

# DOPAG Processing Systems for Single Component Media



**Hilger u. Kern/Dopag**  
**Metering Technology**

# Pumping and Metering

## Single Component Media with Maximum Precision

The Hilger u. Kern / Dopag group designs and manufactures single and multi component systems for pumping, metering and mixing media from low to high viscosity throughout the world. From standard designs to individually tailored solutions. For more than 25 years we have been implementing innovative technical designs in a cost effective way.

### Single Component Metering Systems from the Hilger u. Kern / Dopag group are:

- User friendly
- Economical
- High quality standard
- Modular system design
- Balanced price/performance ratio

### Single Component Metering Systems for accomplishing these functions:

bead laying



applying drops



filling and emptying



spraying



laminating



### Single Component Metering Systems for the processing of:

- Silicones
- Inks
- Greases
- Oils
- Pastes
- Adhesives

To ensure that we meet these requirements, all business procedures within the Hilger u. Kern/Dopag group are certified in accordance with DIN EN ISO 9001.



# Our processing know-how is the best for every task and every medium



▲ Lifetime lubrication for the drive motor of a vacuum cleaner.  
The Hilger u. Kern/Dopag group supplied the know-how and the technique.



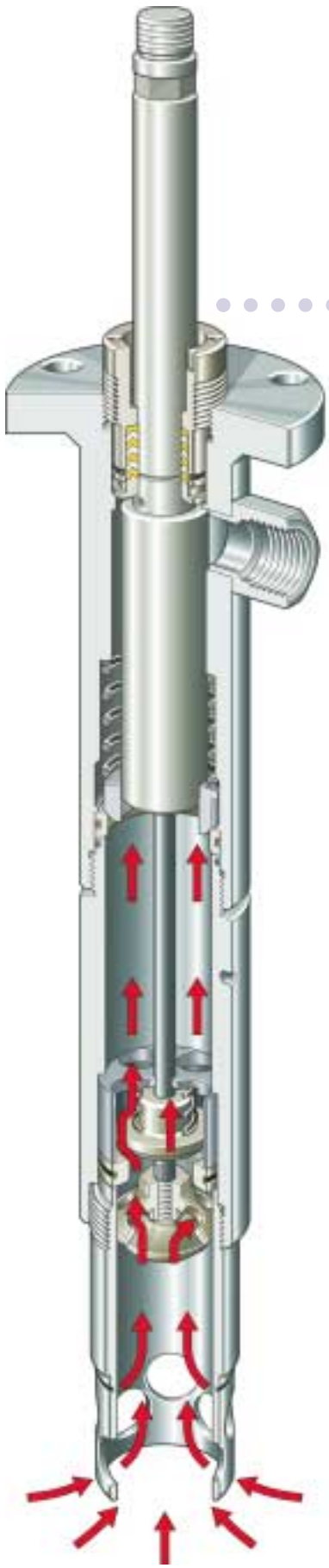
▲ An automatic assembly line for car seats.  
The Hilger u. Kern / Dopag group supplied the complete grease metering system.



▲ Laying beads of grease as a lifetime lubricant for synthetic swivel joints of vacuum cleaners.  
Modern metering technique from the Hilger u. Kern / Dopag group in combination with a robot.



**In Detail:**  
**The reciprocating pump**



# Individually planned and constructed systems.

## A wide range of products enables you to use new methods



### Drum Pumps

for example the drum pump P80 for pumping of low to high viscosity media, direct from the original drums.

- robust, pneumatic double action reciprocating (chop check) pump
- generates an operating pressure of up to 300 bar
- 2-hand safety control

### Options

- level monitoring with automatic cut-out when drum is empty
- hard-chromed piston
- wetted parts made of stainless steel



