

Panel Controls : Power On/Off, LED Display, Up/Down Adjust Buttons, Start/Stop Button

Panel Displays : Accumulated lamp usage, exposure time, iris setting, lamp on/warm-up status, shutter open, Light Guide detection, shutter/lamp error

Warm-up Period : 4 minutes [typical]

Power In : 100-240VAC, 50/60Hz

Power Supply : High efficiency, switch mode, line isolated

Dimensions (LxWxH) : 13.30 x 7.10 x 7.90 (33.8cm x 18.0cm x 20.1cm)

Weight : 9.9lbs (4.5kg)



S2000

70% improvement of shutter activation latency increasing productivity, especially for high volume manufacturing.

Downloadable StepCure® Software : Download customized multi-phase cure profiles directly to the unit. No need for a permanently connected PC.

Modified PLC Level Mode : Provides trigger signal versatility by selecting either edge or level modes.

Provides up to 30W/cm² of output and a guaranteed 2000 hour lamp life, lower operating costs.

Intelli-Lamp Technology to cool lamp and monitor lamp hours

2 UV Lamp Options : Special UV lamp technology for acrylic adhesives provides a tack-free surface cure.

Closed-Loop Feedback Technology : Automatically monitors and maintains a constant output for a repeatable spot UV curing process using an integrated UV sensor.

Typically, UV lamp intensity will diminish over time which affects the results and consistency of a UV curing process. The closed-Loop Feedback technology automatically compensate this effect with a tolerance of +/-5%

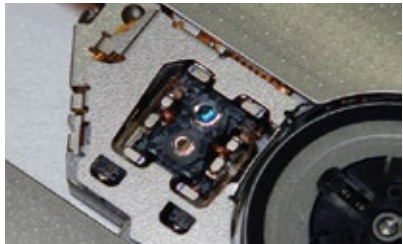
Adjustable light output in 1% increments : Allowing very precise control of the light curing system output.

Easily combined with the R2000 Radiometer : Calibrate and set absolute UV curing system irradiance levels from a single reference point.

OMNICURE SERIE 1500



| S1500 | R2000 |
|-------------|-----------------------|
| Filtre (nm) | Irradiance (mW / cm²) |
| 320-500 nm | 23 000 mW/cm2 |
| 320-390 nm | 14 500 mW/cm2 |
| 365 nm | 7 300 mW/cm2 |
| 400-500 nm | 5 900 mW/cm2 |
| 250-450 nm | 19 100 mW/cm2 |
| No Filter | 27 70 mW/cm2 |



PRESENTATION

The OmniCure® S1500 spot UV curing lamp provides automated manufacturers with industry leading control, reliability, and high intensity irradiance in a versatile UV mercury lamp system. Offering precise control of UV lamp output and high-speed shutter activation capabilities, the OmniCure S1500 spot UV curing lamp is ideal for the high throughput UV adhesive curing and automated bonding processes involved in microelectronic and optoelectronic manufacturing.

Recognized as the global leader in bonding systems for precision assembly with light-cured adhesives, the OmniCure® family of products provides the power, control and repeatability demanded by high-speed automated

manufacturing assembly. The OmniCure® S1500 UV Spot Curing System builds on that leadership by providing first-rate quality, precision and versatility in an easy-to-use, cost-effective system. The OmniCure® S1500 is also designed to adhere to regulatory validations and is RoHS compliant.

■ **Powerful 200 Watt Intelli-Lamp®**

At the heart of the OmniCure S1500 & S2000 UV curing system is the unique Intelli-Lamp technology. The OmniCure Intelli-Lamp is guaranteed to strike for a minimum of 2000 hours operation with a maximum-use lifetime up to 4000 hours. Snap-in insertion enables quick and easy Intelli-Lamp installation, while ensuring consistent optical tube and UV

sensor alignment. Each Intelli-Lamp chip module automatically records and maintains the UV lamp hours of use to facilitate activation of lamp warranty if required. The Intelli-Lamp provides output across virtually the entire visible and UV spectrum, making it suitable for a wide range of adhesive/substrate bonding applications.

■ **Intelligent Operation**

The OmniCure® S1500 has a multitude of built-in features that provide greater control, precision and versatility. Features include an adjustable iris, patented Intelli-Lamp® technology, selectable bandpass filters, process alarms, and 'lock out' protection, most of which are found only in higher-priced curing systems.

S1500 : PERFORMANCES

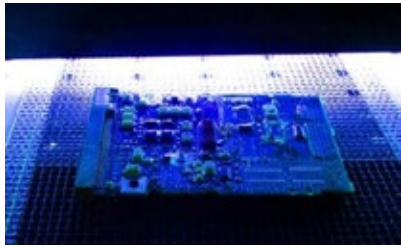
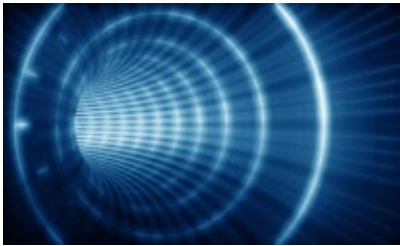
| SPECIFICATIONS | BENEFICES |
|--|---|
| Fast Shutter Activation Time | Improved shutter activation latency increasing productivity |
| Modified PLC Level | Provides trigger signal versatility by selecting either edge or level modes |
| 200W lamp technology with 2000 hour lamp life guarantee | Less frequent lamp changes for lower operating costs |
| Shutter / Aperture sophisticated roulette | Tested more than 6 million times to inspect to their reliability |
| Intelli-Lamp® Technology to cool lamp and monitor lamp hours | Maintain optimum operating condition, stable lamp output, longer lamp life, accumulated lamp hours |
| Adjustable light output in 1% increments | Allowing very precise control of output |
| External PC Controlled | Beneficial for automated assembly processes |
| Guaranteed Long UV Lamp Life | The OmniCure S1500 Intelli-Lamp is guaranteed to strike for a minimum of 2000 hours operation with a maximum-use lifetime up to 4000 hours. |
| Pre-Aligned & Focused | Snap-in insertion automatically senses the Intelli-Lamp, eliminating the need for operator alignment or focusing. |
| Automatic Lamp Hour Tracking | Each Intelli-Lamp chip module automatically records and maintains the UV lamp hours of use to facilitate activation of lamp warranty if required. |
| Broad UV Spectral Output | The Intelli-Lamp provides output across virtually the entire visible and UV spectrum, making it suitable for a wide range of adhesive/substrate bonding applications. |
| Built-In Reflector | Each Intelli-Lamp includes an integrated reflector, eliminating the need for a separate replacement reflector in the UV curing system. |
| Hot-Strike Prevention | Automatic temperature monitoring cools the UV curing lamp and protects against accidental hot-striking to further extend UV lamp life. |

- UV Curing Lamp Technology:
High Pressure 200 Watt Mercury Vapor Short Arc
- UV Curing Lamp Life :
2000 hours (guaranteed)
- Available Filters :
Standard: 320-500nm
Optional: 250-450nm *, 365nm, 320-390nm, 400-500nm
- Panel Controls :
Power On/Off, LED Display, Up/Down Adjust Buttons, Start/Stop Button
- Panel Displays :
Accumulated lamp usage, exposure time, iris setting, lamp on/warm-up status, shutter open, Light Guide detection, shutter/lamp error
- Warm-up Period : 4 minutes (typical)
- Power In :
100-120 V c.a. / 200-240 V c.a., 50/60 Hz
- Power Supply :
High efficiency, switch mode, line isolated
- Dimensions (LxWxH) : 13.30 x 7.10 x 7.90 (33.8cm x 18.0cm x 20.1 cm)
- Weight : 9.9lbs (4.5kg)
- Includes :
UV Curing Lamp Module, Selected Filter (installed), Protective Eyewear, Grounded and Shielded Power Cord, Foot Pedal, Manual

OMNICURE SERIE 2000



| S2000 | R2000 |
|--------------|------------------------------------|
| Filters (nm) | Irradiance (mW / cm ²) |
| 320-500 nm | 24 700 mW/cm ² |
| 320-390 nm | 9 830 mW/cm ² |
| 365 nm | 7 280 mW/cm ² |
| 400-500 nm | 16 550 mW/cm ² |
| 250-450 nm | 26 640 mW/cm ² |



PRESENTATION

Recognized as the global leader in bonding systems for precision assembly with light-cured adhesives, the OmniCure® S2000 provides the power, control and repeatability required for high-speed automated manufacturing assembly. Offering a powerful 200 Watt lamp with a guaranteed life of 2000 hours, the OmniCure®S2000 also offers Closed-Loop Feedback technology and a flexible PC software interface for computer-controlled operation. When combined with OmniCure®'s R2000 Radiometer, the OmniCure®S2000's precision and reliability is unmatched. The OmniCure®S2000 is also designed to adhere to regulatory validations and is RoHS compliant.

■ Fast Shutter Activation

The OmniCure® S2000 is equipped with a fast shutter activation time, providing a maximum trigger shutter activation latency of only 50ms in PLC mode.

■ Closed-Loop Feedback

Over time, lamp intensity diminishes effective curing. The OmniCure® S2000 internal intensity sensor monitors light output in real time and opens the iris to automatically correct light output within +/-5%, ensuring repeatable and measurable doses of energy every time.

■ Downloadable StepCure®

StepCure® software can download a customized multi-phase cure profile directly to the system. This option offers users greater cure control.

■ 200 Watt Intelli-Lamp®

The powerful 200 Watt Intelli-Lamp® provides even faster curing with high UVA irradiance of up to 30W/cm². With automatic lamp hour tracking and broad spectral output, the OmniCure® S2000 suitable for a wide range of adhesive/substrate bonding applications.

S2000 : PERFORMANCES

SPECIFICATIONS

BENEFICES

| | |
|---|---|
| Faster Shutter Activation Time | 70% improvement of shutter activation latency increasing productivity, especially for high volume manufacturing |
| Downloadable StepCure® Software | Download customized multi-phase cure profiles directly to the unit. No need for a permanently connected PC |
| Modified PLC Level Mode | Provides trigger signal versatility by selecting either edge or level modes |
| 200W lamp technology with up to 30W/cm ² of output and a 2000 hour lamp life guarantee | Lower operating costs |
| Intelli-Lamp® Technology to cool lamp and monitor lamp hours | Maintain optimum operating condition, stable lamp output, longer lamp life, accumulated lamp hours |
| 2 Lamp Options | Special lamp technology for acrylic adhesives provides a tack-free surface cure |
| Closed-Loop Feedback Technology | Automatically maintains a constant output for a repeatable curing process |
| External PC Controlled | Beneficial for automated assembly processes |
| Adjustable light output in 1% increments | Allowing very precise control of output |
| Easily combined with the OmniCure®R2000 Radiometer | Calibrate and set absolute irradiance levels wirelessly from a single reference point |
| Pre-Aligned & Focused | Snap-in insertion enables quick and easy Intelli-Lamp installation, while ensuring consistent optical tube and UV sensor alignment. |
| Automatic UV Lamp Hour Tracking | Each Intelli-Lamp chip module automatically records and maintains the UV lamp hours of use to facilitate activation of lamp warranty if required. |
| Broad Light Curing System Spectral Output | The Intelli-Lamp provides output across virtually the entire visible and UV spectrum, making it suitable for a wide range of adhesive/substrate bonding applications. |

- Lamp :
High Pressure 200 Watt Mercury Vapor Short Arc
- Lamp Life :
2000 hours (guaranteed)
- Available Filters :
Standard: 320-500nm
Optional: 250-450nm *, 365nm, 320-390nm, 400-500nm
- Panel Controls :
Power On/Off, Display Mode, Adjust Up/Down, Start/Stop, Lock/Unlock
- Panel Displays :
Accumulated lamp usage, Exposure time (0.2 - 999.9sec), iris setting (0-100%) / irradiance level (0.2W/cm² - 40W/cm²), lamp on/warm-up, shutter open, calibrated, Light Guide detection, shutter/lamp error
- Warm-up Period : 4-minutes (typical)
- Power In :
100-120VAC / 200-240VAC, 50/60Hz
- Power Supply :
High efficiency, switch mode, line isolated
- Dimensions (LxWxH) : 13.3" x 7.1" x 7.9" (33.8cm x 18.0cm x 20.1cm)
- Weight : 9.9lbs (4.5kg)
- Includes :
Lamp Module, Selected Filter (installed), Protective Eyewear, Grounded and Shielded Power Cord, Foot Pedal, Manual

OMNICURE R2000 RADIOMETER



SPECIFICATIONS

| | |
|--------------------|---|
| Wavelength Range | 250nm - 1µm (with suitable calibration) |
| Maximum Range | Power: 1mW-12W Irradiance: 5mW/cm² - 60W/cm² (with 5mm Light Guide) |
| Resolution | Power: 1mW Irradiance: 5mW/cm² (with 5mm Light Guide) |
| Accuracy | +/- 5% typical; +/- 10% maximum |
| Auto-ranging | Power: 1-990 mW; 1.0-12.00W Irradiance: 5-990mW/cm²; 1.0-60W/cm² |
| Functions | Irradiance and power measurement |
| | Automatic light guide detection, Calibration due message |
| Power supply | Lithium battery 3.6V |
| Dimensions (LxWxH) | 7 1/2" x 4 3/8" x 2" (19.0cm x 11.1cm x 5.0cm) |

PRESENTATION

Radiometry is an essential link for measuring the light output from a UV curing system in order to maintain a repeatable process. The OmniCure® R2000 UV Radiometer can be combined with the OmniCure S2000 Spot UV Curing System to provide a complete curing station with unmatched control and repeatability. Special electronics built into the R2000 UV Radiometer also allow for the connection of custom sensors that measure light energy directly at the cure site or within cure ring bonding fixtures.

