

A MEMBER OF THE HILGER&KERNGROUP

## High performance easy to handle

Machines for bonding, sealing, potting and encapsulation

# Simplify your metering and mixing process

## Reliable processing of two-part epoxies, polyurethanes and silicones

METER MIX<sup>®</sup> is a global manufacturer and supplier of metering, mixing and dispensing machines for processing single and twocomponent materials. Our machines successfully process epoxies, polyurethanes, silicones, polysulphides and methacrylate based resins, as well as greases and oils. METER MIX<sup>®</sup> dispensing equipment offers solid solutions for a wide range of applications such as bonding, sealing, potting, encapsulation or reaction injection moulding.

With our machines, you can process one-part and two-part materials reliably and safely - regardless of whether you are a beginner or an advanced user. You could choose between two technologies:

- Material dispensed by continuous flow
- Material dispensed by shot

### **Our product portfolio**

#### Material dispensed by continuous flow

Machines for liquid materials



Machines for paste materials



- Proven gear pump or progravity pump technology
- Pulsation-free dispensing
- Variable mixing ratio
- Accurate flow-rate control

	Material dispensed by shot
	Liquid Shot
	<b>Paste Shot</b>
gressive S	<ul> <li>Proven piston pump technology</li> <li>Precise metered shot sizes achievable</li> <li>Reliable and robust operation</li> </ul>

## Find the right machine for your solution

### **LiquidFlow Machines**

#### LiquidFlow 2

Versatile machine for accurate dispensing of small beads





#### **LiquidFlow 30**

Entry-level gear pump technology for low-mid flow applications

**08** 



#### LiquidFlow 40

Mid-range gear pump technology for medium flow applications

10



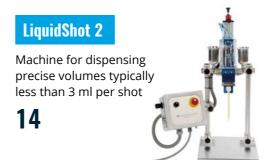
#### LiquidFlow 50

High-level machine for larger flow production demands

12



### **LiquidShot Machines**



LiquidShot 4 Piston pump technology for medium applications typically dispensing between 20 to 180 ml



20

16

### **PasteFlow Machines**

#### PasteFlow 20

High-level machine for dispensing beads of high-viscosity material directly from 20 lt drums

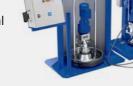




#### PasteFlow 200

High-level machine for dispensing beads of high-viscosity material directly from 200 lt drums

24



### **PasteShot Machines**

PasteShot 20

per shot

18

Machine for dispensing small-medium shot sizes typically between 5 to 120 ml of high-viscosity material directly from 20 lt drums

26



28

#### LiquidShot 3

Piston pump technology for small applications typically dispensing between 3 to 60 ml per shot



#### LiquidShot 5

Piston pump technology for large applications typically dispensing between 100 to 250 ml per shot



#### PasteShot 200

Machine for dispensing medium-large shot sizes typically 30 to 200 ml of high-viscosity material directly from 200 lt drums



### LiquidFlow 2

Versatile machine for accurate dispensing of small beads



and mixing system for accurate dispensing of small beads and shots of two-part materials. One of the could process the following materials: major benefits with this machine is the DC electric drive unit and progressive cavity pump technology which • Epoxy ensures very precise dispensing with high economic • Silicone efficiency at the same time. Due to the compact size of • Methacrylate

The LiquidFlow 2 is a versatile and efficient metering the LiquidFlow 2, it can be easily mounted on a robotic applicator with various material feeding options. It

- Polyurethane

#### **TYPICAL APPLICATIONS**

#### Electronic potting

- Sealing
- Component bonding

- Quiet operation

#### **STANDARD FEATURES**

#### **OPTIONS**

- Bench top or robot mounted machine • 600 ml cartridge feed
- Metering Pumps: Continuous progressive cavity
- · "Metered" or "Operator Controlled" shot size selection
- Service indicator LED Controls:

  - Integrated PLC control (with colour HMI touchscreen operator interface)
  - "Recipe" function with up to 50 programmable ratios, flow rates and shot sizes
  - Main Off/On switch
  - Emergency Stop & Reset Buttons
  - Anti-gel automatic purge timer
  - Either foot pedal or remote start options available

#### **TECHNICAL DATA**

Size	2 x 0.01	2 x 0.05	2 x 0.15	2 x 0.30
5120	2 × 0.01	2 × 0.05	2 × 0.15	2 X 0.50
Specific volume [ml/rev]	0.026	0.120	0.330	0.600
Shot size min [ml] <sup>1</sup>	0.006	0.030	0.080	0.150
Output rate [ml/min] <sup>2</sup>	0.263.90	1.218.1	3.350.0	6.090.0
Metering accuracy [%] <sup>3</sup>		·	± 1	
Mixing ratio A:B			1:110:1	
P work [bar]			6	
P max [bar]			10	
Speed range [rev/min]			10150	

<sup>1</sup> At mixing ration 1:1

<sup>2</sup> Depending on mixing ratio, material properties, mixer type, alignment of PCP, etc.