### Material Filter

to filter out unwanted particles and foreign bodies

- in various sizes from 16 to 100 mesh
- working pressure up to maximum 315 bar

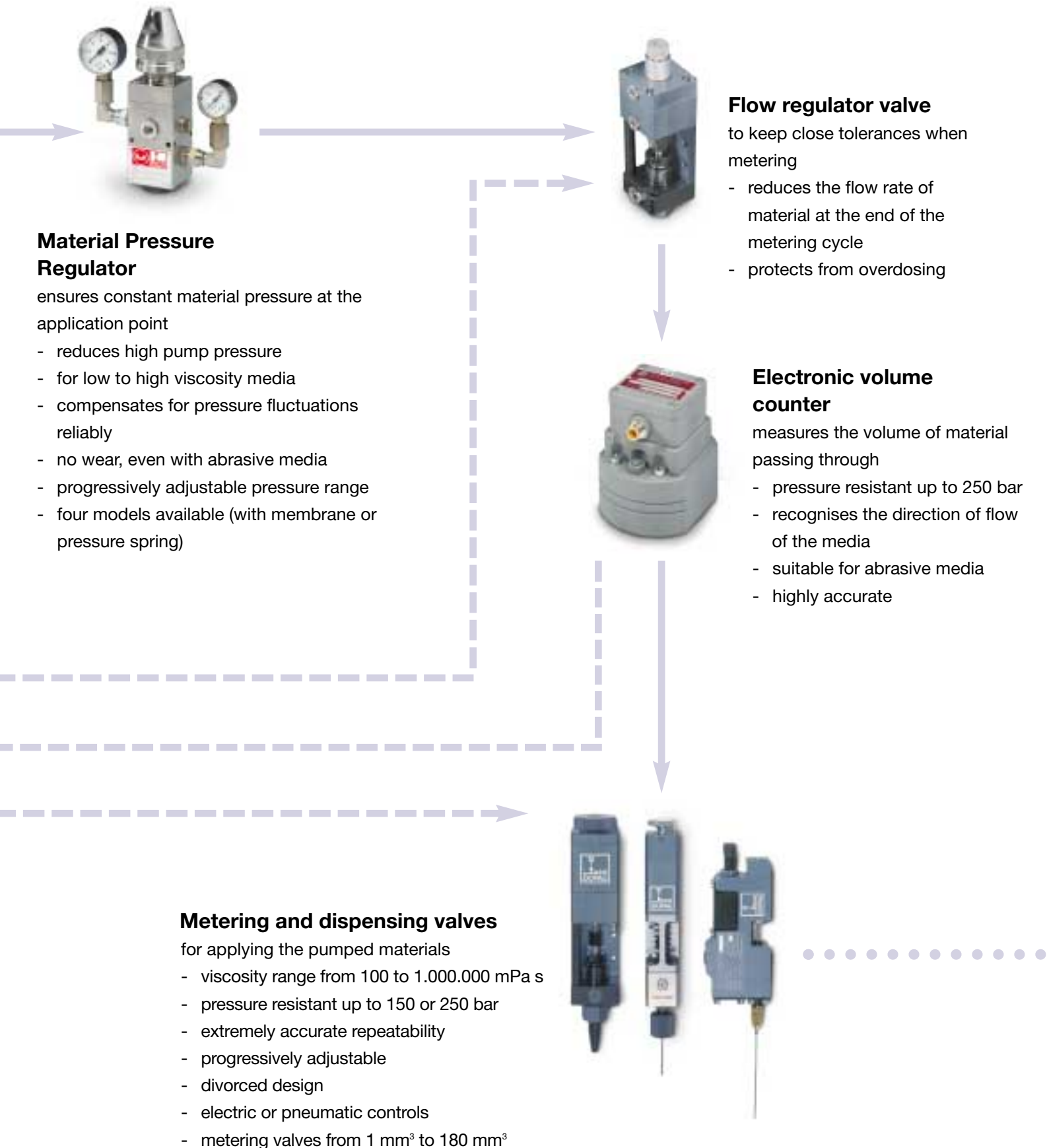


### Metering Computer MR 20

solves difficult metering tasks

- ensures maximum accuracy of metering
- detects and monitors the quantity of material
- menu-guided by LCD display
- production program storage
- interface with higher-ranking system control

# Methods of pumping and metering of single component media.



**In detail:  
Metering valve**



# Surrounding your application perfect design, advice and service - and sometimes a little bit more.

The skill of  
DOPAG

Controlling the precise metering and precise supply of liquid media of every consistency are essential pre-conditions for finding the best solutions. But sometimes it has to be something special and for these cases we operate with special adapters. Each of them is unique and as individual and unmistakable as a fingerprint. We can apply all types of media, whether by contact, spray or impulse application at the desired flow rate. Special adapters from the Hilger u. Kern / Dopag group are solving the most difficult problems.

The strength of the DOPAG metering systems:

- highly economical
- short down time
- components integrate perfectly with each other

## Special adapters



spray applicator



contact applicator



contact applicator

## Metering valve with vacuum bell jar





# Hilger u. Kern / Dopag Metering Technology

Thank you for your interest in DOPAG metering and mixing systems from the Hilger u. Kern / Dopag Group.

Naturally, as a user, it is important for you to know what benefits you will gain from collaboration with one of the largest international manufacturers of systems for processing polymers and single component media.



Firstly, DOPAG metering and mixing systems are individually developed and built for every customer's need. You deliver the parameters, we supply the customised solution for you. However, the standard for the development of these systems is not just your current requirements:

## Safety on the product side

As you can see, the Hilger u. Kern / Dopag Group has the largest range of products available of this type of technology world-wide, covering a broad spectrum of applications – including individual development and testing

It is also important to us that future systems can be solved equally successfully.

