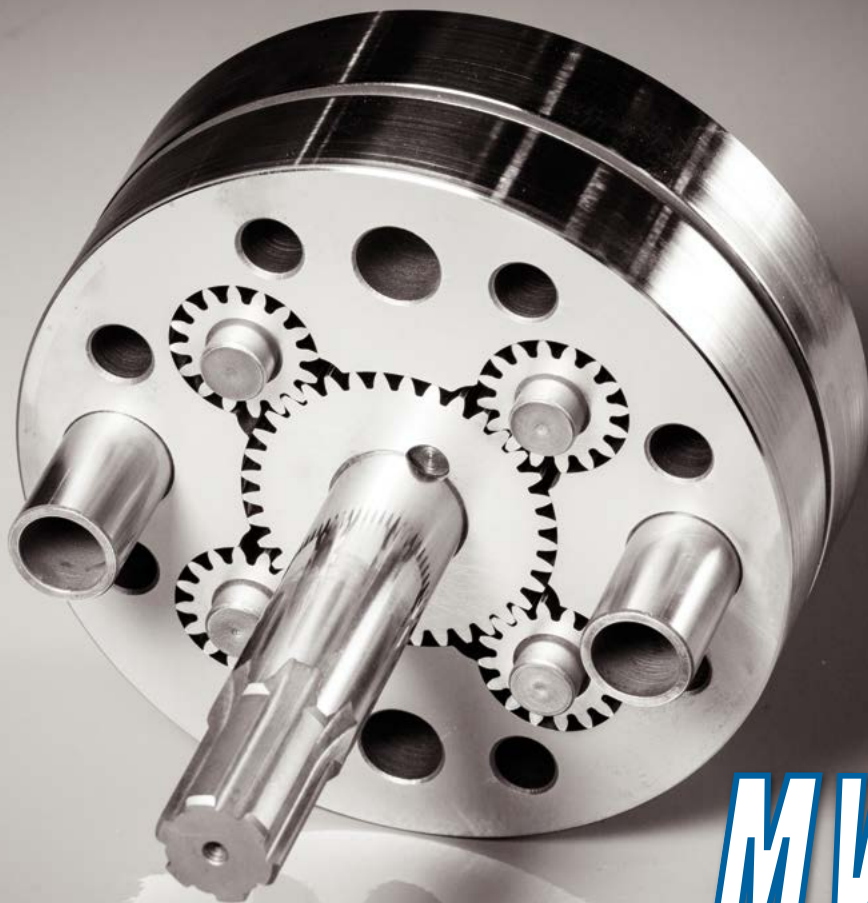


PRODUCT PORTFOLIO 2017



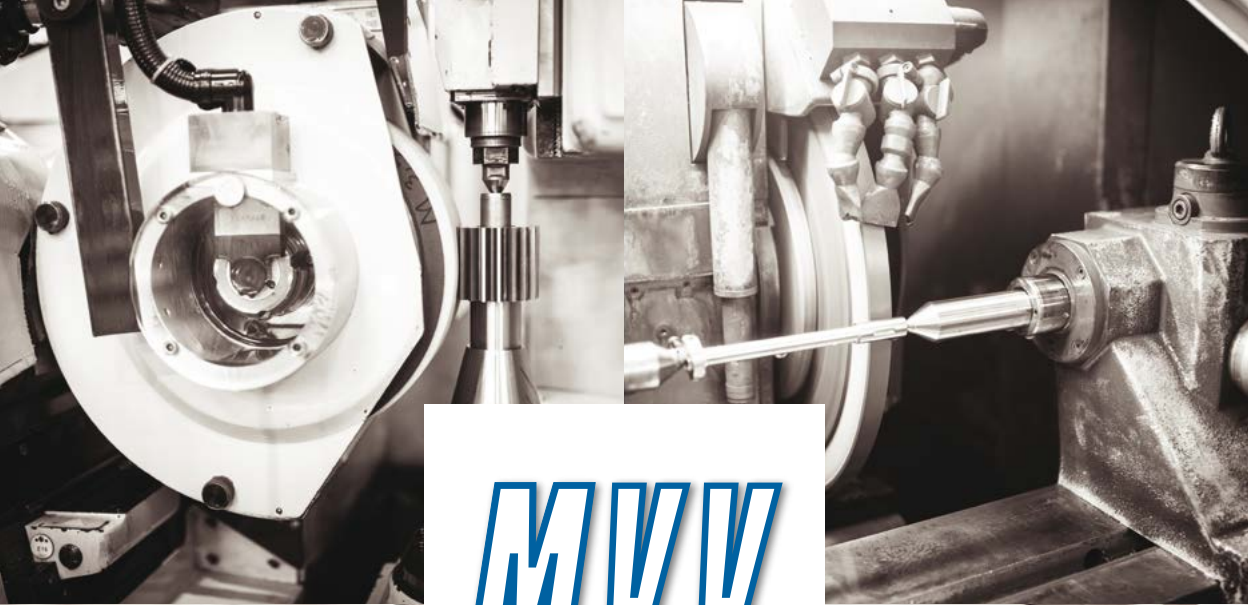
**MVV**  
GEAR PUMPS  




# MVV

GEAR PUMPS





**MVV**  
GEAR PUMPS





## **RANGE OF PRODUCTS**

### **General dosing, PU, process applications**

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|  |   |
|--|---|
| PL8 – PU, general purpose                        | 6 |
| PL2 – fully stainless steel: PU, general purpose | 7 |
| PAL – abrasives coloring agents (PU)             | 8 |
| PLR – heated casing                              | 9 |