<sup>3</sup>Absolte accuracy related to one revolution, depending on material properties, mixer type, etc.

#### **YOUR BENEFITS**

- Precise small metered dosing or beading
- Continuous flow
- Pulsation-free dispensing
- Variable mixing ratio
- Accurate flow-rate control
- 2.5 lt & 6 lt reservoirs
- Digitally controlled heating circuits for reservoirs (when fitted)
- Bulk feed transfer pump/accumulator facility
  - directly from suppliers containers
- Electric agitation to material reservoirs (when fitted)
- Electronic low-level sensing to material reservoirs
  - (when fitted) with visual and audible alarms
- Stainless steel wetted parts to protect against corrosion
- Upgraded component parts for protection against abrasion
- Nitrogen purge facility to material reservoirs (when fitted)

### LiquidFlow 30

**Entry-level gear pump** technology for low-mid flow applications



is a flexible system for potting and encapsulation It is a variable ratio gear pump metering and mixing applications with continuous material flow. This system that can process low to medium viscosity two entry-level gear pump technology is perfect for low- component materials: mid flow applications and customers will benefit from • Polyurethane its modular design (30M). The LiquidFlow 30 can be • Epoxy individually adapted to each application ensuring that • Silicone

The LiquidFlow 30 metering and mixing machine it meets customers expectations and requirements.

#### **TYPICAL APPLICATIONS**

- Electronic potting • Can be used for a variety of different applications
- Casting
- Moulding
- Component bonding and sealing
- LED lighting

#### **STANDARD FEATURES**

- · Metering Pumps: Electric inverter driven gear • Digitally controlled heating to reservoirs, pumps and hoses pumps "Metered" or "Operator Controlled" shot size Electric agitation to material reservoirs • • Electronic low-level sensing to material reservoirs selection Service indicator LED with visual and audible alarms Controls: Stainless steel wetted parts to protect against • Integrated PLC control with HMI touchscreen and corrosion
  - variable ratio adjustment
  - · Adjustable flow rate
- Anti-gel automatic purge timer
- Either foot pedal, hand held trigger or remote start options available
- Recipe Function" to allow up to 50 pre-set shot sizes, flow rates, and ratios on LiquidFlow 30M

#### **TECHNICAL DATA**

Ratio range capability	1:1 to 100:1 (Depending upon model and pumps selected)
Viscosity acceptance	Typically up to 15,000 mPas (Or higher when fitted with optional heating system) Up to 500,000 mPas when processed from transfer feed systems (Depending upon material thixotropy)
Shot size	Available from approx. 1 ml upwards
Flow rate	Up to approx. 2.1 lt/min (Depending upon viscosity and size of pumps)
Mixing	Disposable Static or Rotary/Static
Reservoir capacity	6 lt (1,58 gal) or 12 lt (3.16 US gal)
Electric supply	230 V / 50 Hz or 110 V / 60 Hz AC
Compressed air	80 p.s.i.

#### VERSIONS





Benchtop with smaller tanks LiquidFlow 30A

Benchtop with modular options LiquidFlow 30M

#### **YOUR BENEFITS**

- Continuous flow
- Pulsation-free dispensing
- Variable mixing ratio
- Quiet operation
- Accurate flow-rate control

- Hardened parts to protect against abrasion
- Nitrogen purge facility to material reservoirs
- Vacuum degassing to material reservoirs
- Bulk feed transfer pump/accumulator facility
- directly from suppliers containers
- Air nucleation system for foam applications
- Rotary/Static disposable mixing option (electrically driven)
- Automatic material recirculation system to help p fillers in suspension
- "Recipe Function" to allow up to 50 pre-set shot sizes, flow rates, and ratios on LiquidFlow 30A

### LiquidFlow 40

Mid-range gear pump technology for medium flow applications



a floor mounted system with larger tanks for potting and encapsulation applications with continuous LiquidFlow 40 can process low to medium viscosity material flow. The mid-range gear pump technology is very suitable for medium flow rate and shot size applications. The machine provides a beneficial "easy • Epoxy to handle" operation, which is in a class of its own in • Silicone the middle to upper world of metering, mixing and

The LiquidFlow 40 metering and mixing machine is dispensing systems. Its proven gear pump technology provides precise and consistently reliable dosing. The two-component materials:

- Polyurethane

#### **TYPICAL APPLICATIONS**

- Electronic potting
- Casting
- Moulding
- Component bonding and sealing
- LED lighting