Accurate radiometry is essential to maintaining a calibrated and repeatable UV curing process suitable for consistent, high-quality production. The OmniCure® R2000 Radiometer is the most advanced and accurate tool for measuring irradiance or power from your UV Spot Curing System. Developed in cooperation with the OmniCure® Platform of UV Curing Systems, the portable OmniCure® R2000 Radiometer offers unmatched performance to calibrate and set irradiance levels on your OmniCure® S2000 Curing System.

- Using a single Radiometer, maintain process control and save setup time by calibrating multiple systems with a preferred irradiance set point
- Proprietary detector system for accurate wideband measurements suitable for many different light sources
- Proprietary optical interface that virtually eliminates beam profile dependence and significantly improves measurement accuracy
- Memory for storing data and communicating with PC software for downloading
- Ready for use with additional custom accessories such as the Cure Ring Detector and the Cure Site Detector

OMNICURE SERIE S : ACCESSORIES

ADJUSTABLE COLLIMATING ADAPTOR

The adjustable collimating adaptor is ideal for any application that requires a uniform spot from 1" up to 6" (2.54cm to 15.2cm).



LIGHT LINE

The Light Line will convert the Light Guide's spot of light into a focused, linear beam of curing energy.



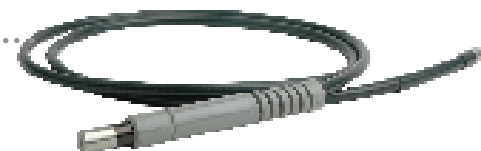
UV CURE RING

UV Cure Ring technology allows a Light Guide 360° of curing power. The standard ring for use with Liquid Light Guides is available in solid or slotted versions.



LIQUID LIGHT GUIDE

Available in 3, 5 and 8mm tip diameters, these Light Guides are an economical choice for light delivery.



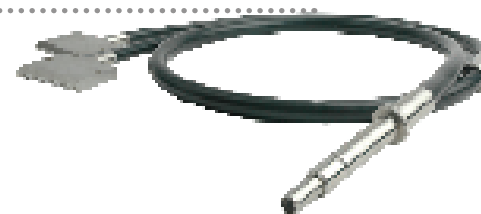
HIGH POWER FIBER LIGHT GUIDE

The Lumen Dynamics High-Power Fiber Light Guide supplies an equal distribution of UV energy to multiple cure sites from a single light curing system.



HIGH POWER FIBER LIGHT LINE

The High Power Fiber Light Line utilizes technology developed in the High Power fiber light guides to provide a high output linear beam of UV curing energy.



Many other accessories and consumables available : www.gentec-benelux.com

OMNICURE LX400



Interchangeable/Replaceable focusing lens options

PRESENTATION

Building on the simplicity of the OmniCure® LX Series plus the ability to control up to four UV LED Heads simultaneously or independently. Building on the simplicity of the OmniCure® LX Series plus the ability to control up to four UV LED Heads simultaneously or independently.

■ Highest Power LED Technology

With peak irradiance of 8,000mW/cm² with the 365nm UV LED Heads, 9,500mW/cm² at 385nm, and 9,000mW/cm² at 400nm, as well as up to four LED Heads installed, the OmniCure® LX400 UV LED Curing System provides the highest power and most reliable UV LED technology currently available with variable UV power output. Where multiple LED Heads are required, irradiance on each head is uncompromised and consistent.

■ Versatile System

The OmniCure® LX400 offers the ability to control up to four UV LED Heads simultaneously or independently. This ability makes the product ideal for manufacturing setups where single or multiple foot pedals are needed to control multiple curing stations simultaneously. To enable a higher level of control, each UV LED Head can be set for different exposure times and intensity levels. The intensity levels for each head are set in 1% increments in a group or each head independently.

The focusing lenses are replaceable. Such flexibility enables the OmniCure® LX400 users to change the lenses to accommodate the applications without the need to replace the UV LED Heads. This also reduces the downtime to reconfigure the OmniCure® LX400 for other applications.

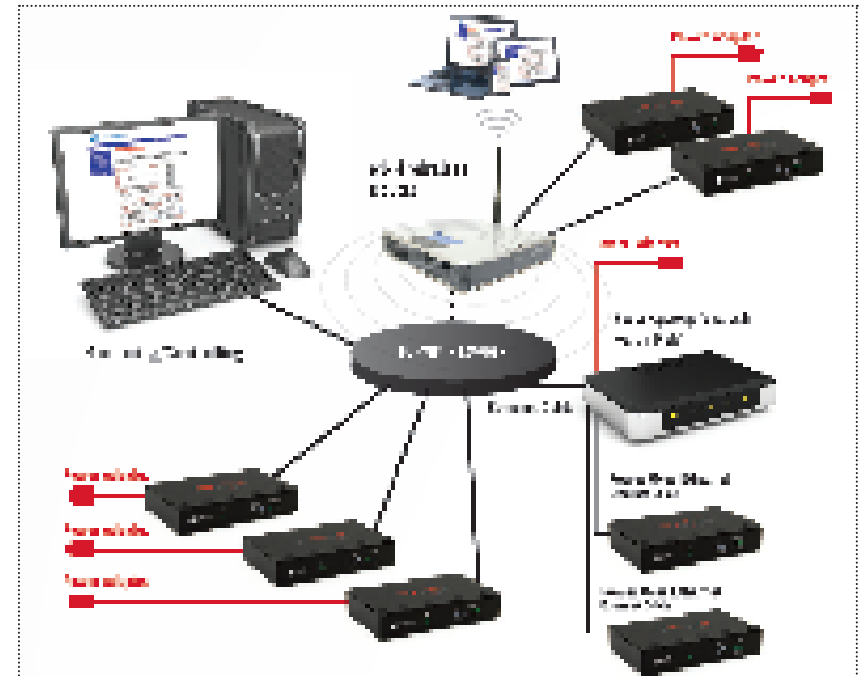
■ Support for Multi-wavelength UV LED Heads

The OmniCure® LX400 controller can operate four UV LED Heads, each of different wavelengths (e.g. 365nm UV LED Head, 385nm UV LED Head, and 400nm UV LED Head). This is unique to the OmniCure® LX400 controller, setting it apart from other UV LED bonding systems available today. This enables it to accommodate more applications

LX400 : PERFORMANCES

| SPECIFICATIONS | | BENEFICES |
|------------------------------------|-----------------|--|
| Connectable Heads | | 1 to 4 individual heads |
| LED Indicators | | LEDs indicate: Timer Control, Level, Trigger Mode and Emission (UV ON) |
| Mode Control | | Mode and Up/Down buttons to control the display mode |
| Timer | | Programmable trigger mode : <ul style="list-style-type: none"> • Countdown Mode: Range programmable from 999.9s to 0.1s, in 0.1s intervals • Count Up Mode: User control timing via the front panel or foot pedals |
| Level | | 15%-100% (with 1% increments) |
| Start/Stop | | Start/Stop button to control start or stop of the LED Emission |
| Key Switch | | Key Switch to turn on/off controller |
| Flashing Alarm | | Over temperature protection and lamp-off alarm for LED Heads |
| Foot Pedal | | Foot pedal to control start or stop of the LED Emission |
| External PLC Control | Method | PLC (See the manual for more details) |
| | External Input | Start/Stop, intensity level select, lock out front panel interface and timer mode select |
| | External Output | Emission Alarm |
| Operating Voltage | | Controller Supply Input: 12 VDC, 4A Input to AC adaptor: 100-120VAC/ 200-240VAC (+/-10%) & 50/60Hz. |
| Ambient Temperature/Humidity Range | | Controller : 5° to 35°C, 85% max. (no condensation) |
| Storage Temperature/Humidity Range | | Controller : -10° to 60°C, 85% max. (no condensation) |

OMNICURE LX180 : CONNECTED SYSTEM



3 options to connect : Ethernet, alimentation, WiFi

PRESENTATION

The OmniCure® LX180 UV LED spot curing system introduces a new powerful way for manufacturers to achieve highest productivity with increased manufacturing efficiency and minimal downtime in a most cost-effective way. The LX180 allows manufacturers the ability to ensure optimal production up-time and improve process efficiency through innovative remote monitoring and control capabilities over their UV curing systems and managed from a workstation via their IT network. Process engineers are able to easily pre-configure, monitor and adjust their UV LED systems entirely via remote access offering greater flexibility and ease while enhancing productivity.

The small compact OmniCure® LX180 UV spot curing system is simple to integrate with new or existing production lines giving users maximum flexibility and reduced operational costs. The LX180 offers the ability to achieve superior UV bonding with faster, more efficient curing through high power UV output with a maximum irradiance of 12,400 mW/cm². The LX180 is simple to use with pre-set exposure times and can easily adapt to specific curing time requirements for use with a variety of UV adhesives through its learning mode.

- Faster, more efficient curing through high UV LED output with maximum irradiance of 12,400 mW/cm²
- Maximum flexibility and ease of use delivered in a compact size
- Higher process efficiency with quick set-up times via remote control and configuration adjustments
- Increased productivity and minimal downtime through network-enabled remote monitoring
- High yields via low temperature curing

LX180 : PERFORMANCES

| SPECIFICATIONS | BENEFICES |
|--|---|
| Connectable heads | 1 à 2 têtes séparées |
| LED indicators | System status: LED status (CH1 et CH2) ; LED connection status (CH1 et CH2) |
| Four selectable modes by DIP switch settings | Top/down buttons to set the display mode |
| Four selectable modes by DIP switch settings | <ul style="list-style-type: none"> 1. Intensity Setting: 100% or 60% setting 2. Foot pedal: independent/parallel control 3. Learn mode: Exposure set-up via foot pedal/PLC connector 4. Count Up/External Timer Mode ; Count Down/Internal Timer Mode |
| Irradiance level via Ethernet | 15% - 100% |
| Activation mode | Foot pedal, PLC and Ethernet |
| Foot pedal | Foot pedal control to start/stop LED emission |
| External PLC | Exposure trigger signal acknowledgement and alarm indication |
| Display GUI | Temperature and condition of each LED UV pattern connected |
| Ethernet remote function | <p>Remote access via web interface for system control (HTTP) Ability to trigger exposures via the Ethernet network. ModBus Protocol for full PLC control via TCP communications</p> <p>Password protected user login/access to set/ adjust parameters for:</p> <ol style="list-style-type: none"> 1. Exposure time 2. LED intensity 3. Foot pedal mode 4. Count Up/Count Down mode 5. All DIP switch settings <p>TCP/IP suite to permit device find functionality and Windows GUI SMTP email notification upon fault detection</p> |

LED LIGHT METER



SPECIFICATIONS

| | |
|----------------------|---|
| Spectral Sensitivity | Selectable wavelengths programmable from 320-750nm |
| Measurement Range | Irradiance: 50mW/cm2 to 25 W/cm2 Power: 1mW to 500mW |
| Accuracy | +/- 10% |
| Resolution | Irradiance : 1mW/cm2 Power : 1mW |
| Fonctions | Peak Hold |
| | λnm (Wavelength selection) |
| | Power/ Irrad (puissance/ irradiation) |
| Sensor Dimension | 165 mm x 100 mm x 44 mm |
| Meter Dimension | 75 mm x 25 mm x 11.95 mm |

PRESENTATION

The OmniCure® LED Light Meter offers the ability to accurately measure power and irradiance from an OmniCure® LED UV curing system, or any other LED UV source, directly at the cure site. With the narrow wavelengths emitted from an LED spot source, specific challenges arise when measured with a radiometer calibrated using a broadband source.