### **Chemical range**

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| PL4 – thin and critical fluids         | 12 |
| Complete pump units                    | 13 |

### **Painting systems**

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### **Melted glue pumps**

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### **Yarn lubrication and finishing**

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## **Polymer extraction & booster**

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## **Drive systems**

## **Static mixers**

## **Engineering**

## **Spinnerets**

## **Spinning beams**

## **After sale**

## **Special parts**

## **Company profile**

## **Contacts**

Shown data are indicative only; please contact company for specific application  
l/h indication based on 10-150rpm max [except PUG and PL4 series]

# PL8 - polyurethane - general purpose

- suitable for polyols, isocyanates, catalysts, additives and silicons
- unparalleled efficiency (over 99% @ 100 bar)
- PTFE packing as standard or oil fluid barrier
- cast iron body for maximum lubrication
- core tempered martensitic stainless steel plates and gears (58 HRC)
- compatible with existing installations
- tailor made solutions

|                       | SI            |
|-----------------------|---------------|
| Viscosity             | cP            |
| Capacity rage         | cc/rev<br>l/h |
| Rotational speed      | rpm           |
| Max outlet pressure   | psi<br>bar    |
| Operating temperature | °C            |

## Applications:

Polyurethane  
Bonding agents  
Process  
applications  
Oils  
General metering

## Materials:

Cast iron body  
Martensitic S.S.  
Ni-Alloys

## Shaft seal:

Packing  
Oil Barrier  
Mechanical seal  
Magnetic coupling

## On demand:

ATEX certificate  
Bi-directional  
Surface treatment  
Electrically Heated  
Drives



| PL8                   | PL2                   |
|-----------------------|-----------------------|
| 50-80.000             | 50-80.000             |
| 0,3-120<br>0,18-1.080 | 0,1-140<br>0,06-1.260 |
| 10-250                | 10-250                |
| 1.450<br>100          | 2.175<br>150          |
| 10-180                | 10-180                |

- suitable for polyols, isocyanates, catalysts, additives and silicons
- unparalleled efficiency (over 99% @ 100 bar)
- different sealing options available
- core tempered martensitic stainless steel body, plates and gears (58 HRC) ensures high mechanical and chemical resistance
- compatible with existing installations
- tailor made solutions (reduced clearances, SS construction...)
- unbeatable performances with low lubricity plasticizers (up to 60 bar)
- special version for converting industry

#### Applications:

Polyurethane  
Silicone  
Glue  
General metering  
Plasticizers  
Converting

#### Materials:

Martensitic Steel  
Stainless Steel  
Ni-Alloys

#### Shaft seal:

Packing  
Oil Barrier  
Mechanical seal  
Magnetic coupling

#### On demand:

Bi-directional  
Surface treatment  
Electrically Heated  
Drives



# PAL - abrasive coloring agents

- suitable for abrasive fluids, pigments, colorants, carbide containing fluids (calcium carbonate, titanium oxide...)
- maximum particles diameter: 150 micron (depending on concentration)
- same footprint as PL8 and PL2 for easy upgrading of existing dosing systems
- PTFE packing as standard
- HSS high speed tool steel (65 HRC), for best resistance to high temperature and mechanical wear.
- tailor made solutions
- special surface treatments

|                       | SI            |
|-----------------------|---------------|
| Viscosity             | cP            |
| Capacity range        | cc/rev<br>l/h |
| Rotational speed      | rpm           |
| Max outlet pressure   | psi<br>bar    |
| Operating temperature | °C            |

## Applications:

Dyes  
Pigments  
Abrasive fluids

## Materials:

High speed steel

## Shaft seal:

Packing  
Mechanical seal

## On demand:

Surface treatment  
Drives





| PAL               | PLR                   |
|-------------------|-----------------------|
| 50-1.000.000      | 50-80.000             |
| 0,45-8<br>0,27-72 | 0,3-140<br>0,18-1.260 |
| 10-200            | 10-250                |
| 1.450<br>100      | 1.450<br>100          |
| 10-180            | 10-180                |

- suitable for polyols, isocyanates, catalysts, additives, silicons.
- electric candle heated body or jacketed body for oil or vapor heating
- PTFE packing as standard
- core tempered martensitic stainless steel body, plates and gears (58 HRC) ensures high mechanical and chemical resistance
- compatible with existing installations
- tailor made solutions (reduced clearances, sealing systems, SS construction...)

### Applications:

Polyurethane  
Bonding agents  
General dosing

### Materials:

Cast iron body  
Martensitic S.S.  
Ni-Alloys

### Shaft seal:

Packing  
Barrier liquid  
Mechanical seal  
Magnetic coupling

### On demand:

ATEX certificate  
Bi-directional  
Surface treatment  
Drives



# PLZ - process metering

- general purpose industrial duty gear pumps
- extreme metering accuracy (in excess of 1%)
- mechanical seal as standard
- core tempered martensitic stainless steel body, plates and gears (58 HRC) ensures high mechanical and chemical resistance
- suitable for accurate metering of various chemicals in O&G, petrochemical, power generation and other process applications

|                       | SI            |
|-----------------------|---------------|
| Viscosity             | cP            |
| Capacity range        | cc/rev<br>l/h |
| Rotational speed      | rpm           |
| Max outlet pressure   | psi<br>bar    |
| Operating temperature | °C            |

## Applications:

Polyurethane  
Bonding agents  
General dosing  
Chemicals

## Materials:

Martensitic S.S.