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#### **STANDARD FEATURES**

- · Metering Pumps: Electric inverter driven gear pumps
- · "Metered" or "Operator Controlled" shot size selection
- Service indicator LED
  - · Controls:
  - Integrated PLC control with HMI touchscreen and variable ratio adjustment
- · Adjustable flow rate
- · Anti-gel automatic purge timer
- Either foot pedal, hand held trigger or remote start options available

#### **TECHNICAL DATA**

Ratio range capability	1:1 to 100:1 (depending upon model and pumps selected)
Viscosity acceptance	Typically up to 15,000 mPas (Or higher when fitted with optional heating system) Up to 500,000 mPas (Depending upon material thixotropy)
Shot size	Available from approx. 1 ml upwards
Flow rate	Up to approx. 2.1 lt/min (Depending upon viscosity and size of pumps)
Mixing	Disposable Static or Rotary/Static
Reservoir capacity	18 lt (4.74 gal)
Electric supply	230 V / 50 Hz or 110 V / 60 Hz AC
Compressed air	80 p.s.i.

#### **YOUR BENEFITS**

- Compact and portable floor mounted framework • Can be used for a variety of different applications
- Continuous flow
- Pulsation-free dispensing
- Variable mixing ratio
- Quiet operation
- Accurate flow-rate control

- Reservoir sizes up to 30 lt possible
- Digitally controlled heating to reservoirs, pumps and hoses
- Electric agitation to material reservoirs
- Electronic low-level sensing to material reservoirs
  - with visual and audible alarms
- Stainless steel wetted parts to protect against corrosion
- Hardened parts to protect against abrasion
- Ultra-high precision gear metering pumps for low viscosity or small shot applications
- Nitrogen purge facility to material reservoirs
- Vacuum degassing to material reservoirs
- Bulk feed transfer pump/accumulator facility
- directly from suppliers containers
- Air nucleation system for foam applications
- Rotary/Static disposable mixing option (electrically driven)
- Automatic material recirculation system to help keep fillers in suspension
- "Recipe Function" to allow up to 50 pre-set shot sizes, flow rates, and ratios

### LiquidFlow 50

**High-level machine for** larger flow production demands



machine for larger flow production demands. The ratio very simply on the built in HMI touchscreen. The benefit from this machine is the portable framework machine is mostly used for manual applications, but with the facility to mount larger material reservoirs it can also be interfaced to fully or semi-automatic and, if requested, a higher flow rate is also achievable. One major advantage of the LiquidFlow 50 is the independent inverter driven motor control for each • Epoxy gear pump, instead of using a lower cost but less • Silicone efficient gear and toothed belt or chain assembly. This

The LiquidFlow 50 is a high-level metering and mixing feature allows the operator to easily change the mixing systems. Typical materials which can be processed are:

- Polyurethane

#### **TYPICAL APPLICATIONS**

- Electronic potting
- Casting
- Moulding
- Component bonding and sealing
- Filter manufacturing

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#### **STANDARD FEATURES**

- · Metering Pumps: Electric inverter driven gear pumps
- Mixer Valve: Pneumatically operated TSV601 "Metered" or "Operator Controlled" shot size selection
- Service indicator LED
- Controls:
  - Integrated PLC control with HMI touchscreen and variable ratio adjustment
  - Air supply filter/regulator and gauge with connection check unit
  - Anti-gel automatic purge timer
  - Either foot pedal, hand held trigger or remote start options available

#### **TECHNICAL DATA**

Ratio range capability	1:1 to 100:1 (depending upon pumps selected)
Viscosity acceptance	Up to 500,000 mPas (when fitted with transfer pump/accumulator option)
Shot size	Available from approx. 10ml upwards
Flow rate	Typically up to approx. 8 lt/min (depending upon viscosity)
Mixing	Disposable Static or Rotary/Static
Reservoir capacity	18 lt (4,74 gal) stainless steel with silica gel moisture protection
Electric supply	230 V / 50 Hz or 110 V / 60 Hz AC
Compressed air	80 p.s.i.

#### **YOUR BENEFITS**

- Larger flow rates are possible
- Can be used for a variety of different applications
- Continuous flow
- Pulsation-free dispensing
- Variable mixing ratio
- Quiet operation
- Accurate flow-rate control

#### **OPTIONS**

- Reservoir sizes up to 50 lt possible
- Digitally controlled heating to reservoirs, pumps and hoses
- Electric agitation to material reservoirs
- Electronic low-level sensing to material reservoirs
- with visual and audible alarms
- Stainless steel wetted parts to protect against corrosion
- Hardened parts to protect against abrasion
- Ultra-high precision gear metering pumps
- Nitrogen purge facility to material reservoirs
- Vacuum degassing to material reservoirs
- Rotary/Static disposable mixing option (electrically driven)
- Dynamic mixing head (electrically driven) for high flow applications
- Bulk feed transfer pump/accumulator facility
- directly from suppliers containers