The OmniCure® LED Light Meter is specially designed with the ability to select specific wavelengths for measurement. When used with the sensor calibrated with a near monochromatic source, potential inaccuracies in measurement are eliminated that would normally occur due to the narrow spectral distribution of a UV LED source.

Featuring a peak hold function, the OmniCure® LED Light Meter allows users the ability to easily measure narrow beam patterns for capturing peak irradiance. With a fine aperture that is calibrated with precision, accurate and consistent measurements can be obtained over a broad dynamic range. Manufacturers are able to achieve greater accuracy with ease of use while maintaining a reliable and controlled UV assembly processes. The OmniCure® LED Light Meter is calibrated according to protocol standards traceable to NIST and NRC :

- NIST - National Institute of Standards and Technology
- NRC - National Research Council

- Small form factor fits into limited spaces
- Peak hold function detects/records peak measurements
- Broad linear dynamic range for measuring from any LED light source
- Multi-point wavelength calibration for accurate measurements
- Offering maximum reliability and control for UV assembly processes

OMNICURE SERIE LX : ACCESSORIES

LED HEAD FOCUSING LENSES

Interchangeable LED focusing lenses allow control over UV spot size and irradiance level to meet the needs of your specific application.



FOCUSING LENSES

These interchangeable focusing lenses offer great flexibility to respond to your needs in terms of size of radiation. It is essential for any specific application.



LED HEAD MOUNTING CLAMPS

The precision machined mounting clamp is designed for installation versatility. The mounting clamp slides easily over the UV LED head and is secured with a single screw.



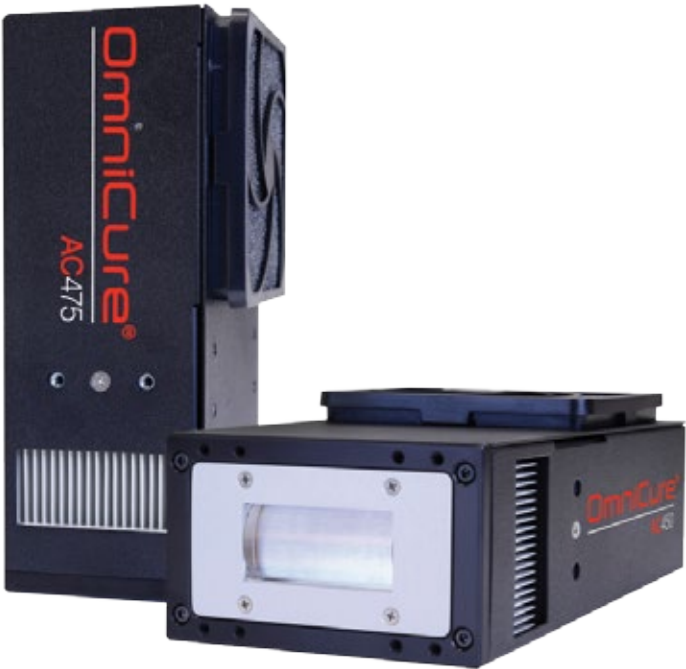
EXTENSION CABLE

Cables extension allows manufacturing process engineers to accommodate applications where the UV curing station needs to be further away from the controller.



Many other accessories and consumables available : www.gentec-benelux.com

SYSTEME UV LED : AC450 & AC 475



| SPECIFICATIONS | BENEFICES |
|--|--|
| Output of over 8W/cm ² | High speed curing for adhesives, coatings and inks |
| Custom front-end optics | Greater flexibility in the curing process via high peak irradiance available at longer working distances |
| Patented process for addressing individual LED modules | Even and consistent curing through excellent uniformity across the full LED area |
| Available in 395nm and 365nm | Ability to select the optimum wavelength for the adhesive, coating or ink and also the substrates to best suit specific applications |
| Air-cooled | Easily integrated into any workstation with no additional venting, ozone extraction or chillers required |
| I/O Port for remote operation | Ability to automate for increased productivity |
| Compact size | Easily integrated into any workstation |

PRESENTATION

Ideal for curing of adhesives and coatings in electronics, optics and medical device assembly or inks in print, marking and coding applications.

■ **Exceptional Irradiance Performance**
The OmniCure® AC450 and AC475 utilize high emission LEDs which achieve over 8W/cm² at the optics window. The systems include advanced front-end optics to provide high peak irradiance at long working distances with extended clearance of

conveyed parts. This allows for easier curing, or the option of focusing the light at different working distances for adapting to a specific UV process.

■ **Superior Uniformity & Extendible**
Utilizing Lumen Dynamics' patented process for individually addressing each UV LED module output, the OmniCure® AC450 and AC475 offers consistent results by ensuring high longitudinal uniformity over the entire 50mm (2") to 75mm

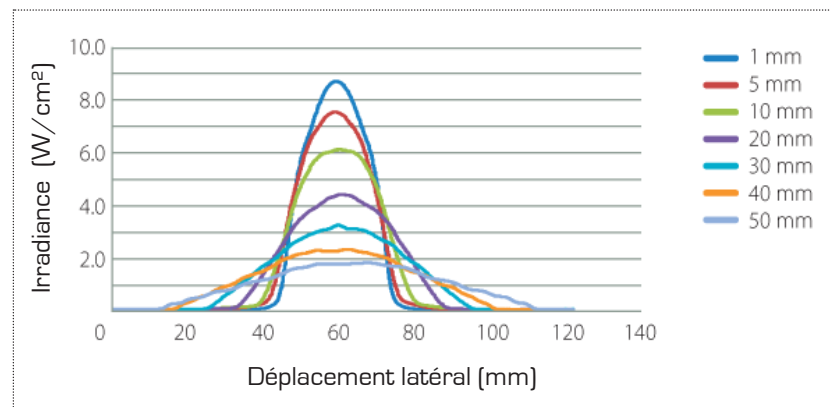
(3") curing area. A uniform exposure area allows for curing of larger and/or multiple parts simultaneously. It also offers the ability to convert a static curing process to one where parts are being cured while in motion in order to increase throughput.

■ **Flexibility with Control**
Precise control of the UV irradiance level and time ensures that the correct dose of UV energy at the required wavelength is provided on every exposure for a repeatable curing process. Intelligent system monitoring and control ensures system reliability meets the demands for any application.

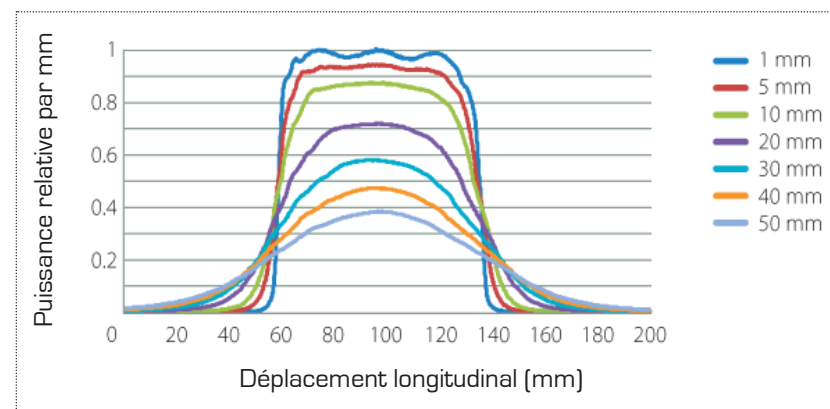
AC450 & AC 475 : PERFORMANCES

| | | AC450 | | AC475 | |
|----------------------------|------|--|-------|-------------|-------|
| Available Wavelengths | | 365 nm ± 5 nm, 395nm ± 5nm | | | |
| Curing Area | | 50mm x 25mm | | 75mm x 25mm | |
| Typical Irradiance (W/cm2) | | 365nm | 395nm | 365nm | 395nm |
| Working Distance | 1mm | 4.0 | 8.0 | 4.0 | 8.0 |
| | 10mm | 2.8 | 5.7 | 2.8 | 5.7 |
| | 20mm | 1.9 | 3.7 | 1.9 | 3.7 |
| | 30mm | 1.5 | 2.8 | 1.5 | 2.8 |
| | 40mm | 1.2 | 2.0 | 1.2 | 2.0 |
| | 50mm | 1.0 | 1.7 | 1.0 | 1.7 |
| Optical Power | | 45W | 90W | 68W | 135W |
| Power Consumption | | 350W | 350W | 550W | 500W |
| Longitudinal Uniformity | | ± 10% | | | |
| Operating Voltage | | 48 V DC ± 2 V | | | |
| Dimensions | | 110 x 68 x 190 mm | | | |
| Weight | | 1.1 kg (2.4 lbs) | | | |
| Cooling | | Air | | | |
| Life Expectancy | | > 20 000 hours | | | |
| Automation | | Integrated PLC controls for UV intensity and system alarms | | | |
| Acoustic Noise | | < 65dBA, load adapting | | | |
| Warranty | | 1 year ; 10,000 service hours (light engine) | | | |

Irradiance / Working distance - 395 nm



Uniformity in function of the working distance AC475



THINKY MIXER

Planetary centrifugal mixer



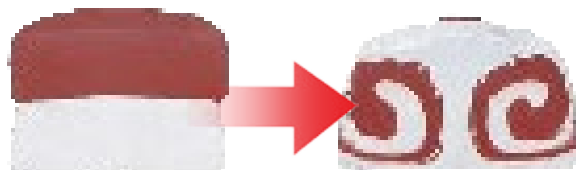
PLANETARY MIXER

ROTATION / RÉVOLUTION

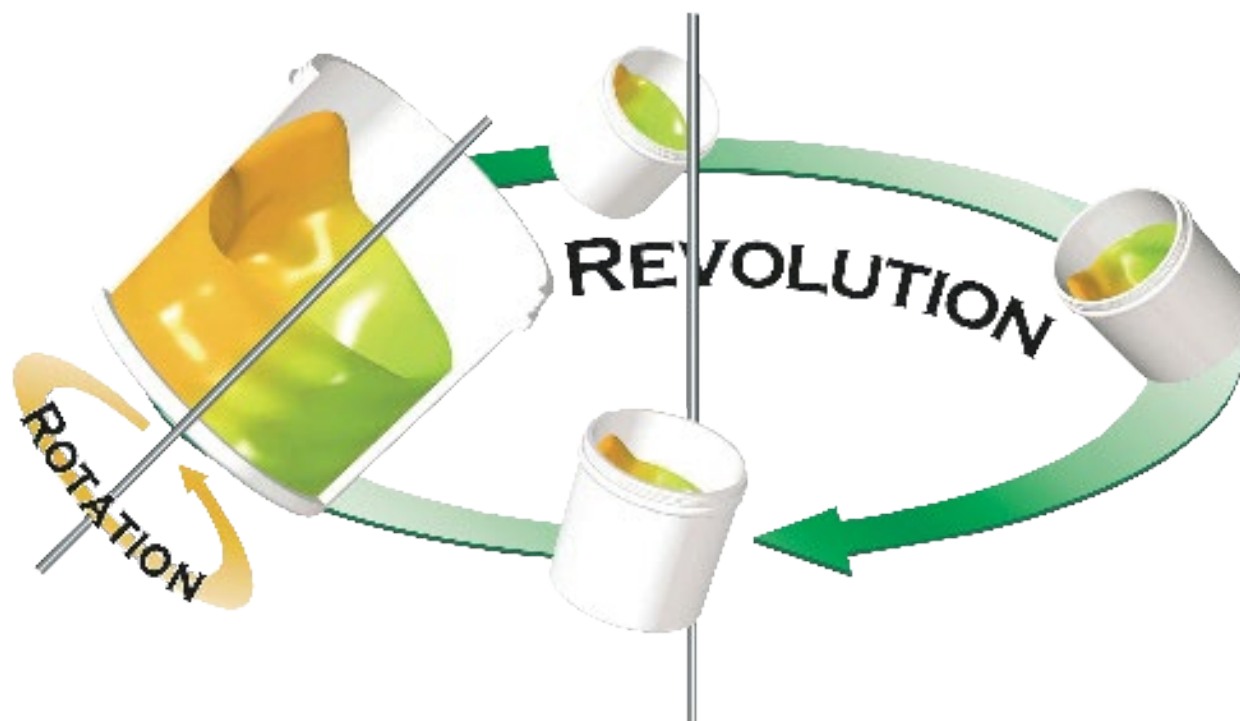
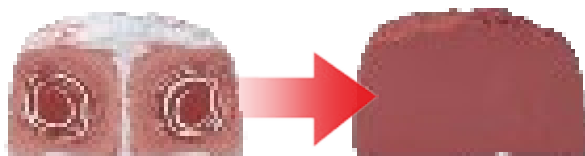
Sample

Mixing process of high-viscosity materials using oil - based day. The mixing of two layers of high - viscosity oil - day has started. In just seven minutes uniform mixing

Early phase



Completion of operation



PRESENTATION

The Planetary Centrifugal System is an innovative mixing technology that achieves «simultaneous mixing and deaeration». Its dynamic motion is much the same as the movement of the Earth as it revolves both on its own axis and around the Sun.

