

MG18

High-Pressure homogeniser Model MG18

Pressures up to 600 bar
Capacities up to 15000 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 pressure is hydraulically actuated. The hydraulic system also allows complete automatic control of the homogenising pressures.

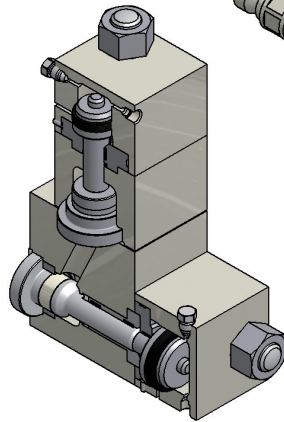
Drive end

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.

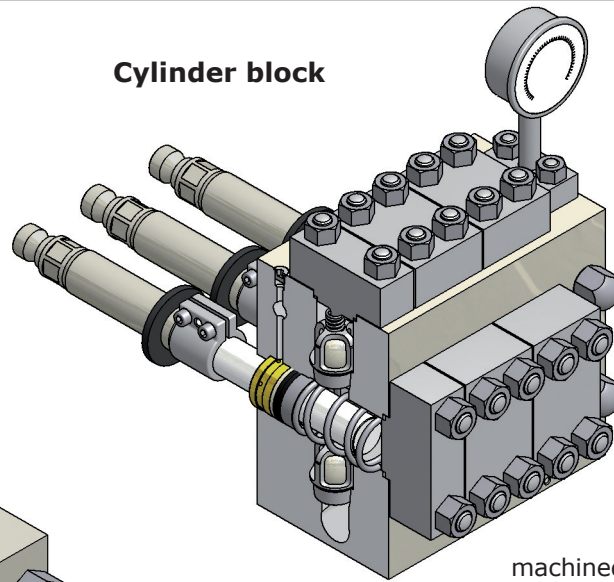
Two stage homogenising valve

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.

MG18 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	3200 l/h	166 rpm	0 l/h	0 rpm	2800 l/h	150 rpm	
550 bar	3800 l/h	181 rpm	3400 l/h	163 rpm	3100 l/h	152 rpm	
500 bar	4200 l/h	183 rpm	3800 l/h	167 rpm	3400 l/h	153 rpm	
430 bar	5000 l/h	186 rpm	4500 l/h	169 rpm	4000 l/h	153 rpm	
350 bar	6200 l/h	186 rpm	5600 l/h	169 rpm	5000 l/h	154 rpm	
300 bar	7200 l/h	188 rpm	6500 l/h	172 rpm	5800 l/h	157 rpm	
250 bar	8600 l/h	187 rpm	8000 l/h	175 rpm	7000 l/h	157 rpm	
200 bar	10600 l/h	185 rpm	10000 l/h	176 rpm	8200 l/h	147 rpm	
175 bar	12000 l/h	188 rpm	11000 l/h	175 rpm	9000 l/h	146 rpm	
150 bar	14000 l/h	181 rpm	13200 l/h	173 rpm	10600 l/h	142 rpm	

Weight 2300 kg