Besides rotary or static mixing, the dvnamic mixing head can be used optionally for high flow applications

### LiquidShot 2

Machine for dispensing precise volumes typically less than 3 ml per shot



especially developed for dispensing precise volumes an articulated robot. The machine processes a variety typically less than 3 ml per shot. This makes it perfect of two-part materials: for electronic encapsulation applications which · Epoxy require absolute precision. The LiquidShot 2 provides • Polyurethane a secure, proven fixed ratio metering control unit · Silicone during the dispensing process. Furthermore, the • Methacrylate

The LiquidShot 2 metering and mixing system is lightweight construction allows direct installation onto

#### **TYPICAL APPLICATIONS**

Electronic potting

Sealing

· Component bonding

- Precise, small volume metered shots
  - Suitable for processing filled materials (when

#### **STANDARD FEATURES**

on LiquidShot 2E

on LiquidShot 2P

LiquidShot 2E

Controls:

- Single acting rod-displacement pumps • 6 lt (1,58 gal) capacity reservoir sizes on special • Metered Shot mode on LiquidShot 2P support framework · Metered, incremental or robot shot size selection Digitally controlled heating Low-level sensing · Shot size adjuster with digital reference indicator Electric agitation on reservoirs • Pressurised cartridge feeds for processing thick • Electronic shot size and flow rate control on (non-pourable) materials • Stainless steel wetted parts to protect against Service indicator LED corrosion Hardened parts to protect against abrasion
  - Integrated PLC control (with colour HMI touchscreen operator interface)
  - Liquid Shot 2E incorporates "Recipe" function with up to 50 programmable flow rate and shot sizes
  - · Anti-gel automatic purge timer
  - · Either foot pedal or remote start options available

#### **TECHNICAL DATA**

Ratio range capability	1:1 to 12:1 (depending upon pumps selected)
Viscosity acceptance	Up to 500,000 mPas (depending upon material thixotropy)
Shot size	Available from approx. 0.04 ml up to 6.79 ml at a ratio of 1:1 by volu- me
Cycle rate	Up to 15 shots per minute (depending upon viscosity)
Mixing	Disposable Static
Reservoir capacity	600 ml plastic cartridges
Electric supply	230 V / 50 Hz or 110 V / 60 Hz AC
Compressed air	80 p.s.i.

#### VERSIONS





Pneumatic drive, rod displacement pump LiquidShot 2P

Electric drive, rod displacement pump LiquidShot 2E

#### **YOUR BENEFITS**

• Compact size, suitable for mounting on XYZ robot

- Accurate flow-rate control (LiquidShot 2E)
  - fitted with hardened parts)

- Bulk transfer pump & accumulator feed facility
- directly from suppliers containers

### LiquidShot 3

Piston pump technology for small applications typically dispensing between 3 to 60 ml per shot



focused in electronic potting and encapsulation. for beginners or experts. The LiquidShot 3 processes Proven piston pump technology allows for consistent, small shot dispensing applications typically dispensing between 3 ml to 60 ml per shot. The metering and mixing system provides a clean and cost-efficient solution and is perfect for small and medium production • Silicone volumes. The machine can be up and running in a very

The LiquidShot 3 is the first choice for all applications short period of time and is easy to handle, whether many two component materials with differing mixing ratios or vastly different viscosities:

- Polyurethane
- Epoxy

#### **TYPICAL APPLICATIONS**

- Electronic potting and encapsulation
- Casting
- Component bonding
- Brush setting

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#### **STANDARD FEATURES**

#### **OPTIONS**

- Mixer Valve: Pneumatically operated TSV601
- "Metered Shot" and "Operator Controlled" shot size selection
- · Shot size adjuster with digital reference indicator on LiquidShot 3C and 3CT
- Service indicator LED
- Controls:
  - Integrated PLC control with HMI operator interface
  - "Recipe" function with up to 50 programmable shot sizes and flow rates on LiquidShot 3CE and 3CTE
  - · Anti-gel automatic purge timer
  - Shot counter/repeater unit for multiple shot applications on LiquidShot 3C and 3CT
  - · Either foot pedal or hand held trigger start options available

#### **TECHNICAL DATA**

Ratio range capability	1:1 to 14:1 (depending upon pumps selected)
Viscosity acceptance	Up to 500,000 mPas (depending upon material thixotropy)
Shot size	Available from approx. 1.2 ml up to 63 ml at a ratio of 1:1 by volume
Cycle rate	Up to 30 shots per minute (depending upon viscosity)
Mixing	Disposable Static or Rotary/Static
Reservoir capacity	6 lt (1,58 gal) stainless steel with silica gel moisture protection 18 lt (4,74 gal) available, depending on construction
Electric supply	230 V / 50 Hz or 110 V / 60 Hz AC
Compressed air	80 p.s.i.