The container with the material is placed into the holder at a perfect 45-degree angle. A clockwise revolution and counter-clockwise rotation is applied to the container. The centrifugal force of

the revolution works as a «power that accelerates deaeration. The interaction between rotation and revolution generates a spiral flow and rising and falling convection currents. Air bubbles within the material are efficiently pressed out the surface, thus enabling mixing and dispersion without bubbles folding back into the mix.

The Thinky Mixer that debuted in the world as the planetary centrifugal mixer was very easily able to achieve the kneading and deaeration viscosity materials that had been impossible up until then

and pioneered a number of material evolutions all at once.

Today, Thinky Mixer has grown into an entire series with full support for the basic materials research stage to mass production, and continues to make contributions to the state-of-the art materials field in the elimination of submicronlevel air bubbles. Its 45 degree angle maximizes the collision frequency of materials and media, and completes the pulverization process in a very short time.

- Deaeration
- Defoaming
- Crushing/Grinding
- Dispersion
- Emulsification
- Stirring/Kneading

APPLICATIONS

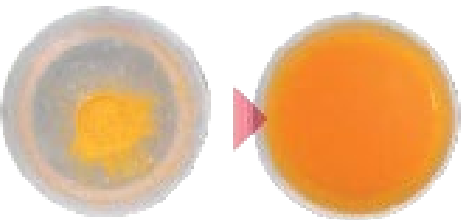
BEFORE/ AFTER

Onguent [Zinc oxide and acrinol powder]



Yellow acrinol powders are uniformly dispersed to create a solid yellow color cream with a smooth feel when applied

Silicone /Silicate



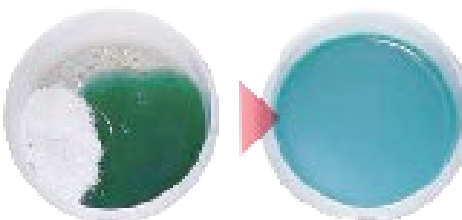
The fluorescent material is uniformly dispersed with no sedimentation throughout the low-viscosity silicone resin

Cosmetic Foundation



Four types of materials are uniformly mixed to a smooth cream consistency.

Epoxy Resin and alumina powder



2 - part resin and white alumina powder are uniformly mixed to a solid green color

MANUAL MIXING / THINKY MIXER

Sealant for white LED

Fluorescent powders with a higher specific gravity are uniformly dispersed without sedimentation



Polyimide

No bubbles. Uniformity mixed



Solder Paste

Smooth Surface. No bubbles



Silicon resin and calcium carbonate

No lumps. Powders turn into a uniformly mixed paste



ARE 250 : HIGH QUALITY MIXER

SPECIFICATIONS

| | |
|------------------------|----------------------|
| Max. processing volume | 300 ml |
| Dimensions | H380 x L300 x P315 |
| Max. weight [net] | 250 g |
| Max. weight [brut] | 310 g |
| Deaeration type | Atmospheric pressure |
| Mixing function | 410G |
| RPM | Adjustable |



PRESENTATION

The THINKY ARE-250 Mixer is an industrial non-contact «planetary» mixer for all compounds. It mixes, disperses and degasses your materials in seconds to minutes, in a sealed or lid-less container such as a jar, beaker, syringe or cartridge. The non-contact mixing principle makes it possible to formulate compounds from very small amounts such as 0.5ml to large production scales.

This is a lightweight benchtop model, which can hold up to 310g of material. The Multi-Step Mixing feature allows you to program 5 different sets of mixing and degassing conditions

(time and speed per mode) in a single batch cycle. Precise control of the process makes it possible not only to improve formulation quality, but also to eliminate human errors or operator skills throughout the process. It is also effective in controlling shear, so as not to damage your materials. Cooled materials or heated materials can be processed with special adapters. The ARE-250 can accept syringes up to 55ml or up to 75ml (2.5 oz) cartridges with optional adapters. Larger THINKY mixers with vacuum capability are also available.

- Vacuum-less processing, degassing and deaeration
- Remove voids and re-disperse filled materials packed in syringes
- Saves significant time and lowers costs
- Produces consistent quality, with digitally controlled processing

SR 500 : SOLDER PASTE MIXER



SPECIFICATIONS

| | |
|------------------------|--------------------|
| Max. processing volume | 150 ml |
| Dimensions | H380 x L300 x P340 |
| Max. weight [net] | 520 g |
| Max. weight [brut] | 560 g |
| Pression type | NA |
| Mixing function | 150 G |
| RPM | Adjustable |



PRESENTATION

Special purpose machine that can optimize temperature and viscosity preparations and dispersion and deaeration of solder paste at the same time.

The mixer SR500 can prepare uniform viscosity in a short time for solder paste just taken from cold storage without bringing it back to room temperature. Metal particles with high specific gravity such as solder particles settle to the bottom of containers in cold storage and cause differences in material viscosity. The SR-500 regulates the viscosity of solder paste in a short time, with uniform viscosity from top to bottom. Also, because it can remove air bubbles thought to cause spattering of solder balls, it contributes to reducing the defect rate.

- Can immediately prepare cold stored solder paste without bringing it back to room temperature
- Viscosity preparation and temperature preparation for solder paste is easy.
- Removes large air bubbles in the paste, which are considered the cause of solder paste defects.
- Restirs and redisperses solder paste that has been used
- Adaptateur pour le mélange du contenu d'une seringue
- Supports solder paste in syringes by using the optional adapter

ARV 310 : HIGH QUALITY VACUUM MIXER

SPECIFICATIONS

| | |
|------------------------|-------------------|
| Max. processing volume | 300 ml |
| Dimensions | H450 x L555x P645 |
| Max. weight [net] | 250 g |
| Max. weight [brut] | 310 g |
| Deaeration type | Vacuum |
| Mixing function | 420 G |
| RPM | Adjustable |



PRESENTATION

Standard vacuum mixer enabling uniform mixing and elimination of submicron-level air bubbles.

Combining vacuum pressure reduction function with rotation and revolution mixing enables efficient elimination of submicron-level air bubbles. With rotation and revolution movement under vacuum pressure reduction, deaeration of high-viscosity materials; which was considered difficult, can now be performed with excellent quality. The processing time can be further reduced compared to the atmospheric mixer. In terms of operation; the centrifugal force of revolution during the mixing process suppresses the material within the container, eliminating the need to keep an eye on the material so that it does not overflow, as is needed with static vacuum chambers.

- Simultaneous mixing, dispersion, and submicron-level air bubble elimination
- Deaeration of high-viscosity materials difficult to be processed by a centrifugal separator
- Reduced processing time and improved deaeration performance compared to the atmospheric type mixer
- Centrifugal force of revolution prevents overflow of material during operation

ARV 930 : TWIN VACUUM MIXER



*Can be used for 6oz cartridges

PRESENTATION

Manufacturing application mixer that can vacuum process a maximum 1L of materials with twin mixer system.

This product employs a twin mixer system, and supports manufacturing application with the capacity to process a maximum 1L of materials. It is equipped with a vacuum function in order to achieve deaeration at the submicron level, thus it is possible to process uniform mixing and dispersion as well as deaeration at the same time. It has two

deaeration modes as standard features: one is vacuum deaeration mode which combines 400G centrifugal force and vacuum, and the other is Non Vacuum deaeration mode which utilizes powerful centrifugal force of maximum 670G. This enables high precision deaeration even with materials that contain a volatile component that is not suitable for vacuum deaeration. Furthermore, time to reach vacuum is significantly reduced by adopting our unique in-cup-holder vacuum pressure reduction system that minimizes the vacuum volume.

SPECIFICATIONS

| | |
|------------------------|-------------------------|
| Max. processing volume | 750 ml x 2 ou 550ml x 2 |
| Dimensions | H960 x L760 x P820 |
| Max. weight [net] | 830 g x 2 |
| Max. weight [brut] | 930 g x 2 |
| Deaeration type | Vacuum |
| Mixing function | 660 G |
| RPM | Adjustable |



- First tank capacity of the range [1 Litre]
- High power mixing function [660 G]
- No material spillage during operation
- Adjustable rpm allows optimal setting for any material
- Cup holder vacuum system reduces pressure reduction time
- High standard of deaeration for volatile materials

ARE 500 : HIGHER LOAD MIXER

SPECIFICATIONS

| | |
|------------------------|----------------------|
| Max. processing volume | 550 ml |
| Dimensions | H700 x L500 x P630 |
| Max. weight [net] | 1 000 g |
| Max. weight [brut] | 1 100 g |
| Deaeration type | Atmospheric pressure |
| Mixing function | 670 G |
| RPM | Adjustable |



* Allows you to integrate 6oz cartridge

PRESENTATION

This compact floor-standing type comes at a very competitive price and is capable of processing up to 500 ml. The rpm is adjustable, enabling optimal settings for a wide range of materials. The high durability drive system was developed with manufacturing production in mind.

The RPM level (revolution per minute) is adjustable, which allows the treatment of a wide range of materials. A window on the device cover allows you to see the mixture at work and the vibration sensor and lid lock feature ensures the highest level of security

- Rotation/Revolution no-blade mixing system
- Maximum capacity for material processing : 500ml or 1.1 kg
- Simultaneous processing of mixing, dispersion and deaeration (defoaming)
- Coste effective performance
- Membrane switches are easy to see and operate
- Timer : 5 programmable steps of continuous control for each recipe profile

ARE 400 TWIN : FLEXIBLE LAB TWIN MIXER



* Connected PC version and mesure of the real time temperature

SPECIFICATIONS

| | |
|------------------------|----------------------|
| Max. processing volume | 300 ml x 2 |
| Dimensions | H560 x L460 x P480 |
| Max. weight [net] | 250 g x 2 |
| Max. weight [brut] | 310 g x 2 |
| Deaeration type | Atmospheric pressure |
| Mixing function | 660 G |
| RPM | Adjustable |



PRESENTATION

The built in mechanism can vary the ratio of rotation, while the twin system is newly developed. Mixes and deaerates a maximum 500ml / 800g of material (gross). This machine can set and reproduce optimal recipes for materials whose temperature is hard to control because it can detect material temperatures in containers in real time during operation with the combined use of the newly developed sensor unit incorporating non-contact sensors (optional).

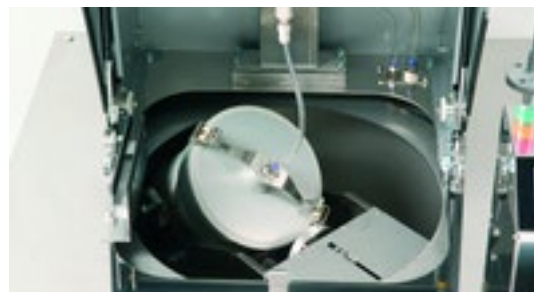
A PC connector (USB Type B) is installed on the back of the unit as standard equipment, achieving parameter setting, rotations

- Rotation and revolution independent variable mechanism mounted
- Twin system, maximum capacity 250ml / 400g x 2
- Mixing capacity can mix high viscosity material such as viscous grease with viscosity 4000 Pa s
- Effective in setting recipes for materials that do not like temperature-rise
- Can use a sensor unit that can detect temperature of materials being mixed in real time (optional)
- Through external PC connections, can display recipe settings, rotations during operation, and material temperature in real time (USB type B standard equipment)

ARV 5000 : PLANETARY CENTRIFUGAL VACUUM MIXER

SPECIFICATIONS

| | |
|------------------------|----------------------|
| Max. processing volume | 4 L |
| Dimensions | H1600 x L1000 x P865 |
| Max. weight [net] | 4700 g |
| Max. weight [brut] | 5000 g |
| Deaeration type | Vacuum |
| Mixing function | 185 G |
| RPM | Adjustable |



* Allows you to integrate 6oz cartridges

PRESENTATION

Mixing, dispersion, and deaeration (defoaming) with a large 3L / 5kg capacity, the ARV-5000 supports mass production and improves productivity and efficiency. A large volume of mixing and deaeration (defoaming) can easily be carried out at one time.