## Shaft seal:

Mechanical seal

## On demand:

ATEX certificate  
Surface treatment  
Drives



| PLZ                 | PUG                |
|---------------------|--------------------|
| 10-80.000           | 1 - 10.000         |
| 0,3 - 9<br>0,2 - 81 | 1 - 52<br>6 - 5400 |
| 10 - 300            | 300 - 1.725        |
| 1450<br>100         | 176<br>12 - 16     |
| -20 - 180           | -50 - 160          |

- suitable for corrosive and poor lubricating materials constructed of AISI 316 and ALLOY 20 materials
- running directly at motor speed (8, 6 or 4 poles, 50 or 60 Hz)
- packing seal as standard or other sealing systems (mechanical seal, mag drive)
- pre-set for cooling/heating jacket
- suitable for accurate metering of various chemicals in O&G, petrochemical, power generation and other process applications
- from 6 to 5.400 LPH
- threaded or flanged ports
- fda certificates for seal

#### Applications:

Chemicals  
Oil and gas  
Pharmaceutical

#### Materials:

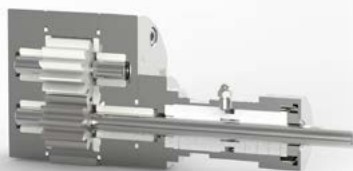
AISI 316  
Alloy 20  
Thermoplastics  
Carbon  
Graphite

#### Shaft seal:

Packing  
Mechanical seal  
Mag drive

#### On demand:

Surface treatments  
Heating  
Drives  
ATEX certificatie



# PL4 - thin and critical fluids

- designed to pump thin and critical fluids
- suitable for solvents or corrosive chemicals
- standard AISI 316 body and plates + PEEK gears
- different MOC on demand
- wide turn down ratio (10:1) thanks to stepper or brushless motors
- available from may, 2017

|                       | SI            |
|-----------------------|---------------|
| Viscosity             | cP            |
| Capacity range        | cc/rev<br>l/h |
| Rotational speed      | rpm           |
| Max outlet pressure   | psi<br>bar    |
| Operating temperature | °C            |

## Applications:

Chemicals  
Water  
Solvents

## Materials:

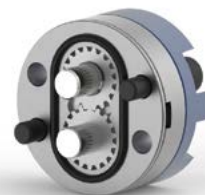
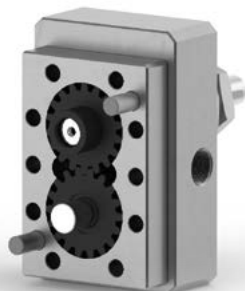
AISI 316  
Martensitic S.S.  
Thermoplastics

## Shaft seal:

Double lips  
Mechanical seal  
Packing  
Mag drive

## On demand:

ATEX certificate  
Surface treatment  
Drives





PL4

0,5 - 1.000

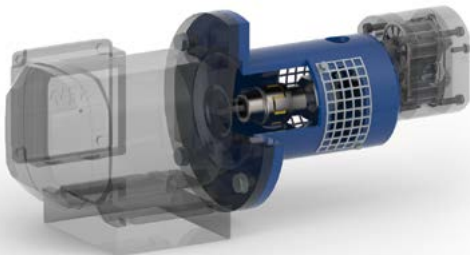
To be determined

To be determined

To be determined

To be determined

- solutions for every pumping need
- from very low flow rates to high speed - high flow systems (0.06 l/h - 6.000 l/h)
- thin to high viscosity chemical fluids dosing ability (0,1 - 1.000.000 cP)
- extreme operating temperatures (-50 +400°C)
- high operating pressures (up to 450 bar)
- solid content, toxic and dangerous
- large selection of motorisation available
- mag drive, mechanical seals or standard packing seal
- threaded ports either BST or NPT and DIN or ANSI flanges available
- ATEX certified
- integrated vsd inverter or manual speed variator



# PLV - paint industry

- specifically intended for painting applications (spray gun, robotic systems)
- suitable for abrasive fluids such as pigments, colorants, fluid containing carbide, oxide (e.g. calcium carbonate, titanium oxide, etc.)
- dedicated materials for dyes and particles: PTFE, PEEK, high tech materials to handle abrasive fluids
- modular and easily expandable, with WLV flushing valve or capacity increase kit
- special superficial hardening treatment available

|                       | SI         |
|-----------------------|------------|
| Viscosity             | cP         |
| Capacity range        | cc/rev     |
| Rotational speed      | rpm        |
| Max outlet pressure   | psi<br>bar |
| Operating temperature | °C         |

## Applications:

Catalysts  
Primer  
Metallized  
Solvents  
Resins

## Materials:

Martensitic S.S.  
Plastic gear

## Shaft seal:

Oil Barrier  
Special elastomers

## On demand:

Bi-directional  
Superficial hardening treatment  
Block for pressure probes  
Brushless Drives  
Stepper motor



## PLV

1 - 100.000

0,3 - 8

10 - 300

174  
12

10 - 100

- VLW-flushing valve
- high tech normally closed pneumatic flushing valve
- operates flushing of the painting system with solvents avoiding contamination
- on demand available with proximity sensor
- interchangeable with similar systems from other manufacturers



## Modular color change system

- wide choice of configurations  
[addition or removal of painting modules based on actual need]
- to be installed in white room
- up to 12 different colors
- very low material waste and time loss
- pressure switch-controlled
- easy to install thanks to the special bracket
- controlled recirculation version available