#### VERSIONS





Benchtop entry level pneumatic side-by-side drive piston pump LiquidShot 3B

Benchtop pneumatic in-line drive piston pump LiquidShot 3C



Benchtop pneumatic in-line drive piston pump with modular options LiquidShot 3CM

Floor mounted portable pneumatic in-line drive piston pump LiquidShot 3CT

#### **YOUR BENEFITS**

- Cost-effective
- Compact size on LiquidShot 3B, 3C, 3CE and 3CM Portable trolley frame on LiquidShot 3CT and 3CTE
- Precise volumetric metered shots
- Accurate flow-rate control on LiquidShot 3CE and 3CTE • Suitable for processing filled/abrasive materials
  - (when fitted with hardened parts)
- Digitally controlled heating to reservoirs, pumps and hoses
- Electric agitation to material reservoirs
- Electronic low-level sensing to material reservoirs
- with visual and audible alarms
- Stainless steel wetted parts to protect against corrosion
- Hardened parts to protect against abrasion
- Nitrogen purge facility to material reservoirs
- Vacuum degassing to material reservoirs
- Rotary/Static disposable mixing option (electrically driven)
- Bulk feed transfer pump facility directly from suppliers containers



Benchtop electric in-line drive piston pump LiquidShot 3CE





Floor mounted portable electric

in-line drive piston pump LiquidShot 3CTE

### LiquidShot 4

Piston pump technology for medium applications typically dispensing between 20 to 180 ml per shot



metering and mixing system for two-part dispensing typically dispensing between 20 to 180 ml per shot. The applications, especially potting and encapsulation. The machine processes a variety of two-part materials: machine is a durable and economic solution for many production demands with a high degree of operator functionality. This guarantees robust and proven metering and mixing principles. Trusted piston pump

The LiquidShot 4 is a user-friendly, highly productive technology allows for medium dispensing applications

- Polyurethane
- Epoxy
- Silicone

#### **TYPICAL APPLICATIONS**

- Electronic potting and encapsulation
- Casting
- Moulding
- Component bonding
- Brush setting

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- **STANDARD FEATURES** • Mixer Valve: Pneumatically operated TSV601
- "Metered Shot" and "Operator Controlled" shot size selection
- · Shot size adjuster with digital reference indicator on LiquidShot 4C & 4CT
- Service indicator LED
- Controls:
  - Integrated PLC control with HMI operator interface
  - "Recipe" function with up to 50 programmable shot sizes & flow rates on LiquidShot 4CE & 4CTE
  - Anti-gel automatic purge timer
  - Shot counter/repeater unit for multiple shot applications on LiquidShot 4C & 4CT
  - Either foot pedal or hand held trigger start options available

#### **TECHNICAL DATA**

Ratio range capability	1:1 to 24:1 (depending upon pumps selected)
Viscosity acceptance	Up to 500,000 mPas (depending upon material thixotropy)
Shot size	Available from approx. 2.5 ml up to 172 ml at a ratio of 1:1 by volume
Cycle rate	Up to 30 shots per minute (depending upon viscosity)
Mixing	Disposable Static or Rotary/Static
Reservoir capacity	6 lt (1,58 gal) 18 lt (4,74 gal), depending on construction s tainless steel with silica gel moisture protection
Electric supply	230 V / 50 Hz or 110 V / 60 Hz AC
Compressed air	80 p.s.i.

#### VERSIONS



Benchtop pneumatic in-line drive piston pump LiquidShot 4C

Benchtop electric in-line drive piston pump LiquidShot 4CE



Floor mounted portable electric in-line drive piston pump LiquidShot 4CTE

#### 18

#### **YOUR BENEFITS**

- Cost-effective
- Compact size on LiquidShot 4C and 4CE
- Portable trolley frame on LiquidShot 4CT and 4CTE
- Precise volumetric metered shots
- Accurate flow-rate control on LiquidShot 4CE and 4CTE
- Suitable for processing filled/abrasive materials

#### **OPTIONS**

- Digitally controlled heating to reservoirs, pumps and hoses
- Electric agitation to material reservoirs
- Electronic low-level sensing to material reservoirs
- with visual and audible alarms
- Stainless steel wetted parts to protect against corrosion
- Hardened parts to protect against abrasion
- Nitrogen purge facility to material reservoirs
- Vacuum degassing to material reservoirs
- Rotary/Static disposable mixing option (electrically driven)
- Bulk feed transfer pump facility directly from
- suppliers containers





Floor mounted portable pneumatic in-line drive piston pump LiquidShot 4CT

### LiquidShot 5

Piston pump technology for large applications typically dispensing between 100 to 250 ml per shot



a reliable and economic solution for a wide range of efficiently through this machine. The LiquidShot 5 is resin dispensing applications, especially electronic able to process the following materials: potting. This machine exhibits a high degree of efficiency, accompanied by a portable floor mounted • Epoxy design. Proven piston pump technology allows for large shot applications typically dispensing between 100 to 250 ml per shot. High mixing ratios or large