Mixing, dispersion, and deaeration (defoaming) are simultaneously conducted in a short time. In combination with vacuum technology, the ARV-5000 completely removes submicron air bubbles even with highly viscous materials.

- Large capacity : 3L or 5 kg
- Recipe setting for optimal material processing ensures no spillage during operation
- Adjustable rpm allows optimal setting for any material
- User - friendly touch screen
- Rotation and revolution provides air - cooling function
- Digital setting ensures no sample overflow
- Accepts a wide range of containers
- Many accessories.
- Intuitive touch screen

ARC 40 H : VACUUM SYRINGE CHARGER



SPECIFICATIONS

| | |
|------------------------|-----------------------------|
| Max. processing volume | 3 ml, 5 ml, 10 ml et 30 ml |
| Capacity | 4 syringes at the same time |
| Dimensions | H550 x L200 x P140 |
| Weight | Approx. 10 kg |
| Operation | Manual |
| Deaeration type | Vacuum |
| Mixing function | NA |



PRESENTATION

ARC 40H has been developed in order to provide planetary mixer users, the possibility of transferring directly the mixed product from the pot of the mixer to the syringe that permits the operation. It therefore allows a considerable time saving since it greatly shortened the conditioning step of the fluid.

This manual filler is adaptable to small syringes 3,5,10 and 30 ml sizes, and guarantees rapid filling and without bubble. His robust and simple structure, was designed with the perspective to easily clean every room in case of soiling.

- Able to charge materials into 3ml, 5ml and 10ml syringes, which are too small to charge manually
- Up to 4 syringes can be charged at one time effectively
- Capable for materials from low to high viscosity
- The process from mixing and defoaming to charging is integrated by Thinky products
- Easy to clean



— SEMCO CONSUMABLES
Packaging & Application Systems

CARTRIDGES



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PLUNGERS



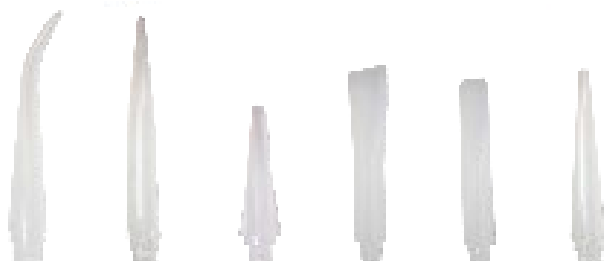
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SEMKIT



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NOZZLES



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SEALANT SMOOTHING TOOLS



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ADAPTATERS



P 129

DISPENSING GUN



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SEMKIT PACKAGE MIXER



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CARTRIDGES AND PLUNGERS

CARTRIDGES



Disposable plastic cartridges are available in 1, 2.5, 6, 8, 12, 20, 32 oz. (approximate metric value 30, 65, 170, 230, 340, 610, 950 cc) and 1/10th gallon capacities. Available in low or high - density natural polyethylene, all sizes are fit with 1/4» NPT (6mm) female thread dispensing orifice. Special colours are available, however minimum order, lead time, and pricing considerations apply.

CP and CWP cartridges are the standard Semco® cartridge with either a P or WP plunger inserted. This inserted plunger allows for filling from the dispensing end, reducing the potential for air entrapment and improving

PLUNGERS



Precision molded plungers are available in three styles. Each style has its own functional characteristics. All are designed to fit the cartridge contour, assuring complete dispensing and the elimination of waste.

- WP or Wiper Plunger : highest amount of interference
- The P-plunger has medium interference
- The PRS or Pressure Relief Plunger has the least interference

CARTRIDGES ONLY

PART NUMBER

| | |
|--------------------------|--------|
| 1 oz. (30cc) LD | 220307 |
| 1 oz. (30cc) HD | 233222 |
| 2.5 oz. (65cc) LD | 220315 |
| 2.5 oz. (65cc) HD | 220316 |
| 6 oz. (170cc) LD | 220317 |
| 6 oz. (170cc) HD | 220318 |
| 8 oz. (230cc) LD | 220319 |
| 8 oz. (230cc) HD | 220320 |
| 12 oz. (340cc) LD | 220321 |
| 12 oz. (340cc) HD | 220322 |
| 20 oz. (610cc) HD | 229734 |
| 32 oz. (950cc) LD | 232921 |
| 32 oz. (950cc) HD | 232917 |
| 32 oz. (950cc) SHD White | 233656 |
| 1/10 gallon. (310cc) LD | 230285 |
| 1/10 gallon. (310cc) HD | 229689 |

CARTRIDGES WITH PLUNGERS

PART NUMBER

| | |
|-----------------------|--------|
| CP 2.5 oz. (65cc) LD | 220323 |
| CP 2.5 oz. (65cc) HD | 220324 |
| CP 6 oz. (170cc) LD | 220325 |
| CP 6 oz. (170cc) HD | 220326 |
| CP 8 oz. (230cc) LD | 220327 |
| CP 8 oz. (230cc) HD | 220328 |
| CP 12 oz. (340cc) LD | 220329 |
| CWP 1 oz. (30cc) LD | 232375 |
| CWP 2.5 oz. (65cc) LD | 220331 |
| CWP 2.5 oz. (65cc) HD | 220332 |
| CWP 6 oz. (170cc) LD | 220333 |
| CWP 6 oz. (170cc) HD | 220334 |
| CWP 8 oz. (230cc) LD | 220335 |
| CWP 8 oz. (230cc) HD | 220336 |
| CWP 12 oz. (340cc) LD | 220337 |
| CWP 12 oz. (340cc) HD | 220338 |
| CWP 20 oz. (610cc) HD | 230231 |

DESCRIPTION

SIZE

PART NUMBER

| | | |
|-------------------------------|---------------------------------|---------|
| Plungers WP BD | 1 oz. (30cc) | 2323642 |
| Plungers P BD | from 2.5 to 12 oz. (65cc/340cc) | 2202522 |
| Plungers WP BD | from 2.5 to 12 oz. (65cc/340cc) | 2344122 |
| Plungers WP HD | from 2.5 to 12 (65cc/340cc) | 2202592 |
| Plungers PRS BD | from 2.5 to 12 (65cc/340cc) | 2202602 |
| Plungers SWP | from 2.5/12 (65cc/340cc) | 2297562 |
| Plungers WP BD | 20/32 oz. | 2292212 |
| Plungers WP HD | 20/32 oz. | 2323742 |
| Plungers PWP with Purge screw | | 2202712 |

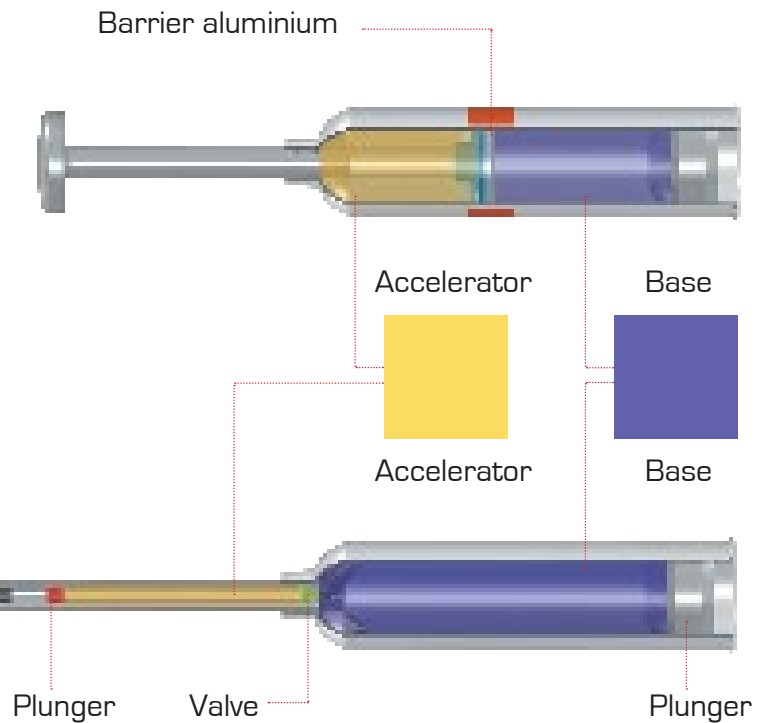
| DESCRIPTION | cc | fl.oz |
|-------------|-----|-------|
| 676 | 32 | 1.0 |
| 653 | 59 | 2.5 |
| 651 | 156 | 6.0 |
| 668 | 214 | 8.0 |
| 691 | 310 | 10.5 |
| 688 | 590 | 20.0 |

| DESCRIPTION | cc | fl.oz |
|-------------|-----|-------|
| 678 | 32 | 1.0 |
| 655 | 59 | 2.5 |
| 654 | 156 | 6.0 |
| 669 | 214 | 8.0 |
| 690 | 310 | 10.5 |
| 689 | 590 | 20.0 |



BARRIER STYLE

INJECTION STYLE



PRESENTATION

The Semkit® package is a complete, multi-component plastic cartridge assembly which stores, mixes, and applies multiple component adhesives, sealants, encapsulants, and other materials. It has been market tested for over 30 years and still represents the best blend of performance and safety available in the market today. Semkit® packages are ideal for epoxies, polysulfides, polyurethanes, and silicones used in the aerospace, electronics, automotive, construction, marine, and telecommunications industries.

The kit assures material performance, optimum quality, and increased productivity on the production line and in the field.

The Semkit® package assures accurate proportioning of the materials since the pre-measured components are stored in separate compartments within the cartridge. It eliminates the labour-intensive tasks of measuring and handling materials while minimizing skin contact and material fumes. All the material contained inside the two-component Semkit® package is mixed within the cartridge and can be extruded with virtually nothing remaining.

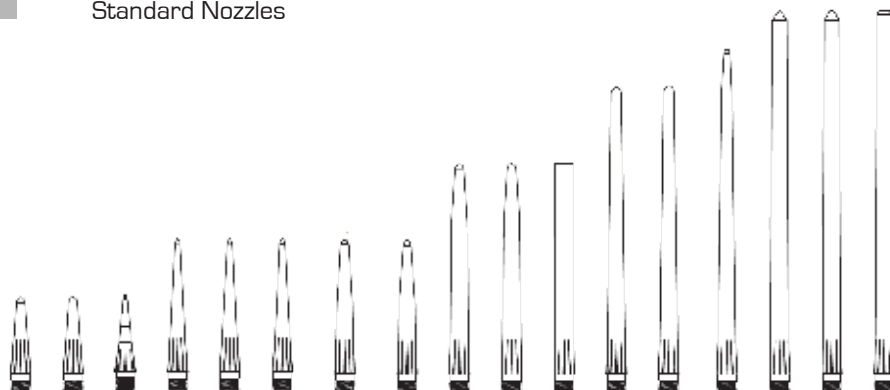
This configuration provides added value by eliminating material exposure and contamination, dramatically reducing waste, and ensuring the correct ratio of each material is used in every application.