## Lightweight colour change system

- same advantages of the standard colour change system
- modular construction
- aluminium lightweight materials
- direct installation on robot arm
- customizable



# PA6/7 - hot melt adhesives - one outlet

- suitable for hot melts used in converting applications: packaging industry, laminates production, edgebanders
- able to handle abrasive materials (up to 150 micron)
- HSS high speed tool steel, for best resistance to high temperature and mechanical wear.
- round or rectangular shape
- on demand superficial treatments
- lip seals as standard

|                       | SI         |
|-----------------------|------------|
| Viscosity             | cP         |
| Capacity range        | cc/rev     |
| Rotational speed      | rpm        |
| Max outlet pressure   | psi<br>bar |
| Operating temperature | °C         |

## Applications:

Hot melt glue

## Materials:

High speed steel

## Shaft seal:

Lip seal

## On demand:

Surface treatment  
Drives



| PA6 / PA7                  | PF2          |
|----------------------------|--------------|
| 50-1.000.000               | 50-1.000.000 |
| 0,45-8 / 8-50              | 0,2 - 12     |
| 10 - 150                   | 10 - 100     |
| 2.900 / 4.350<br>200 / 300 | 2.900<br>200 |
| 10 - 200                   | 10 - 200     |

- suitable for hot melts used in converting applications: packaging industry, laminates production, edgebanders
- same as PA6/7 but with multi discharge ports
- able to handle abrasive materials (up to 150 micron)
- HSS high speed tool steel, for best resistance to high temperature and mechanical wear.
- round or rectangular shapes
- on demand superficial treatments
- lip seals as standard

#### Applications:

Hot melt glues

#### Materials:

High speed steel

#### Shaft seal:

Lip seal

#### On demand:

Surface treatment  
Drives



# PAX - man made fibers & melted polymers

- suitable for man made fibers and melted polymers (nylon, PP, PA...)
- HSS high speed tool steel, for best resistance to high temperature and mechanical wear
- on demand superficial treatments
- packing as standard; on demand, MVV viscoseal labyrinth or mechanical seal
- on demand available with multiple discharge ports

|                       | SI         |
|-----------------------|------------|
| Viscosity             | cP         |
| Capacity range        | cc/rev     |
| Rotational speed      | rpm        |
| Max outlet pressure   | psi<br>bar |
| Operating temperature | °C         |

## Applications:

PP, PA,  
PAG, PA6,6,  
PET, PC,  
PSV

## Materials:

High Speed Steel

## Shaft seal:

Packing  
Labyrinth sealing  
Mech-Friction seal

## On demand:

Surface treatment  
Dynamic mixers  
Drives





| PAx             | PFx             |
|-----------------|-----------------|
| 100 - 1.000.000 | 100 - 1.000.000 |
| 0,3 - 200       | 0,3 - 100       |
| 10 - 60         | 10 - 60         |
| 4.350<br>300    | 4.350<br>300    |
| < 350           | < 350           |

- planetary gear arrangement, multiple discharge ports (up to 16 outlets)
- cylindrical shape for reduced footprints
- suitable for man made fibers and melted polymers (nylon, PP, PA...)
- HSS high speed tool steel, for best resistance to high temperature and mechanical wear.
- on demand superficial treatments
- packing as standard; on demand, MVV viscoseal labirynth or mechanical seal

#### Applications:

PP, PA,  
PA6, PA6,6,  
PET, PC,  
PS

#### Materials:

High Speed Steel

#### Shaft seal:

Packing  
Labirynth sealing  
Mechanical seal

#### On demand:

Surface treatment  
Dynamic mixers  
Drives



# P94 - ultra micro finishing

- designed for yarn lubrication
- sandwich arrangement, multi stage with multiple discharge ports
- centering pins and mechanical machining precision ensure unparalleled dosing repeatability and accuracy
- core tempered martensitic stainless steel body, plates and gears (58 HRC) ensures high mechanical and chemical resistance
- lip seals as standard
- complete dosing system including: electrical motor base-plate, gear reducer available on demand

|                       | SI         |
|-----------------------|------------|
| Viscosity             | cP         |
| Capacity range        | cc/rev     |
| Rotational speed      | rpm        |
| Max outlet pressure   | psi<br>bar |
| Operating temperature | °C         |

## Applications:

Yarn lubrication

## Materials:

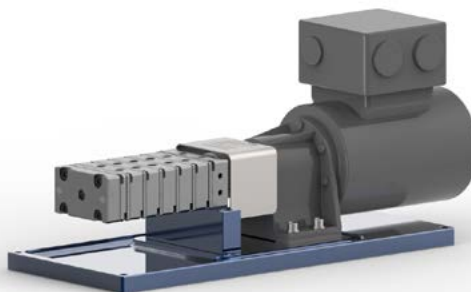
Martensitic S.S.

## Shaft seal:

Lip seals

## On demand:

Drives



| P94         | P96       |
|-------------|-----------|
| 1 - 4.000   | 1 - 4.000 |
| 0,015 - 0,2 | 0,2 - 5   |
| 10 - 60     | 10 - 60   |
| 29<br>2     | 29<br>2   |
| 10 - 80     | 10 - 80   |

- designed for yarn lubrication
- sandwich arrangement, multi stage with multiple discharge ports (up to 30)
- centering pins and mechanical machining precision ensure unparalleled dosing repeatability and accuracy
- core tempered martensitic stainless steel body, plates and gears (58 HRC) ensures high mechanical and chemical resistance
- lip seals as standard
- complete dosing system including: electrical motor base-plate, gear reducer available on demand

#### Applications:

Yarn lubrication

#### Materials:

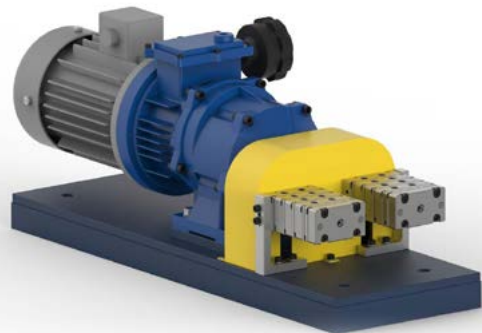
Martensitic S.S.

