

### High-Pressure homogeniser Model MG14

Pressures up to 600 bar  
Capacities up to 11000 l/h



#### Cylinder block

A single piece precision machined block made out of a high tensile, corrosion resistant, forged stainless steel. Built with front and upper caps giving easy access for inspection and maintenance. The standard design has spring loaded plunger packings with integrated water cooling. The fully sanitary design utilises a minimum of parts and seals and is suitable for C.I.P.

Plungers and plunger packings are available in different materials to meet the toughest demands. Generally the cylinder block is executed with high efficient, low noise spherical type pump valves. These valves are spring loaded, suitable for processing viscose and moderate abrasive products.

For abrasive products the well known ball type pump valves are available. All these pump valve designs have high wear and corrosion resistant pump valves and field replaceable seats both made out of Rexalloy®™ or optional seats made of Tungsten Carbide.

There are many other options available to meet specific product- or process requirements

#### Homogenising valve

Available in a variety of designs and materials, single or two stage, with the standard flat valve and seat in Rexalloy®™ but also with a serrated surface (LW type) or Knife edge for cell rupture applications. Each type specially designed to achieve the highest efficiency with the lowest energy consumption. The different valve designs are available in the standard Rexalloy®™ material, Tungsten Carbide, Ceramic and for some applications with Diamond coating.

The homogenising pressures can be adjusted manually with a handwheel or through a hydraulic system which also allows a completely automatic pressure control.

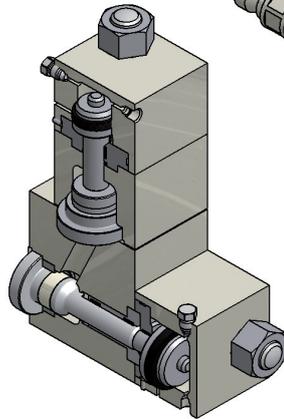
#### Drive end

The one piece high strength cast iron design with integrated gear reduction provides a quiet running machine with low eccentric shaft speeds. The drive has a dry sump with a separate lubrication oil tank and does not require any cooling water. All bearings are pressure lubricated by an electric driven oil pump allowing capacity variation between 15-100% under full load. Both drive shaft and eccentric shaft have oversized roller bearings. The crossheads are designed with adjustable, self aligning ball joint bearings. This unique concept offers unbeatable reliability, requires a minimum of maintenance and down time.

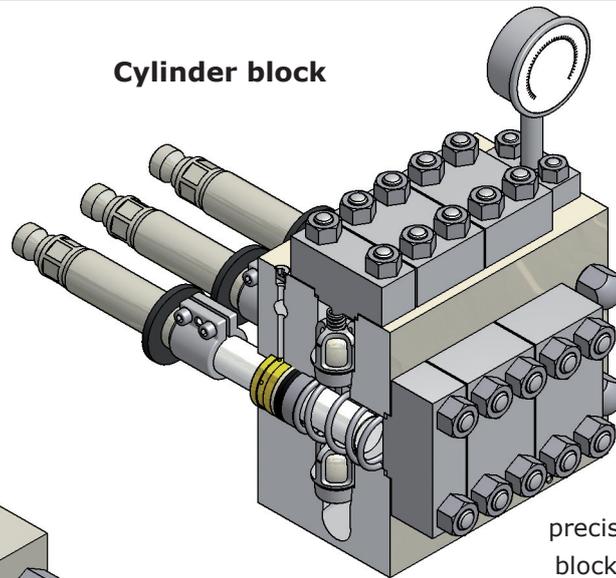
## Two stage homogenising valve

A typical two stage homogenising valve assembly with a plug type valve in the first stage and a pilot type valve in the second stage.

This assembly meets the highest demand for C.I.P. cleaning, is easily accessible for maintenance and uses a minimum of parts.



## Cylinder block



The pump block is a one piece precision machined block, made out of high strength corrosion resistant forged stainless steel. The one piece design utilises a minimum of parts and seals, is fully sanitary and suitable for C.I.P.

## MG14 PERFORMANCE RANGE

SPHERICAL type pump valves for viscose and moderatly abrasive products			POPPET TYPE pump valves for low viscosity and moderately abrasive products			BALL TYPE pump valves for high viscosity and abrasive products and products containing solids	
Operating pressure	Maximum capacity	Eccentric shaft speed	Maximum capacity	Eccentric shaft speed	Maximum capacity	Eccentric shaft speed	
600 bar	1500 l/h	177 rpm	0 l/h	0 rpm	1250 l/h	152 rpm	
500 bar	2300 l/h	192 rpm	2100 l/h	177 rpm	1800 l/h	155 rpm	
450 bar	2600 l/h	195 rpm	2400 l/h	182 rpm	2000 l/h	155 rpm	
350 bar	3500 l/h	200 rpm	3200 l/h	184 rpm	2600 l/h	153 rpm	
300 bar	4000 l/h	209 rpm	3500 l/h	185 rpm	2900 l/h	157 rpm	
275 bar	4400 l/h	196 rpm	4100 l/h	185 rpm	3400 l/h	156 rpm	
200 bar	6000 l/h	198 rpm	5600 l/h	187 rpm	4600 l/h	156 rpm	
150 bar	8000 l/h	208 rpm	7000 l/h	184 rpm	5800 l/h	156 rpm	
125 bar	9600 l/h	201 rpm	9000 l/h	190 rpm	7000 l/h	151 rpm	

Weight 1600 kg