There are two styles of Semkit® packages :

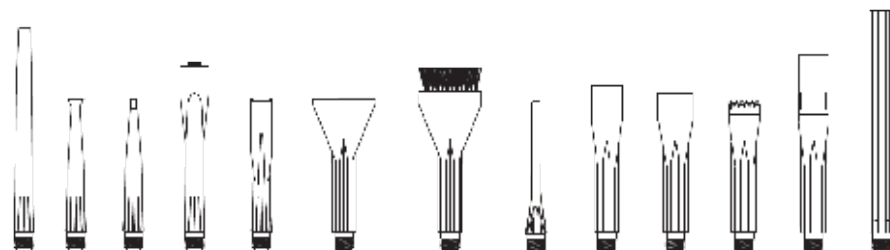
- Injection kits are typically used with mix ratios of 10:1 or higher. In this kit, the base material is contained in the cartridge, while the catalyst is stored inside the injection rod
- Barrier style kits are typically used with mix ratios of 1:1 to 10:1. Both materials are contained in the cartridge and are separated by a foil barrier

NOZZLES

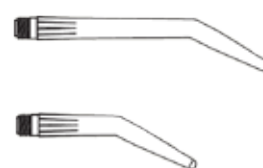
Standard Nozzles



Ribbon Nozzles



Bend Nozzles



Fillet Nozzles



| P/N | SIZE [cm] | ORIFICE [cm] | DENSITY |
|---------|-----------|--------------|---------|
| 2205382 | 2.5 | 0.063 | Low |
| 2205402 | 2.5 | 0.125 | Low |
| 2286222 | 2.5 | 0.125 | High |
| 2205422 | 4 | 0.031 | Low |
| 2276132 | 4 | No | Low |
| 2205442 | 4 | 0.063 | Low |
| 2286232 | 4 | 0.063 | High |
| 2205482 | 4 | 0.094 | Low |
| 2205502 | 4 | 0.125 | Low |
| 2222782 | 4 | 0.125 | High |
| 2205532 | 6 | 0.063 | Low |
| 2205552 | 6 | 0.125 | Low |
| 2244942 | 6 | 0.375 | Low |
| 2205572 | 8 | 0.063 | Low |
| 2205592 | 8 | 0.125 | Low |
| 2205610 | 10 | 0.063 | Low |

* More usual part number

PRESENTATION

These disposable nozzles are precision molded and have a 1/4» [6mm] NPT male thread to fit Semco® 1, 2.5, 6, 8, 12, 20, 32 oz, and 1/10th gallon disposable cartridges. A wide range of lengths and orifice sizes are available to better meet your application needs. Nozzles can be bent to varying degrees, however minimum order, lead time, and pricing considerations apply.

Standard nozzles

These standard nozzles are available in different sizes and diameters port. and can be bent at different angles under control minimum requirement, delivery time and price list.

Ribbon nozzles

A wide range of ribbon nozzles is offered in various thicknesses and widths to better meet your needs.

Bend nozzles

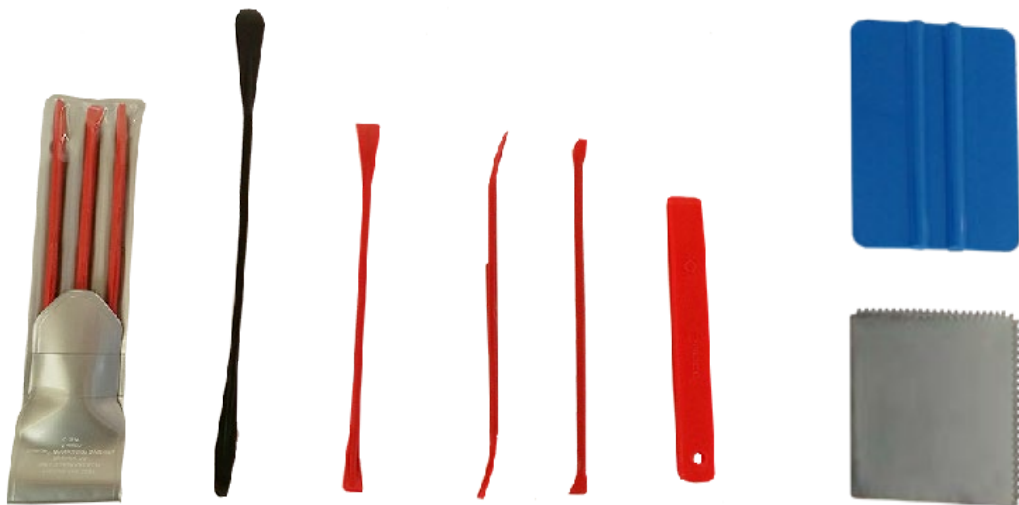
With these bend nozzles, you can choose your elbow curve and length from the tip

Fillet nozzles

Semco fillet nozzle applied uniformly applied on lap joints. They avoid handling the product with spatulas and increase productivity. Some have a notch to allow the work in difficult corners and confined spaces.

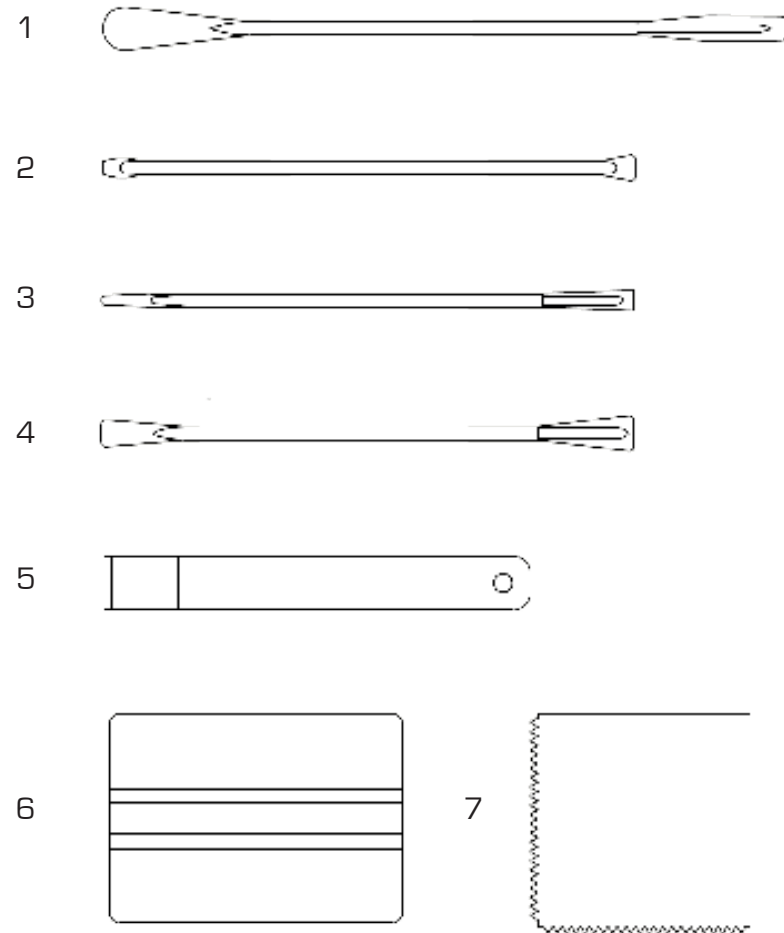
See more on : www.gentec-benelux.com

SEALANT SMOOTHING TOOLS AND ADAPTATERS



These special reinforced plastic spatulas and spreaders are for tooling and smoothing sealants and adhesives.

| N° | DESCRIPTION | LENGTH [mm] | WIDTH [mm] | PART NUMBER |
|----|----------------------|-------------|------------|-------------|
| 1 | Spatula | 240 | 14 | 231349 |
| 2 | Spatula | 184 | 5 | 226241 |
| 3 | Spatula | 184 | 3 | 226242 |
| 4 | Spatula | 184 | 10 | 226243 |
| 5 | Scraper | 147 | 19 | 234352 |
| 6 | Spatula spreader | 100 | 70 | 229394 |
| 7 | Comb spreader | 75 | 75 | 229395 |
| 8 | Spatulas Kit (2,3,4) | NA | NA | 226244 |



PRESENTATION

| DESCRIPTION | PART NUMBER |
|--------------------|-------------|
| Cartridge Adapters | 2318712 |

These disposable adapters are precision molded and have a 1/4" [6mm] NPT male thread to fit Semco® 1, 2.5, 6, 8, 12, 20, 32 oz., and 1/10 th gallon disposable cartridges. The syringe filler adapter is designed to allow easy filling of Luer Lock or Luer Slip syringes. The Sem-Luer Adapter converts the 1/4" [6mm] NPT female thread of the standard Semco® cartridge to a male Luer Lock connection, allowing the easy attachment of any Luer Lock needle.



DISPENSING GUN

A GUN



This sealant gun is the standard of the aerospace and electronics industries. It is designed for the quiet, pneumatic application of sealants, adhesives, potting compounds, and other materials.

The Semco® model 250-A gun is available with retainers to fit standard 1, 2.5, 6, 8, and 12 ounce disposable cartridges. Air hoses to operate the gun must be ordered separately [see page 15 for more information]. Also the handle can be easily removed to allow better manipulation.

- Operating ranges from 0 to 6.9 bar (0-100 psi)
- Available sizes : 1 - 2.5 to 6 - 8 and 12 oz
- Reduces the cost of application, maximizes accuracy
- Efficient regulation for a smooth and uniform extrusion
- Silent, durable and ergonomic

SEALANT GUN (20 - 32 oz)



The Semco® Model 550 sealant gun is designed for the pneumatic application of sealant, caulking, adhesive, and other compounds packaged in Semco® 1/10th gallon, 20, and 32 oz. cartridges. Parts are available to convert the gun from one size to another. Air hoses to operate the gun must be ordered separately [see page 15 for more information]. These lightweight guns are constructed of cast aluminum and other durable materials.

- Operating ranges from 0 to 6.9 bar (0-100 psi)
- Available Sizes: 20 - 32 oz and 1/10 gallon
- The pressure on the trigger controls the flow
- Efficient regulation for a smooth and uniform extrusion
- Lightweight and ergonomic

MANUAL DISPENSING GUN



The Semco® model 850 gun is a hand-operated, high quality dispensing gun designed to accept Semco® disposable cartridges or Semkit® packages. The ratchet handle is made of metal for tough, durable, long-term use. A threaded retainer provides a tight fit into the ratchet handle, permitting uninterrupted operation. Custom size retainers accommodate Semco® 1, 2.5, 6, 8, 12, 20, 32 oz., and 1/10 gallon disposable cartridges. The retainers are available in metal or plastic.

- Sizes: 1 - 2.5 to 6 - 08/12/20 - 32 oz and 1/10 gallon
- Solid construction
- Distributes a wide range of products
- Accepts thick and viscous products
- Air source or electrical power unnecessary

HIGH PRESSURE INJECTION GUN



The high pressure injection gun is capable of post assembly injection of high viscosity groove injection sealing compounds into confined areas and voids, including channel sealing.

The gun is available in a manual or reciprocating version. The reciprocating gun provides a continuous bead of material when actuated. The pressure produced is 110 X line pressure used and the maximum pressure rating is 11,000 psi (759 bar).

- Original size : 6oz
- Sizes available option : 8 - 2 oz
- Size of the piston rod : 8mm diameter
- Ideal for hard to reach areas
- High performance gun

SEMKIT PACKAGE MIXER



Automatic Semkit Mixer

The Semco® model 388 Semkit® package mixer provides complete automatic mixing of filled Semkit® packages. Use of the mixer reduces worker tiredness and assures the user a more thorough and consistent mix, kit to kit.

FEATURES

Automatic mixing of Semkit® packages

Assures consistent, thorough and uniform mixing

Easy to operate

Timer automatically shuts mixer off at pre-set mix time

Eliminates mixing labour and worker tiredness

Operates on 40 - 90 PSI, 1.2 CFM and 115 VAC. [Transformer included]

Shipping weight 35 kg



Semi - Automatic Mixer

The Semco® model 285-A Semkit® package mixer provides semi-automatic mixing of filled Semkit® packages. Use of the mixer reduces worker fatigue and assures a more consistent, uniform mix. The drive spindle rotates the mixing rod while the operator strokes the cartridge vertically. This permits the rotating dasher to thoroughly mix the materials. The bell timer alerts the operator when the mix cycle is completed.