#### Shaft seal:

Lip seal

#### On demand:

Up to 30 outlets  
Surface treatment



# PAE - high temperature booster

- high temperature (up to 350 °c) – high pressure applications (up to 500 bar)
- designed to reduce the pulsation downstream extrusion equipment and to highly increase its efficiency
- able to handle abrasive fluids
- HSS high speed tool steel, for best resistance to high temperature and mechanical wear
- packing as standard; on demand, MVV viscoseal labirynth or mechanical seal
- on demand several heating and sensors features
- custom designed solution meeting every and each customers' needs

|                       | SI         |
|-----------------------|------------|
| Viscosity             | cP         |
| Capacity range        | cc/rev     |
| Rotational speed      | rpm        |
| Max outlet pressure   | psi<br>bar |
| Operating temperature | °C         |

## Applications:

PP, PA,  
PA6, PA6,6,  
PET, PC,  
PS

## Materials:

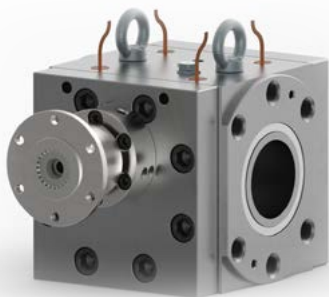
High speed steel  
Nitriding steel  
According to  
application

## Shaft seal:

Labirint seal  
Stuffing box  
Packing

## On demand:

Bi-directional  
Surface treatment  
Drives  
Sensors  
ATEX



| PAE            | PLE            |
|----------------|----------------|
| 1 - 1.000.000  | 1 - 1.000.000  |
| 1 - 2.500      | 1 - 2.500      |
| 10 - 80        | 10 - 120       |
| 7.250<br>< 500 | 4.350<br>< 300 |
| < 350          | < 120          |

- low temperature (up to 120 °C) – high pressure applications (up to 500 bar)
- designed to reduce the pulsation downstream extrusion equipment and to highly increase its efficiency
- able to handle abrasive fluids
- core tempered martensitic stainless steel body, plates and gears (58 HRC) ensures high mechanical and chemical resistance
- packing as standard, lip seals on demand
- custom designed solution meeting every and each customers' needs

#### Applications:

Chemical Process  
Silicone  
Glue

#### Materials:

Martensitic SS

#### Shaft seal:

Lip seal  
Packing

#### On demand:

Bi-directional  
Surface treatment  
Drives  
ATEX



# P6x - acrylic - carbon fiber precursor

- suitable for acrylic yarn - carbon fiber precursor
- core tempered martensitic stainless steel body, plates and gears (58 HRC) ensures high mechanical and chemical resistance
- standard PTFE packing, lip seals or mechanical seal on demand

|                       | SI              |
|-----------------------|-----------------|
| Viscosity             | cP              |
| Capacity range        | cc/rev          |
| Rotational speed      | rpm<br>gini/min |
| Max outlet pressure   | psi<br>bar      |
| Operating temperature | °C              |

## Applications:

Acrylic solution

## Materials:

Martensitic S.S.

## Shaft seal:

PTFE packing  
Mechanical seal  
Lip seal

## On demand:

AISI316 + stellite  
Ni-Alloy  
Atex certificate



| P6x                  | P55                  |
|----------------------|----------------------|
| 1.000 - 10.000       | 1.000 - 10.000       |
| 10 - 90              | 0,3 - 6              |
| 10 - 150             | 6 - 80               |
| 14,5 - 580<br>1 - 40 | 14,5 - 580<br>1 - 40 |
| 10 - 90              | 10 - 90              |

- suitable for acetate solutions
- core tempered martensitic stainless steel body, plates and gears (58 HRC) ensures high mechanical and chemical resistance
- standard lip seals or mech-friction seal

### Applications:

Acetate solutions

### Materials:

Martensitic S.S.

### Shaft seal:

Lip seal  
Mech-Friction seal

### On demand:

Custom solutions





# P2x - viscose

- suitable for viscose yarn
- core tempered martensitic stainless steel body, plates and gears (58 HRC) ensures high mechanical and chemical resistance
- cast iron body
- lip seals as standard

|                       | SI              |
|-----------------------|-----------------|
| Viscosity             | cP              |
| Capacity range        | cc/rev          |
| Rotational speed      | rpm<br>giri/min |
| Max outlet pressure   | psi<br>bar      |
| Operating temperature | °C              |

## Applications:

Viscose

## Materials:

Martensitic S.S.  
Cast iron body

## Shaft seal:

Lip seal

## On demand:

Custom solutions



| P2x                | P5x                |
|--------------------|--------------------|
| 1.000 -10.000      | 1.000 -10.000      |
| 10 - 90            | 0,3 - 6            |
| 10 - 150           | 6 - 80             |
| 14,5 - 435<br>1-30 | 14,5 - 435<br>1-30 |
| 10 - 90            | 10 - 90            |

- suitable for elastomeric yarn (spandex, lycra®)
- core tempered martensitic stainless steel body, plates and gears (58 HRC) ensures high mechanical and chemical resistance
- up to 8 discharge ports (squared body)
- up to 16 discharge ports (cylindrical body)
- lips seal as standard, PTFE packing or mech- friction seal on demand

#### Applications:

Elastomeric yarn

#### Materials:

Martensitic S.S.

