

# 2 Komponenten Maschinenbau

## Metering and Mixing Systems



Gear Metering Pump System

Process Gear Mix





Various applications with the product line ProcessGearMix

#### ProcessGearMix 320

For the use in small metering applications, the ProcessGearMix 320 has been completely reworked. All parameters such as mixing ratio, output, potlife, etc., may be programmed at the display with its comfortable operation and stored into a recipee memory. New features such as pressure measurement with pressure sensors, have been added to the standard functions such as shot timer, potlife alarm, counting of number of revolutions at the gear pumps, etc.

### 2KM Product Line ProcessGearMix

The ProcessGearMix machines range from 0.01 up to 100 litres/minute. The ProcessGearMix series is used whenever unfilled or slightly filled elastomeres, foams or resins have to be processed. The applications range from the electric and electronic industry and Rapid Prototyping via road construction and building protection to the most demanding offshore application

The complete mechanic construction of the machines has been considerably improved. The metering stations for the respective components have become separate compact components. Gear pump, pressure sensor, material filter and last-not-least the circulation and measuring valves are now mounted onto one single block. Thanks to its actuation motor, these units may, in contrast to the version as shown herein, be installed in a flexible way, e.g. closer to the site of application, without having to carry out important modifications at the machine.

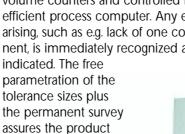


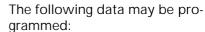
ProcessGearMix 320

### ProcessGearMix 300

The type ProcessGearMix 300 offers a well-balanced variety of options for the growing demands on product safety and operation comfort; 🗸 starting with the processor control with 5" display, metering control with automatic readjustment, valve controls and flushing programs for dynamic mixer heads, via automatic refilling of material vessels, these demands are fulfilled by the product line ProcessGearMix 300.

Wherever best possible product quality and complete documentation are expected, such as in the automotive and supplying industries, medical and technical industry, space technology, electric and electronic industry, etc., product safety is a basic requirement: Possible errors of the metering machine might in certain cases be realized too late, thus causing high costs. This is why the ProcessGearMixes metering is permanently monitored by volume counters and controlled by an efficient process computer. Any error arising, such as e.g. lack of one component, is immediately recognized and indicated. The free





- Mixing ratio
- Potlife
- Output in cm<sup>3</sup>/min
- Material temperature (optional) etc.

The following data are indicated on the screen:

- Divergences in the mixing ratio
- Material consumption A+B components
- Total consumption
- Remaining potlife
- Output in cm<sup>3</sup>/min
- Temperatures (optional)
- Pressures
- Filling levels etc.



Application with the product line ProcessGear Mix



Metering Station

2KM's developments and the production of computer systems according to the latest technology within the metering technique's sector as well as the longstanding experience in all sectors of industry make sure that the operator meets the highest possible process safety. Individual software adjustments to company-specific demands (e.g. data transmission to a host computer, etc.) are no problem, as 2KM goes for own developments.

Electric controls in explosion-proof version as well as the tests on electro-magnetic behaviour are as normal for 2KM as a precise User Manual.



ProcessGearMix 300 with two Metering Units and Processor Control

### ProcessGearMix Series of Components

	101	300	320	520	700	720
Description	Metering system with separately actuated gearwheel metering pumps					
Control System	Relay control	ontrol Processor control				
Pressure Monitoring	Manometer	Analogue pressure sensors and digital pressure indication in the display				
Pressure Control	non	Warning and switch - off values may be programmed freely				
Permanent Mixing Ratio Control	impossible	Standard	Option (with processor control)	Option (with processor control)	Standard	Option (with processor control)
Drive Motor Size	0.35	0.35	0.35	0.35	0.35	0.35 to 0.5
Gearwheel Pump Type	Small numbers of revolutions			Large numbers of revolutions	Small to large numbers, also special versions	
RPM	10 to 150 rpm			100 to 500 rpm	10 to 1000 rpm	
Pump Sizes (ccm/rev)	0.3 / 0.67 / 1.2 / 1.8 / 3.0 and 6.0			0.5 to 4.0	Range 1 = 3.0 to 35.0 Range 2 = 8.0 to 24.0	
Output Range (I per min	0 to 1,8			0,5 to 4,0	7 to 250	
Max. Working Pressure)	100			150	100- 150	
Material Feeding	Depending on application funnel, pressure container, membrane pumps or piston pumps			Pressure Vessels		
Mixer Systems	Static mixer heads 4, 6, 8, 10 and 12 mm dia.  Dynastat mixer heads 4, 6, 8, 10 and 13 mm dia.  Dynamic mixers 25, 50, 75, 100, 200 and 1000 cc volume					
Typical Area of Application	Rapid Prototyping	Precision casting and coatings	Gasketing, Furniture edging, Filter man, etc	Furniture edging and gen. moulding	Bridge Decking, Offshore Bend stiffeners, Moulding etc	

We reserve the right to carry out modifications supporting the technical progress.