FEATURES

Semi-Automatic mixing of Semkit® packages

Easy to operate

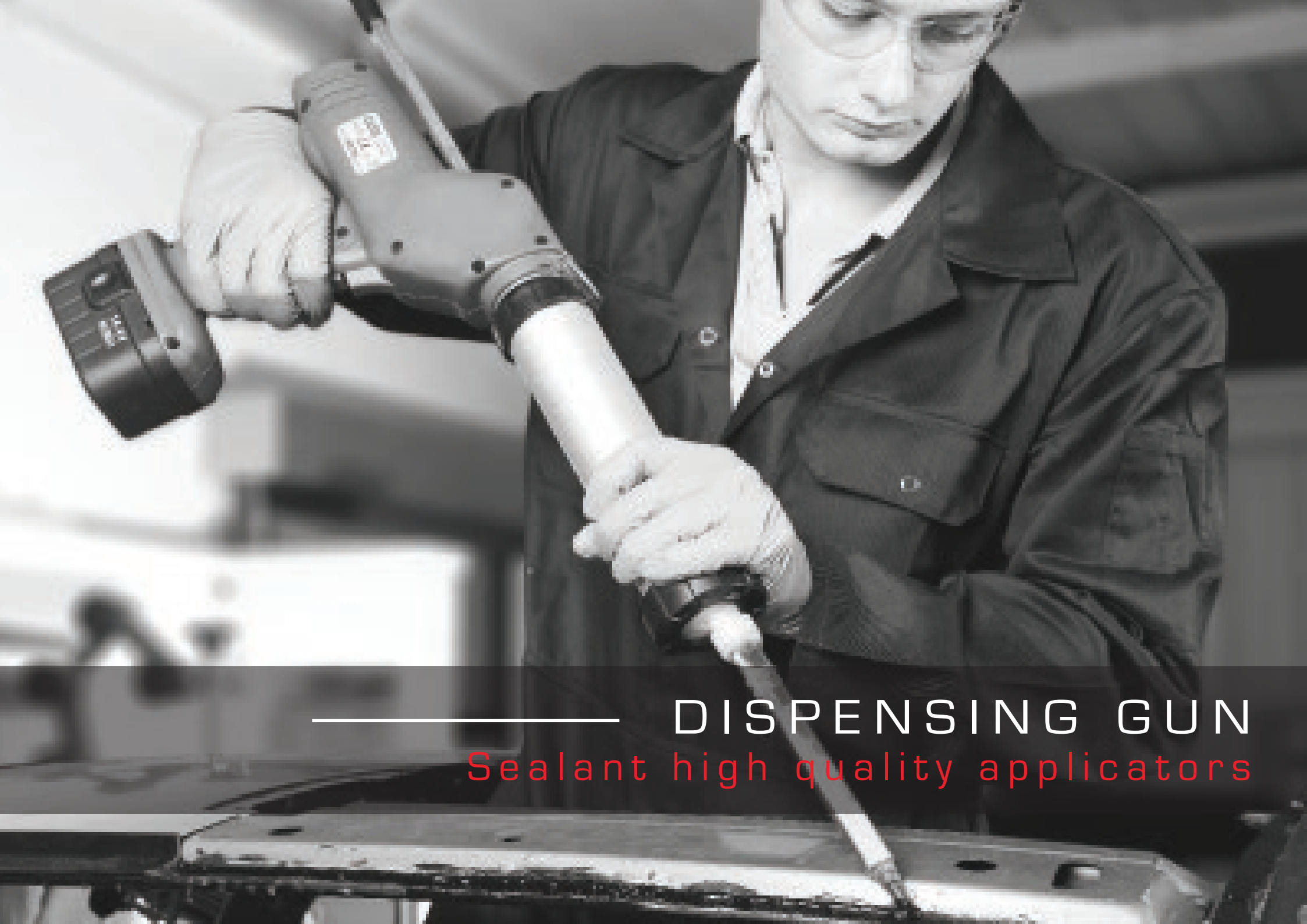
Provides consistent, uniform mixing

Reduces time and effort for thorough mixing

Portable

Bell timer signals completion of mix

Shipping weight 7 kg



DISPENSING GUN

Sealant high quality applicators

DISPENSING GUN

BENEFITS

One year warranty

An innovative range

Attractive prices

Reliability and excellent service

Competitive prices and excellent price/quality value

A lifetime at least 10 times longer than the copies

Strict quality management, compliant with ISO 9001



PRESENTATION

Historic partners of Gentec, Cox offers the widest range of guns and applicators of the world. Thanks to the invention of the mastic gun, COX has become the global market leader of the applicators and choose Gentec for distribution in BENELUX.

Made in England, recognized for its robustness comparing to concurents products, it's more than 90 models that help you to succeed your most technical projects and works.

Recognizing the complexity of some task, our applicators suit to your needs thanks to our large

range (for one-component and two-component products), the choice available in the type of pushing (mechanical manual guns , pneumatic or electrical) and in the diversity of components and cartridges sizes (310 - 400ml) two - component bi mixer (50 -150-200- 220 - 235- 330-345-380-400-620) two component axial co (150-220-300-330-380ml) - and bags (310 - 400-600 ml) and the VRAC.

All our products are customizable to your corporate logo (engravings and inscriptions on a minimum purchasing volume)

By combining an innovative design with an excellent manufacturing standards, a strict quality management, a prices policy competitive and a deep understanding of the market of sealants and adhesives, PC Cox TM has developed a series of manual, electric and pneumatic applicators that respond to the DIY market needs and also to the most sophisticated industrial specialty.

We found in the middle of the keys success factors of COX, his significant commitment for research and development : continuous improvement of his products to meet the growing market demands, new materials research and testing, and new manufacturing techniques.

The company regularly design new applicators to meet customer needs by pioneering products worldwide.

SINGLE - COMPONENT RANGE

Specially designed for DIY professionals, single-component guns offered by Gentec are exclusively manufactured in the United Kingdom. They provided three different ranges of dispensing gun : manual, pneumatic or battery. They allow you to undertake the most demanding work by guaranteeing a long-term use associated with a level of safety and optimal control.

■ Manual Guns

Designed for any kind of product conditioned in single-component cartridges, in pocket or in VRAC whatever their viscosity. You will find a wide range of gun with different trigger having ratios ranging from 7: 1 to 25: 1 and sizes of cartridges or pockets (310 ml, 400 ml and 600 ml)

Ranges: Easiflow - Midiflow - Powerflow - Ultraflow - Ultrapoint

■ Pneumatic guns

The new generation of pneumatic applicators Airflow 3 offers a fast and effortless implementation of all your products. Ideal for the most demanding applications both inside or outside. The pneumatic gun have a pushing capacity up to 4.1 kN and are used for bags, 310ml cartridges, 400ml and 600ml, and bulk.

Ranges: Airflow III - Jetflow - Ultrapoint

■ Electric guns

Electric guns are battery-operated applicator that deposits the most viscous products quickly and efficiently, with power up to 3.0 kN. They exist in three sizes for bags and 310 ml, 400ml and 600ml cartridges.

Ranges: Electraflow - Easipower - Floorfix - WallFix



SINGLE - COMPONENT RANGE

Manual



ULTRAFLOW [3 models]



Powerflow [6 models]



ULTRAPOINT [1 model]



AIRFLOW III [4 models]

| | | | |
|---------------------------------------|--------------------------------------|--------------------------------------|---------------------------|
| Coaxial cartridge 150 ML | Specialized and versatile applicator | Specialized applicator large volumes | New generation applicator |
| BULK 600, 800, 1000 ML | BULK 2, 3, 4 L | BULK 1L | Pressure 145 PSI (10 Bar) |
| Bags 310, 400, 600 ML | Cartridges / Bags 310,400,600ML | Comes with a mixing turbine | Bags 310, 400, 600ML |
| Cartridges 310, 330, 400, 500, 600 ML | Coaxial ML 150 and a quarter US | Use of VRAC materials | Cartridges 310, 400 ML |
| Reports 12: 1, 18: 1 and 25: 1 | Trigger ratio 12: 1 or 18: 1 | Trigger 12: 1 ratio | Power 1.4 KN |

Pneumatic

Electric



JETFLOW [2 models]



ELECTRAFLOW [2 models]



FLOORFIX [1 model]



WALLFIX [1 model]

| | | | |
|------------------------|---------------------------------|---------------------------------|---------------------------------|
| Spray new generation | Electric applicator | Ideal for glue on parquet | Ideal for vertical surfaces |
| Flight impossible | 3.0kN power | 3.0kN power | 3.0kN power |
| Bags 310, 400, 600ML | Bags 310, 400, 600 ML | Pocket 1.8L | 1.5 The Pocket |
| Cartridges 310, 400 ML | Cartridges 310, 400 ML | Rake nozzle 190, 300, 400mm | Many accessories available |
| 1.45kN power | Rechargeable Battery 14.4 Volts | Rechargeable Battery 14.4 Volts | Rechargeable Battery 14.4 Volts |

TWO - COMPONENT RANGE

Two - components range

The use of two-component applicators and static mixing nozzle cartridge was found to be an effective method for dispensing of reactive substances, such as adhesives and sealants. In recent years, production has increased significantly with the improvement of the use of applicators in all types of industries. Gentec offers you the widest available range of Bi-component applicators in the world :

More than 60 models designed for dual cartridges and co-axial.

| STANDARD CARTRIDGES | MANUAL | PNEUMATIC |
|------------------------------|--|--|
| 50ml (1:1) [25+25] | CBM 25 - MPD 50/50 | CBA 25 |
| 150ml (1:1) Plas-Pak [75+75] | PPM 75 | PPA 75LP - PPA 75HP |
| 220ml (1:1) Ritter [110+110] | RBM 100LV - RBM 100 | RBM 200X - RBA 200B |
| 380ml (1:1) Ritter [190+190] | RBM 200X | RBA 200B |
| 620ml (1:1) Ritter [310+310] | RBM 310X | RBA 310 B |
| 200ml (1:1) [100+100] | VBM 100 - TBM 100LV - TBM 100 Eclipse 200 | VBA 100LP - VBA 100HP - VBA 100LP/1 TBA 100HP/1 |
| 400ml (1:1) [200+200] | VBM 200 - VBM 200X | VBA 200A - VBA 200B |
| 235ml (7:1) [206+29] | CBM 235/7 | Aucun |
| 235ml (10:1) [213+22] | CBM 235A - CBM 235B - CBM 235C | Aucun |
| 235ml (10:1) [Sulzer 213+22] | CBM 235A | Aucun |
| 330ml (10:1) [300+30] | CBM 330B - CBA 330B | CBM 330A - CBA 330A |
| 345ml (10:1) [314+31] | CBM 330A | CBA 330A |

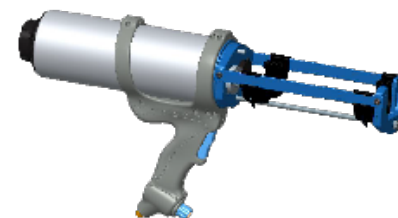


TWO - COMPONENT RANGE

| MIXPAC SERIE 200 | MANUAL | ELECTRIC | PNEUMATIC |
|-----------------------------------|---|-----------------------|---|
| 200ml Mixpac [1:1] [100+100] | VBM100 - VBM (MR/1) 200 - VBM (MR/1) 200X - TBM 100LV - Eclipse 200 | Electraflow 2C 200 MR | VBA 100LP - VBA 100HP - VBA (MR/1) 200A - VBA (MR/1) 200B |
| 200ml Mixpac [2:1] [140+70] | VBM (MR/2) 200 - VBM (MR/2) 200X | Electraflow 2C 200 MR | VBA (MR/2) 200A - VBA (MR/2) 200B |
| 200ml Mixpac [4:1] [180+45] | VBM (MR/4) 200 - VBM (MR/4) 200X | Electraflow 2C 200 MR | VBA (MR/4) 200A - VBA (MR/4) 200B |
| 200ml Mixpac [10:1] [225+22.5] | VBM (MR/10) 200 - VBM (MR/10) 200X | Electraflow 2C 200 MR | VBA (MR/10) 200A - VBA (MR/10) 200B |

| MIX PAC SERIE 400 | MANUAL | ELECTRIC | PNEUMATIC |
|---------------------------------|---|-----------------------|---|
| 400ml Mixpac [1:1] [200+200] | VBM 200 - VBM 200X - VBM (MR/1) 400 - VBM (MR/1) 400X | Electraflow 2C 400 MR | VBA 200A - VBA 200B - VBA (MR/1) 400A - VBA (MR/1) 400B |
| 400ml Mixpac [2:1] [270+135] | VBM (MR/2) 400 - VBM (MR/2) 400X | Electraflow 2C 400 MR | VBA (MR/2) 400A - VBA (MR/2) 400B |
| 400ml Mixpac [4:1] [340+185] | VBM (MR/4) 400 - VBM (MR/4) 400X | Electraflow 2C 400 MR | VBA (MR/4) 400A - VBA (MR/4) 400B |
| 400ml Mixpac 10:1 [450+45] | VBM (MR/4) 4000 - VBM (MR/4) 400X | Electraflow 2C 400 MR | VBA (MR/10) 400A - VBA (MR/10) 400B |

| CO - AXIALES CARTRIDGES | MANUAL | PNEUMATIC |
|-------------------------|------------------------------------|-------------------------------------|
| [1:1] 43.5 mm | CCM 380/1 - CCM 380X/1 | CCA 380A/1 - CCA 380B/1 |
| [2:1] 36.5 mm | CCM 380/2 - CCM 380X/2 | CCA 380A/2 CCA 380B/2 |
| [3.5-5:1] 26.5-30.5 mm | CCM 380/3.5-5.5 - CCM 380X/3.5-5.5 | CCA 380A/3.5-5.5 - CCA 380B/3.5-5.5 |
| [10:1] 43.5 mm | CCM 380/10 - CCM 380X/10 | CCA 380A/10 - CCA 380B/10 |