The LiquidShot 5 metering and mixing machine offers differences in viscosities are processed perfectly and

- Polyurethane
- Silicone

#### **TYPICAL APPLICATIONS**

- Electronic potting
- Casting
- Moulding
- Component bonding
- Filter encapsulation

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• Suitable for processing filled/abrasive materials

#### **STANDARD FEATURES**

#### **OPTIONS**

- Mixer Valve: Pneumatically operated TSV601 • 6 lt (1,58 gal), 12 lt (3,16 gal), and 18 lt (4,74 gal) • "Metered Shot" and "Operator Controlled" shot capacity reservoir sizes Digitally controlled heating to reservoirs, pumps size selection · Shot size adjuster with digital reference indicator and hoses
- Service indicator LED
- Controls:
  - Integrated PLC control with HMI operator interface
  - Dispense pressure regulator and gauge
  - Air supply filter/regulator and gauge with connection check unit
  - · Anti-gel automatic purge timer
  - Shot counter/repeater unit for multiple shot applications
  - Either foot pedal or hand held trigger start options available

#### **TECHNICAL DATA**

Ratio range capability	1:1 to 20:1 (depending upon pumps selected)
Viscosity acceptance	Up to 500,000 mPas (depending upon material thixotropy)
Shot size	Available from approx. 20 ml up to 235 ml
Cycle rate	Up to 30 shots per minute (depending upon viscosity)
Mixing	Disposable Static or Rotary/Static
Reservoir capacity	30 lt (7,9 gal) stainless steel with silica gel moisture protection
Electric supply	230 V / 50 Hz or 110 V / 60 Hz AC
Compressed air	80 p.s.i.

#### **YOUR BENEFITS**

- Suitable for larger shot sizes
- Portable trolley frame
- Precise volumetric metered shots
- Easily adjustable flow-rate control
- (when fitted with hardened parts)

- Electric agitation to material reservoirs
- Electronic low-level sensing to material reservoirs
- with visual and audible alarms
- Stainless steel wetted parts to protect against corrosion
- Hardened parts to protect against abrasion
- Nitrogen purge facility to material reservoirs
- Vacuum degassing to material reservoirs
- Rotary/Static disposable mixing option (electrically driven)
- Bulk feed transfer pump facility directly from
- suppliers containers

### **PasteFlow**

### **PasteFlow 20**

High-level machine for dispensing beads of high-viscosity material directly from 20 lt drums



The PasteFlow 20 is a high-level metering and mixing robotic XYZ applicator. With the PasteFlow 20, precise system for applications with continuous material flow. The machine was specially developed for bonding and repeatability, based on different materials: sealing components by utilizing high-precision gear • Epoxy pumps. The machine is perfect for dispensing beads of high-viscosity material directly from 20 lt drums via twin follower seal plates, providing a clean, mess-free • Polysulphide operation with little exposure to the materials. The • Methacrylate system can be manually controlled, or dispensed via a

doses or accurate beads can be metered with excellent

- Polyurethane
- Silicone

#### **TYPICAL APPLICATIONS**

Component bonding

· Sealant dispensing

- Variable mixing ratio Quiet operation •

#### **STANDARD FEATURES**

- Mixer Valve: Pneumatically operated TSV601
- · "Metered" or "Operator Controlled" shot size selection
- Service indicator LED
- Controls:
- Integrated PLC control with colour HMI touchscreen operator interface
- · Flow rate adjustable via rotary potentiometer
- Air supply filter/regulator and gauge with
- connection check unit
- Anti-gel automatic purge timer
- Either foot pedal, hand held trigger or remote start options available

#### **TECHNICAL DATA**

Ratio range capability	1:1 to 30:1 (depending upon pumps selected)	
Viscosity acceptance	Up to 1,500,000 mPas	
Shot size	Typically available from approx. 2 ml upwards	
Flow Rate	Up to approx. 500 ml/min (depending upon viscosity)	
Mixing	Disposable Static or Rotary/Static	
Drum/Pail sizes	20 lt / 20 lt (5 gal / 5 gal)	
Electric supply	230 V / 50 Hz or 110 V / 60 Hz AC	
Compressed air	80 p.s.i.	