#### Shaft seal:

Lips seal  
PTFE packing  
Mech-Friction seal

#### On demand:

Custom solutions



# DRIVE SYSTEMS

**MVV** is able to supply complete engineered pumping system. Based on the operating data (viscosity, flow rate, rotational speed, pressure), it is possible to calculate torque and power absorption to properly size gear motors. Expertise in pumping application (since 1942) and scouting the best suppliers (gear motors, couplings, sensors and probes) made MVV able to supply the most suitable configuration of the drive system.

## **Gear Motor:**

Coaxial  
Angular  
Bevel

## **Coupling:**

Elastic joint  
Gimbal  
With critical couple protection

## **Chassis:**

Bended sheet metal  
Welded tubes  
Extruded Al bars

## **Carter:**

Metallic  
Plastics

## **Cabinet:**

With drives  
PLC  
With display for process parameters

## **Speed check:**

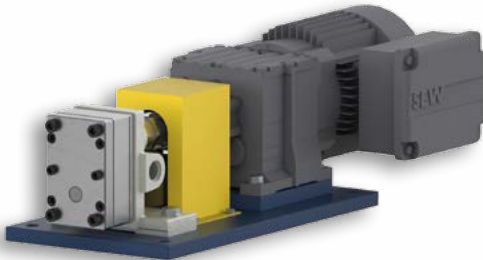
Encoder  
Optical fiber Phonic wheel  
Laser phonic wheel

## **Safety:**

Room sensors  
Protection sensors

## **Certification:**

CE  
ATEX  
UL

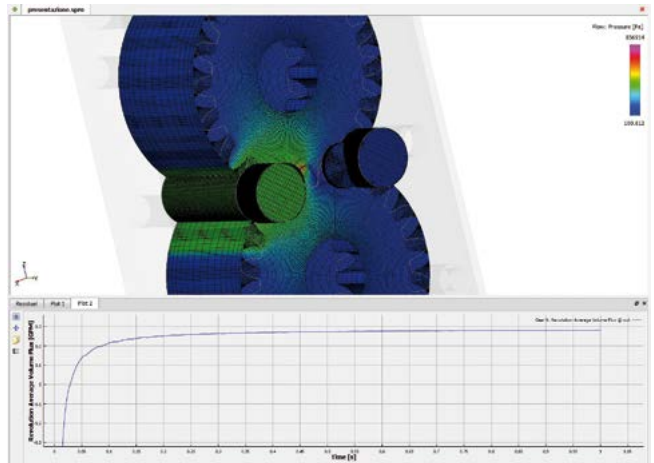


**MVV** produces static mixers for the chemical and pharmaceutical industry, customizing the product as for the client's requests. Thanks to the high quality on the constructive details, MVV static mixers ensure low load losses and high mixing efficiency. Made of high quality stainless steel and mirrored polished, these mixers are perfect to be used with corrosive and aggressive agents. Easy to clean, they find application in many production cycles, ensuring a constant mixing standard.

| <b>Mixer diameter:</b> | <b>Helix sheet-steel thickness:</b> | <b>Helix sheet-steel length:</b> | <b>N. helix sheet-steel:</b> | <b>Materials:</b>                 |
|------------------------|-------------------------------------|----------------------------------|------------------------------|-----------------------------------|
| From 4 to 160 mm       | From 0,8 to 8 mm<br>L = 1,2 x D     | On request                       | On request                   | AISI 304 / AISI 316 / AISI 316 Ti |



Customisation is MVV's day-to-day activity. MVV takes care of customers' requests, by thinking ahead and engineering complete solutions. As an example MVV recently engineered a new micro dosing system (MicroPAB) of 0,16cc/rev specifically intended for laboratory and testing purposes. The pump is driven by an intelligent stepless motor that allows to control, via a simple and efficient touch-screen panel, all the operating parameters. Speed, torque, consumption are constantly monitored, to ensure the best utilization in labs applications.



**MVV** is able to engineer complete Dosing systems, Spin-packs, Spinning heads, Spinning beams, dyeing equipment and calibration machinery.

MVV an extensive expertise in the welding processes (in house Certified Welders) and in plastic deformation for tubes and metal sheets. Has also proven experience (since 1942) in fluids handling (heating, insulation, losses, mixing, etc.) thanks also to the modern FEM analysis.

MVV can certify its products to existing International Standards: ISO, CE, ATEX, PED.







**MVV** produces customized spinnerets for any dry processing plant of synthetic fibers. Analyzing customer requirements, special holes, shapes and versions are conceived.

Spinning plates can have different shapes: disc, cap, circular, rectangular and many others, with round holes, outlined holes, pilot holes or slots. Anyhow the surface roughness of spinnerets is lower than 0.05 Ra, the capillaries are finished by lapping and the height, as well as hole dimensions, complies with strict tolerances. Each spinneret undergoes severe checks through highly sensitive optical instruments, to verify dimensions and finishing of capillaries. MVV uses a wide range of ferritic or austenitic stainless steels suitably treated or other special materials, all of which resistant to heat and corrosion.

