

BOS

homogenisers

MG 12

High-Pressure homogeniser
Model MG12

Pressures up to 600 bar
Capacities up to 8500 l/h



The 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.

The 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.

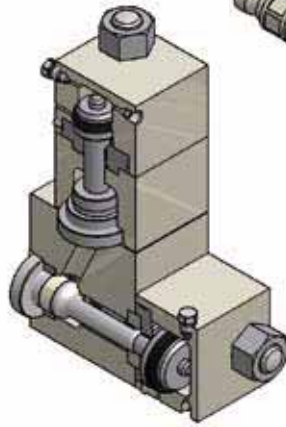
The drive end

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.

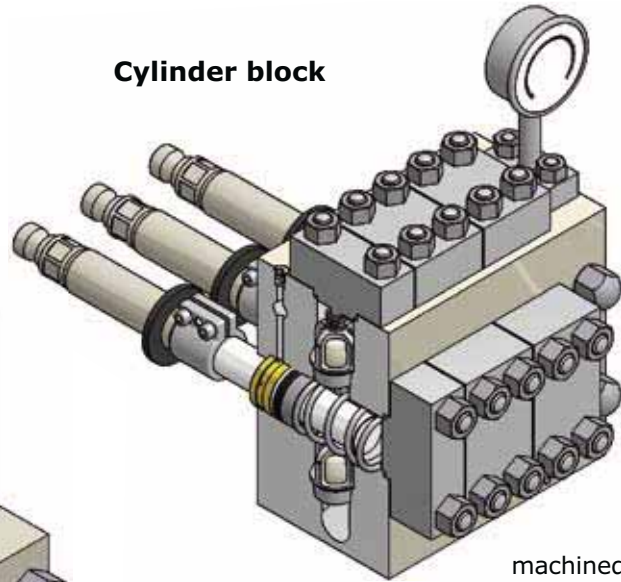
Two stage homogenising valve

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.

MG12 CAPACITY RANGE						
MG12 with SPHERICAL TYPE pump valves for viscose and moderate abrasive products				MG12 with BALL TYPE pump valves for high viscosity/ abrasive products and products containing solids		
Machine type	Maximum capacity	Eccentric shaft speed	Operating pressure	Machine type	Maximum capacity	Eccentric shaft speed
MG12-600S	1400 l/h	174 rpm	600 bar	MG12-600B	1100 l/h	141 rpm
MG12-500S	1900 l/h	188 rpm	500 bar	MG12-500B	1400 l/h	143 rpm
MG12-425S	2200 l/h	174 rpm	425 bar	MG12-425B	1800 l/h	147 rpm
MG12-350S	2700 l/h	178 rpm	350 bar	MG12-350B	2200 l/h	149 rpm
MG12-300S	3200 l/h	177 rpm	300 bar	MG12-300B	2600 l/h	148 rpm
MG12-250S	3800 l/h	179 rpm	250 bar	MG12-250B	3100 l/h	150 rpm
MG12-200S	4800 l/h	182 rpm	200 bar	MG12-200B	4000 l/h	156 rpm
MG12-190S	5100 l/h	178 rpm	190 bar	MG12-190B	4200 l/h	151 rpm
MG12-175S	5500 l/h	182 rpm	175 bar	MG12-175B	4500 l/h	154 rpm
MG12-150S	6400 l/h	176 rpm	150 bar	MG12-150B	5300 l/h	150 rpm
MG12-115S	8500 l/h	187 rpm	115 bar	MG12-115B	6600 l/h	150 rpm

Weight 1500 kg