#### **YOUR BENEFITS**

- Suitable for processing pasty materials directly
  - from suppliers containers
- Continuous flow
- Pulsation-free dispensing
- Accurate flow-rate control

- · Digitally controlled heating to follower plates,
- pumps and hoses
- Electronic low-level sensing to both materials with visual and audible alarms
- Stainless steel wetted parts to protect against corrosion
- Hardened parts to protect against abrasion
- Swivelling boom assembly to support hand held mixer valve
- Rotary/Static disposable mixing option (electrically driven) - depending upon material viscosity
- Remote variable speed flow rate control

### **PasteFlow**

### **PasteFlow 200**

**High-level machine for** dispensing beads of high-viscosity material directly from 200 lt drums



With the PasteFlow 200, we are able to offer a highlevel machine for applications with continuous material flow. The metering and mixing system was specially developed for component bonding and sealing applications by utilizing high-precision gear pump technology. The machine is perfect for dispensing beads of high-viscosity material directly from 200 lt drums via • Silicone twin follower seal plates, providing a clean, mess-free • Polysulphide operation with little exposure to the materials. The

system can be manually controlled, or dispensed via a robotic XYZ applicator. Precise doses or accurate beads can be metered with excellent repeatability, based on different materials:

- Epoxy
- Polyurethane

- Methacrylate

#### **TYPICAL APPLICATIONS**

- Component bonding
- · Sealant dispensing

- •
- Variable mixing ratio
- Quiet operation •

#### **STANDARD FEATURES**

- Mixer Valve: Pneumatically operated TSV601
- · "Metered" or "Operator Controlled" shot size selection
- Service indicator LED
- Controls:
- Integrated PLC control with colour HMI touchscreen operator interface
- · Flow rate adjustable via rotary potentiometer
- Air supply filter/regulator and gauge with
- connection check unit
- Anti-gel automatic purge timer
- Either foot pedal, hand held trigger or remote start options available

#### **TECHNICAL DATA**

Ratio range capability	1:1 to 30:1 (depending upon pumps selected)
Viscosity acceptance	Up to 1,500,000 mPas
Shot size	Typically available from approx. 5 ml upwards
Flow rate	Up to approx. 500 ml/min (depending upon viscosity)
Mixing	Disposable Static or Rotary/Static
Drum/Pail sizes	200 lt / 20 lt (55 gal / 5 gal) 200 lt / 200 lt (55 gal /55 gal)
Electric supply	230 V / 50 Hz or 110 V / 60 Hz AC
Compressed air	80 p.s.i.

#### VERSIONS





Floor mounted 200 lt + 200 lt electric gear pump PasteFlow 200G

#### **YOUR BENEFITS**

- Suitable for processing pasty materials directly
  - from suppliers containers
- Continuous flow
- Pulsation-free dispensing
- Accurate flow-rate control

- · Digitally controlled heating to follower plates,
- pumps and hoses
- Electronic low-level sensing to both materials with visual and audible alarms
- Stainless steel wetted parts to protect against corrosion
- Hardened parts to protect against abrasion
- Swivelling boom assembly to support hand held mixer valve
- Rotary/Static disposable mixing option (electrically
- driven) depending upon material viscosity
- Remote variable speed flow rate control

### **PasteShot**

### PasteShot 20

Machine for dispensing smallmedium shot sizes typically between 5 to 120 ml of highviscosity material directly from 20 lt drums

> The PasteShot 20 metering and mixing machine applications. Reliable piston pumps ensure an accurate was developed primarily for dispensing small to medium shots in bonding, sealing and cartridge filling applications. It is suited for shot sizes typically 5 ml • Epoxy to 135 ml (depending upon ratio) of high-viscosity • Polyurethane materials which can be fed directly from 20 lt drums. • Silicone The machine can be utilized for direct dispensing • Methacrylate onto components, or into cartridges for manual



and consistent processing of materials with high mix ratios or vastly differing viscosities:

#### **TECHNICAL DATA**

Ratio range capability	1:1 to 12:1 (depending upon pumps selected)
Viscosity acceptance	Up to 1,500,000 mPa.s
Shot size	Available from approx. 11 ml up to 108 ml at 10:1 volumetric ratio
Cycle rate	Up to 15 shots per minute (depending upon viscosity)
Mixing	Disposable Static or Rotary/Static
Major component drum/pail size	Typically approx. 20 lt (5 gal) (depending upon drum dimensions)
Minor component reservoir size	18 lt (4,74 gal) stainless steel
Minor component drum/pail size	approx. 20 lt (5 gal)
Electric supply	230 V / 50 Hz or 110 V / 60 Hz AC
Compressed air	80 p.s.i.