### Tolerances

|                  |  |  |
|------------------|--|--|
| for round holes  | capillary diameter<br>height of capillary                | $\pm 0,001 \text{ mm} \div \pm 0,005 \text{ mm}$<br>$\pm 0,005 \text{ mm} \div \pm 0,050 \text{ mm}$ |
| for shaped holes | width of wings<br>length of wings<br>height of capillary | $\pm 0,002 \text{ mm}$<br>$\pm 0,010 \text{ mm}$<br>$\pm 0,010 \text{ mm}$                           |



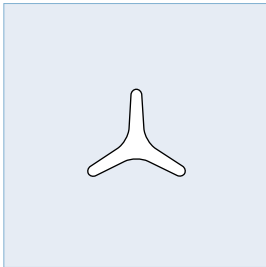


75 years of research in mechanics for textile give us the ability to supply the most suitable products and materials for our customers' specific requirements. Holes are mirror-finished and all the dimensions are subjected to the strictest quality control procedures.

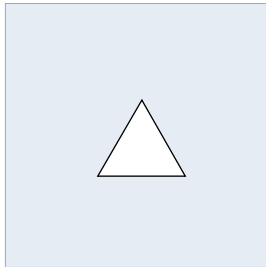
Highly sensitive optical instruments are used to check size and finishing of the capillaries; their height is checked by the most precise instruments and by special tests made in our premises. Discretion is definitely one of our prides. From the first meeting or phone call all the drawings, hole patterns, shapes, surface finishing or materials will be kept in strict confidence.

This is also why our customers choose us to process their award-winning high technology yarns. Due to the increasing demand of our expert craftsmanship, a new workshop for spinnerets and spinning beams manufacturing will be open in 2017 right next to MVV's existing factory.

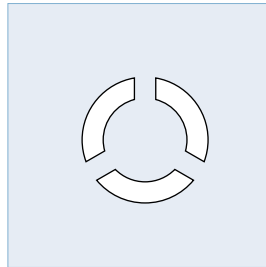
Tri-lobal



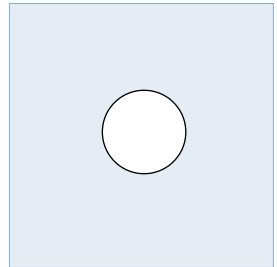
Delta



Hollow-fiber



Round



# SPINNING BEAMS

Following the customer specification, MVV manufactures spinning beams for synthetic fibers such as nylon, polyester, polypropylene and spun-bonding. Using the latest manufacturing technologies, the spinning beams can be heated by conduction, employing diathermic oil and electric resistances, or by induction with diathermic oil vapor.

Modern insulation solutions ensure highest safety levels nearby the heat sources. Upon request, spinning beams can be designed furnished with instruments for the temperature and pressure control, as well as with safety valves certified according to the standards and with freezing valves for maintenance operations even while the plant is operating. The spinning beams made by MVV are tested to ensure compliance with the specific needs of each customer. On request, all MVV's products can be provided with testing certifications according to P.E.D. standards.



|                        |                                     |                      |
|------------------------|-------------------------------------|----------------------|
| Heating system         | Diathermic oil immersion resistors  | Diathermic oil vapor |
| Supply extruder (no.)  | 1 to 6                              |                      |
| Output per hour (kg/h) | According to customer specification |                      |
| Pressure pumps (no.)   | 1 to 72                             |                      |
| Spinnerettes (no.)     | 1 to 864                            |                      |
| Spinning packs pitch   | According to customer specification |                      |



# SPINNING BEAMS









# AFTER SALE

## **MAINTENANCE**

MVV offers in house maintenance with different service levels. Firstly, a visual check is performed both externally and, after disassembly, on the different parts. This first analysis gives information regarding components status and allows double checking the of customer's failure report. Parts are then accurately washed and to determine the operating level of maintenance. There are substantially two levels; first is a revision, so grinding of all contact plane surfaces. Second level is a revamping, substitution of irreparably worn parts. The pump is then tested with at rated capacity and pressure and certified with additional 12 months-warranty.

## **SPARE PARTS**

MVV offers a fast-track spare parts service for all its products. Contact MVV Sales Department for the availability.

## **TECHNICAL ADVICE**

Our Engineers are able to offer technical support for the proper installation and operation of our products and for off the relevant ancillaries. Technical support before or during offer stage often generates dialogue for a new engineered solution. Support and competence are the cornerstone of our customer care.



The experience gained in past years in different industrial application, makes MVV the ideal partner and supplier of special components from drawing or tailor-engineered parts.

Spinning packs, changing filters, blocks distributors, dynamic mixers, dyeing machines, etc..

The expertise and machining ability combined with the close collaboration with the network of leading companies in the area, help to give added value MVV offering.

**MVV** is often required to a supply reduced lots of parts in special high-tech materials, tiny tolerances, special processes. Most of the time engineering is the highest cost of all.