The Hilger u. Kern / Dopag Group has various system designs available for your metering applications, to solve your operating problems:

## Service combined with reliability

When you need it, we will provide the same individual service you have enjoyed in the development of your customised DOPAG metering and mixing system. The sales offices in your area provide competent and immediate service on site close to you. We have 6 sales offices in Germany, 4 subsidiaries and 23 exclusive sales partners world-wide. An extensive stock of spare parts means rapid supply.

- 1K-Metering systems
- Systems with piston metering pumps
- Systems with gear metering pumps
- Systems using the VOLU-MIX principle – patented by Hilger u. Kern

## Reliability for you

- Reliability of the system
- Future-proof technology
- Reliable service

## Range of products

Material supply pumps	Components	1K-Metering systems	2K-Metering and mixing systems	Mixing systems	Peripherals
<ul style="list-style-type: none"> <li>Transfer pumps</li> <li>Drum pumps</li> <li>Bung-mounted pumps</li> <li>Wall mounted transfer pumps</li> </ul>	<ul style="list-style-type: none"> <li>Dispensing valves</li> <li>Metering valves</li> <li>Flow-regulating valves</li> <li>Material filters</li> <li>Material pressure regulators</li> <li>Volume counters</li> </ul>	<ul style="list-style-type: none"> <li>Pumps</li> <li>Computer</li> <li>Valves</li> <li>Volume counters</li> </ul>	<ul style="list-style-type: none"> <li>Piston metering systems</li> <li>Gear metering systems</li> <li>Metering systems using the VOLU-MIX principle</li> </ul>	<ul style="list-style-type: none"> <li>Static mixers</li> <li>Static-dynamic mixers</li> <li>Dynamic mixers</li> </ul>	<ul style="list-style-type: none"> <li>Vacuum chambers</li> <li>Automated systems</li> <li>Robots</li> </ul>

## Areas of application

Bonding with Adhesive	Casting	Coating / Laminating	Sealing / Insulating	Filling	Greasing
<ul style="list-style-type: none"> <li>Spot application</li> <li>Bead application</li> <li>Application over a wide area</li> </ul>	<ul style="list-style-type: none"> <li>Under vacuum</li> <li>Multi-stage</li> </ul>	<ul style="list-style-type: none"> <li>Films</li> <li>Corrosion protection</li> </ul>	<ul style="list-style-type: none"> <li>Bead application</li> <li>Application over a wide area</li> </ul>	<ul style="list-style-type: none"> <li>Under vacuum</li> <li>Multi-stage</li> </ul>	<ul style="list-style-type: none"> <li>Single and multi-point systems</li> </ul>