#### **TYPICAL APPLICATIONS**

- Component bonding and sealing
- Cartridge/Syringe filling

#### **STANDARD FEATURES**

- Mixer Valve: Pneumatically operated TSV601 or AST6001 1k Valve • "Metered" or "Operator Controlled" shot size selection Service indicator LED
- · Controls:
  - Integrated PLC control with HMI operator interface
  - Manual shot size adjuster with digital reference indicator on PasteShot 20F
  - Dispense pressure regulator and gauge
  - Air supply filter/regulator and gauge with connection check unit
  - · Anti-gel automatic purge timer
  - Shot counter/repeater unit for multiple shot applications
  - Either foot pedal or hand held trigger start options available

#### VERSIONS





Floor mounted portable 20 lt + tank pneumatic in-line drive piston pump PasteShot 20A

Floor mounted portable 20 lt + 20 lt pneumatic in-line drive piston pump PasteShot 20C



Floor mounted portable 20 lt pneumatic drive 1k piston pump PasteShot 20F

#### 26

#### **YOUR BENEFITS**

- Precise metered shot sizes achievable
- Reliable and robust operation
- Suitable for processing abrasive media (when
  - fitted with hardened parts)

#### **OPTIONS**

- · Shot size adjuster with digital reference indicator on PasteShot 20A and 20C
- · Digitally controlled heating to follower plate,
- reservoir, pumps and hoses
- Electronic low-level sensing to both materials with visual and audible alarms
- Stainless steel wetted parts to protect against corrosion
- Hardened parts to protect against abrasion Swivelling boom assembly to support hand held
- mixer valve
- Rotary/Static disposable mixing option (electrically
- driven) depending upon material viscosity
- Available with dual independent servo drive system
- for precise flow rate control and variable ratio
- feature on PasteShot 20CE





Floor mounted portable 20 lt + 20 lt electric drive piston pump PasteShot 20CE

### **PasteShot**

### **PasteShot 200**

Machine for dispensing medium-large shot sizes typically 30 to 200 ml of high-viscosity material directly from 200 lt drums



the preferred solution for dispensing medium to large shots for bonding, sealing and cartridge filling applications. It is suited for shot sizes typically 30 to 200 ml of high-viscosity materials which can be fed directly from 200 lt drums. The machine can be utilized for direct dispensing onto components, or · Methacrylate into cartridges for manual applications. Proven piston

The PasteShot 200 metering and mixing system is pump technology ensures accurate and consistent processing of materials with high mix ratios or vastly differing viscosities:

- Epoxy
- Polyurethane
- Silicone

#### **TECHNICAL DATA**

Ratio range capability	1:1 to 20:1 (depending upon pumps selected)
Viscosity acceptance	Up to 1,500,000 mPas
Shot size	Available from approx. 11 ml up to 194 ml at 10:1 volumetric ratio
Cycle rate	Up to 15 shots per minute (depending upon viscosity)
Mixing	Disposable Static or Rotary/Static
Major component drum/pail size	Approx. 200 lt (55 gal)
Minor component reservoir size	30 lt (7,9 gal) stainless steel
Minor component drum/pail size	20 lt (5 gal) 200 lt (55 gal)
Electric supply	230 V / 50 Hz or 110 V / 60 Hz AC
Compressed air	80 p.s.i.

#### **TYPICAL APPLICATIONS**

- Component bonding and sealing
- Cartridge/Syringe filling

#### **STANDARD FEATURES**

- Mixer Valve: Pneumatically operated TSV601 or AST6001 1k Valve • "Metered" or "Operator Controlled" shot size selection
- Service indicator LED
- · Controls:
  - Integrated PLC control with HMI operator interface
  - Manual shot size adjuster with digital reference indicator on PasteShot 200F
  - Dispense pressure regulator and gauge
  - Air supply filter/regulator and gauge with connection check unit
  - · Anti-gel automatic purge timer
  - Shot counter/repeater unit for multiple shot applications
  - Either foot pedal or hand held trigger start options available

#### VERSIONS





Floor mounted 200 lt + 200 lt pneumatic in-line drive piston pump PasteShot 200C

Floor mounted 200 lt + tank pneumatic in-line drive piston pump PasteShot 200A



Floor mounted 200 lt + 200 lt electric drive piston pump PasteShot 200CE

drive piston pump PasteShot 200CE20



#### **YOUR BENEFITS**

- Precise metered shot sizes achievable
- Reliable and robust operation
- Suitable for processing abrasive media (when
- fitted with hardened parts)

#### **OPTIONS**

- · Shot size adjuster with digital reference indicator on PasteShot 200A, 200C and 200C20
- · Digitally controlled heating to follower plate,
- reservoir, pumps and hoses
- Electronic low-level sensing to both materials with visual and audible alarms
- Stainless steel wetted parts to protect against corrosion
- Hardened parts to protect against abrasion Swivelling boom assembly to support hand held mixer valve
- Rotary/Static disposable mixing option (electrically
- driven) depending upon material viscosity
- Available with dual independent servo drive system
- for precise flow rate control and variable ratio
- feature on PasteShot 200CE or 200CE20





Floor mounted 200 lt + 20 lt electric



Floor mounted 200 lt + 20 lt pneumatic in-line drive piston pump PasteShot 200C20



Floor mounted 200 lt pneumatic drive 1k piston pump PasteShot 200



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