Our agile and multi-skilled team is able to quickly and accurately assess the work cycle. The combination of passion and expertise makes MVV extremely competitive in small lot production (i.e. 1-10 pcs even for demanding components)







**MVV** s.r.l. is an Italian company expert in design, production and sales of high precision external gears metering pumps. These pumps are used in different industrial applications: synthetic and artificial fibers, metering of polyurethane components, acid solutions, resins, solvents, catalyzers and hot melt adhesives. The MVV production includes also other highly engineered products: spinning beams, spinnerets for synthetic fibers industry, static mixers, multi-outlets flow distributors and motorizations for the volumetric pumps. Thanks to its expertise in mechanical machining and high-tech materials and special steel, MVV is able to produce special high complexity parts on small batches (1-10 pcs). Customer support on maintenance, repair, service and technical advices completes MVV's technical offer. Our competence, professionalism and flexibility will meet your requirements supplying our up-to - date products and, on demand, our custom solutions. MVV guarantees agreed delivery time and supply, on demand, International Standards and certifications (ISO, CE, ATEX, PED). MVV sells its products worldwide through a network of trained distributors.

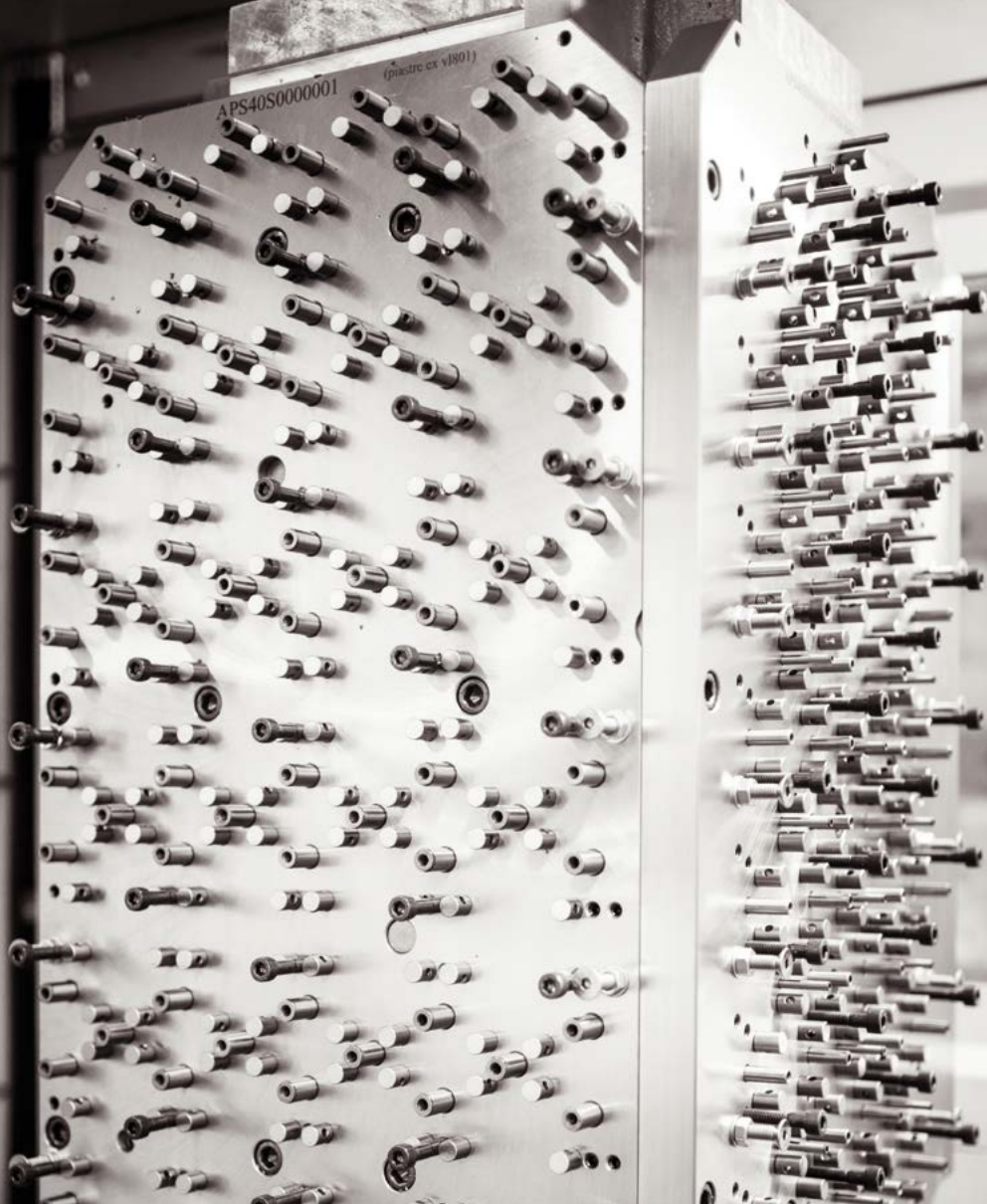
**MVV** was established in the 1942 in Vittorio Veneto as a branch of SNIA Group, and named M.V.V. Meccanico Vittorio Veneto. In this area, MVV has found excellent conditions to develop its mechanical production.

The company started producing Rayon pumps, then in the 50s' launched pumps for other synthetic fibers and in the 70s' it began to work with finishing pumps. MVV has supplied over a million of gear pumps and millions of spinnerets for filaments extrusion manufactured to supply the main important chemical fiber industries.

2012 a pool of private investors acquired MVV and started a new investment plan with a long term strategy backed by robust investments: moving in a new building located in the production area nearby Orsago and recruiting new talented employees. This new team has brought in the company more than 50 years' experience on pumps production and high precision mechanical, perfectly tuned with MVV's core business.

The cornerstone of the new MVV is the central role of each individual: from the customers to the suppliers and employees, through the compliance with the commitments and the pursuit of excellence in the product quality.

Shown data are indicative only; please contact company for specific application



APS40S0000001

(picare ex v1801)



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