TWO - COMPONENT RANGE

| TWIN CARTRIDGES | MANUAL | PNEUMATIC |
|----------------------------------|-----------------------------------|---------------------------|
| 50+50ml (1:1) PlasPak | Aucun | TBA 100LP/3 - TBA 100HP/3 |
| 75+75ml (1:1) PlasPak et Ritter | PPM 150LV - PPM 150 | Aucun |
| 100+50ml (2:1) PlasPak et Mixpac | TBM 100LV - TBM 100 | TBA 100LP/2 - TBA 100HP/2 |
| 100+100ml (1:1) | TBM 100LV - TBM 100 - Eclipse 200 | TBA 100LP/1 - TBA 100HP/1 |
| 150+75ml (2:1) PlasPak et Ritter | PPM 150LV - PPM 150 | PPA 150LP/2 - PPA 150HP/2 |
| 150+150ml (1:1) | PPM 150LV - PPM 150 | PPA 150LP/1 - PPA 150HP/1 |
| 200+20ml (10:1) | CBM 235 | * |
| 300+300ml (10:1) PlasPak/Ritter | PPM 330 - CBM 330B | * |
| 300+75ml (4:1) | PPM 300 | PPA 300A - PPA 300B/3 |
| 300+150ml (2:1) | PPM 300 - PPM 300X | PPA 300 A - PPA 300 B/2 |
| 300+300ml (1:1) | PPM 300 - PPM 300X - Eclipse 600 | PPA 300A - PPA 300B/1 |
| 600+300ml (2:1) PlasPak | PPM 600X | PPA 600A |
| 750+75ml (10:1) PlasPak | PPM 750X | PPA 750 |
| 750+150ml (5:1) PlasPak | Aucun | PPA 1500/3 |
| 750+300ml (2.5:1) | Aucun | PPA 1500/2 |
| 750+750ml (1:1) | Aucun | PPA 1500/1 |



SPECIAL DISPENSING GUN

■ Powerpush range

The PowerPush ® 7000 series is the most powerful two component gun in electric range.

The PowerPush 7000 features the patented DirectDrive ® system: speed control variable deposits, surge and anti-drip reminder for an efficient and accurate dispensing. The lightweight system offer you most confort for perfect dispense. It also has a quick charging system for a long battery life.

The PowerPush 7000 ® tools offer wireless convenience and fast charging system long life batteries. The PowerPush give you all the reliability, versatility and portability for your most complex projects.

■ Soloclamp range

Thanks to his experience, COX has become an expert in the design of standard models. It's results as an amount of classic and versatile products, which includes the Gentec guarantee of quality, from the mainstream product line.

The manual applicators range Soloclamp perfectly suit your basic needs in term of dispensing.

COX society has long recognized the potential of its standard trigger mechanism. To meet your small application requirements, choose the applicator Soloclamp clips.

Powerpush



POWERPUSH 7000 MR



POWERPUSH 7000 MP

| | |
|------------------------|----------------------------|
| Specialized stun gun | Specialized stun gun |
| Cartridges 300 + 300ML | 400ML cartridges |
| Speed control | Speed control |
| 1: 1 ratio | Ratio 1: 1/2: 1/4: 1/10: 1 |
| Anti-drip function | Anti-drip function |

Soloclamp








SOLOCLAMP 100







SOLOCLAMP 150

| | |
|--|--|
| Manual applicator | Manual Applicator |
| Model 100mm | Model 150mm |
| Clamping force equivalent to 1667 N | Clamping force equivalent to 1667 N |
| Jaws plastic resin or metal | Jaws plastic resin or metal |
| Corrosion resistant sliding components | Corrosion resistant sliding components |

VOLUMES AND CONVERSIONS

| MM | V cc | Dots | MM | V cc | Dots |
|-----|---------|------|------|-------|---|
| 0.5 | 0.00003 | . | 7.6 | 0.116 |  |
| 0.8 | 0.0001 | . | | | |
| 1.0 | 0.0003 | . | 8.9 | 0.184 |  |
| 1.3 | 0.0005 | . | | | |
| 1.8 | 0.001 | . | 10.2 | 0.275 |  |
| 2.3 | 0.003 | . | | | |
| 2.8 | 0.006 | . | 11.4 | 0.391 |  |
| 3.3 | 0.009 | . | | | |
| 3.8 | 0.014 | . | 12.7 | 0.536 |  |
| 4.3 | 0.021 | . | | | |
| 4.8 | 0.029 | . | | | |
| 5.6 | 0.046 | . | 19.1 | 1.210 |  |
| 6.1 | 0.059 | . | | | |

| MM | cc's | Line |
|-----|---------|---|
| 0.5 | 0.00003 |  |
| 0.8 | 0.0001 |  |
| 1.0 | 0.0003 |  |
| 1.3 | 0.0005 |  |

VOLUME

| | |
|-------------------------|------------------------------|
| 1 fluid ounces (fl oz) | 29.57 cubic centimeters (cc) |
| 1 gallon (gal) | 3785 cubic centimeters (cc) |
| 1 gallon (gal) | 3.785 liters (L) |
| 1 gallon (gal) | 128 fluid ounces (fl oz) |
| 1 liter (L) | 0.264 gallons (gal) |
| 1 liter (L) | 1000 milliliters (mL) |
| 1 cubic centimeter (cc) | 1 milliliter (mL) |
| 1 microliter (uL) | 0,001 cubic centimeter (cc) |
| 1 microliter (uL) | 1000 nano liters (nL) |
| 1 nano liter (nL) | 0.000001 cubic centimeter |
| 1 nano liter (nL) | 1000 picoliters (pL) |

PRESSURE

| | |
|-------|------------------|
| 1 psi | 0,069 bar |
| 1 psi | 0,070 kgf/cm² |
| 1 psi | 6894,8 Pa |
| 1 psi | 27,68 in H2O@4°C |

WEIGHT

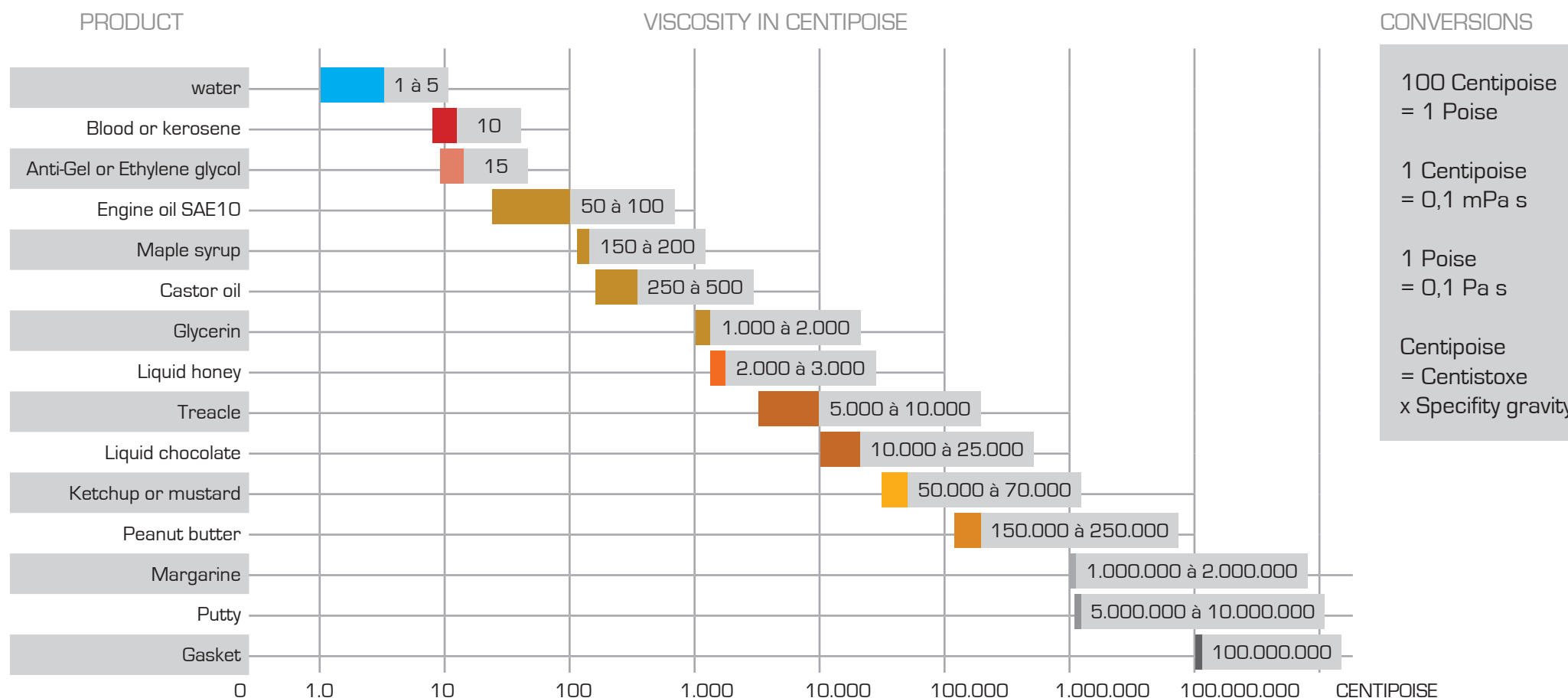
| | |
|-----------------|-----------------|
| 1 kilogram (kg) | 1000 gram (g) |
| 1 kilogram (kg) | 2,2 livres (lb) |
| livre (lb) | 16 onces (oz) |
| 1 livre (lb) | 453,6 gram (g) |
| 1 once (oz) | 28,35 gram (g) |

MEASUREMENT

| | |
|-------------------|-----------------------|
| 1 micron (μ) | 0,0000394 pouce (") |
| 1 micron (μ) | 0,001 millimeter (mm) |
| 1 centimeter (cm) | 10 millimeter (mm) |
| 1 centimeter (cm) | 10,000 microns (μ) |
| 1 inch (") | 2,54 centimeter (cm) |
| 1 inch (") | 25,4 millimeter (mm) |
| 1 inch (") | 30,48 centimeter (cm) |
| 1 foot | 91,44 centimeter (cm) |
| 1 mile (mi) | 1,6 kilometer(km) |
| 1 mile (mi) | 0,069 bar |

PRODUCTS VISCOSITY

The properties of your product, such as his viscosity and his size, are essential elements in order to choose the most appropriate dispensing system for your application. Usually expressed in poise or centipoise (but also in other values), the viscosity is a measure of the internal resistance of a fluid to flow.



MAIN FLUIDS TREATED BY GENTEC

Activator / Anaerobic / Coatings / Cyanoacrylate / Electrolytes / Epoxies / Gels / Greases / Solder Pastes / Solvent / UV Products / White Glue / Lubricants / Oils / Marking Inks / RTV and gaskets

For worldwide technical and sales support, please contact Gentec or visit :

www.gentec-benelux.com/contact-gentec



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Fax : +32 2 351 1962

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www.gentec-benelux.com

The fluid dispensing being the cornerstone of numerous production chains, Gentec emphasis on this specific need by proposing a wide range of innovative and efficient dispensing equipments.

French leader on this area, it specialty is to design and implement solutions to put down and dispense every type of fluid in an accurate and repeatable way during the process of assembly. Thanks to it vast field of activity and application, no doubt that Gentec will know how to resolve your most complex problems of deposit and brings you the suited recommendations to optimize your production's capacities.

Persuaded that our expertise must be complete, we also supply you tools in order to prepare your fluid (mixture and degassing) and polymerize your glues (UV sunstroke). Our range of consumables (needles, syringes, static mixers etc are also considered as the best in the market.

So we provide you every type of dispensing equipments to allow you to use efficiently your fluids regardless of the viscosity : glues, greases, lubricants, pastes, solvents, silicones, inks, activators, RTV, paints.

Present in more than 20 countries in the world, performance, quality, service and technology are at the center of all our concerns.