**Individually planned and constructed systems.**

**A wide range of products enables you to use new metho**



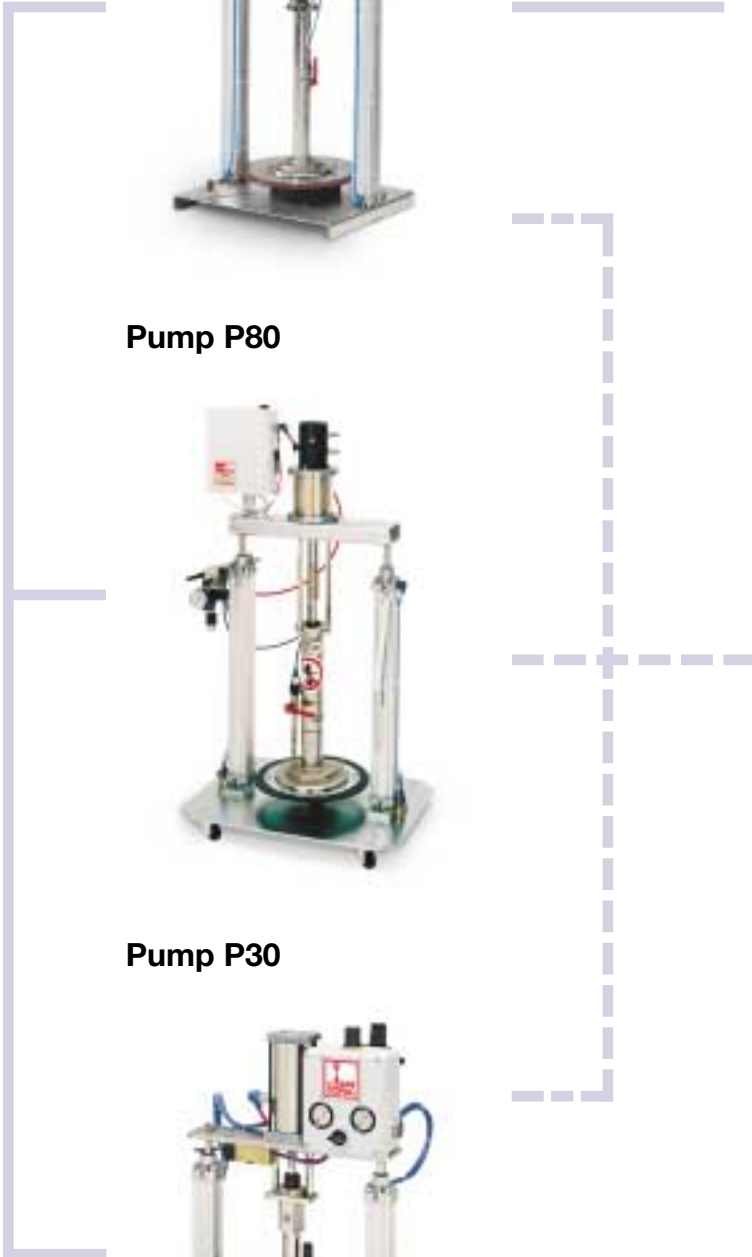
**Pump P80**



**Pump P30**



**Pump P10**



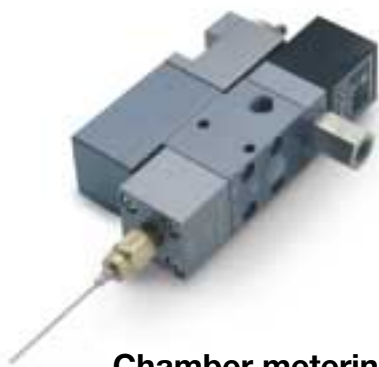
# Methods of pumping and metering of single component media.



**Dispensing valve**



**Needle metering valve**



**Chamber metering valve**



**Chamber metering valve with cartridge**

The Hilger u. Kern / Dopag group is one of the leading manufacturers of machines for metering and mixing systems in the world for plural component polymers and single component media such as greases, oils and pastes. For over 25 years the group has developed machines, systems, and components to suit your individual needs.

**DANMARK**

**DOPAG SCAN Aps**

Topstykket 7 · 3460 Birkerød · DANMARK  
Tel.: +45 (0) 45 82 80 90 · Fax: +45 (0) 45 82 80 35  
Internet: [www.dopag.dk](http://www.dopag.dk) · E-Mail: [info@dopag.dk](mailto:info@dopag.dk)

**FRANCE**

**DOPAG S.A.R.L.**

Technopôle de Lautagne - BP 64 · 26903 Valence Cedex 9 · FRANCE  
Tel.: +33 (0) 4 75 41 90 60 · Fax: +33 (0) 4 75 41 51 09  
Internet: [www.dopag.fr](http://www.dopag.fr) · E-Mail: [contact@dopag.fr](mailto:contact@dopag.fr)

**GREAT BRITAIN**

**DOPAG UK Ltd.**

Unit 299, Oak Drive · Hartlebury Trading Estate  
DY10 4JB WORCS · GREAT BRITAIN  
Tel.: +44 (0) 1299 25 07 40 · Fax: +44 (0) 1299 25 08 60  
Internet: [www.dopag.com](http://www.dopag.com) · E-Mail: [uksales@dopag.com](mailto:uksales@dopag.com)

**GERMANY**

**Hilger u. Kern GmbH**

Käfertaler Straße 253 · 68167 Mannheim · GERMANY  
Tel.: +49 (0) 621 / 3705-0 · Fax: +49 (0) 621 / 3705-200  
Internet: [www.hilger-kern.com](http://www.hilger-kern.com) · E-Mail: [info@hilger-kern.de](mailto:info@hilger-kern.de)

**MALAYSIA**

**DOPAG FAR EAST SDN. BHD**

633 Block A, Kelana Centre Point, No. 3 · Jalan SS 7/19, Kelana Jaya  
47301 Petaling Jaya · Selangor Darul Ehsan · ASIA PACIFIC  
Tel.: +60 (03) 78 06 45 64 · Fax: +60 (03) 78 06 45 70  
E-Mail: [info@dopag.com.my](mailto:info@dopag.com.my)

**SWEDEN**

**DOPAG Sverige**

Carlsgatan 10 B · 21120 Malmö · SWEDEN  
Tel.: +46 (040) 10 85 95 · Fax: +46 (040) 10 85 96  
E-Mail: [pw@dopag.dk](mailto:pw@dopag.dk)

**SWITZERLAND**

**DOPAG Dosiertechnik und Pneumatik AG**

Langackerstrasse 25 · 6330 Cham · SWITZERLAND  
Tel.: +41 (0)41 / 785 57 57 · Fax: +41 (0)41 / 785 57 00  
Internet: [www.dopag.com](http://www.dopag.com) · E-Mail: [info@dopag.ch](mailto:info@dopag.ch)



**Hilger u. Kern / Dopag**  
**Metering Technology**