

BOS

homogenisers

MG 30

High-Pressure homogeniser
Model MG30

Pressures up to 600 bar
Capacities up to 20.500 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. As an alternative the machine can be executed with conventional 17-4PH poppet type pump valves in combination with Rexalloy®™ seats. 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 pressure is hydraulically actuated. The hydraulic system also allows complete automatic control of the homogenising pressures.

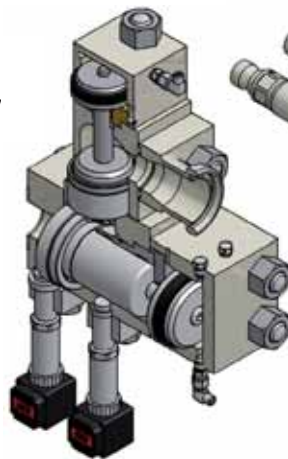
The drive end

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.

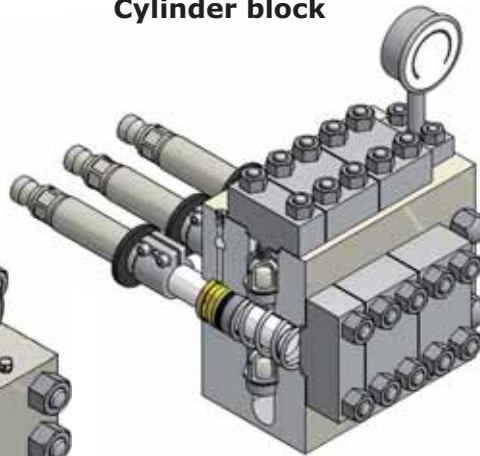
Two stage homogenising valve

A typical two stage hydraulic operated 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.

MG30 CAPACITY RANGE

MG30 with BALL TYPE pump valves for high viscosity/ abrasive products and products containing solids				MG30 with SPHERICAL TYPE pump valves for viscose and moderate abrasive products		
Machine type	Maximum capacity	Eccentric shaft speed	Operating pressure	Machine type	Maximum capacity	Eccentric shaft speed
MG30-600B	3600 l/h	140 rpm	600 bar	MG30-600S	4000 l/h	150 rpm
MG30-550B	4500 l/h	145 rpm	550 bar	MG30-550S	5200 l/h	162 rpm
MG30-500B	5000 l/h	147 rpm	500 bar	MG30-500S	5600 l/h	160 rpm
MG30-450B	5500 l/h	148 rpm	450 bar	MG30-450S	6200 l/h	162 rpm
MG30-400B	6500 l/h	149 rpm	400 bar	MG30-400S	7200 l/h	160 rpm
MG30-350B	7500 l/h	148 rpm	350 bar	MG30-350S	8200 l/h	157 rpm
MG30-300B	8600 l/h	146 rpm	300 bar	MG30-300S	9500 l/h	157 rpm
MG30-250B	9600 l/h	146 rpm	250 bar	MG30-250S	11500 l/h	169 rpm
MG30-200B	12000 l/h	144 rpm	200 bar	MG30-200S	14500 l/h	169 rpm
MG30-175B	13500 l/h	146 rpm	175 bar	MG30-175S	16500 l/h	172 rpm
MG30-140B	17500 l/h	140 rpm	140 bar	MG30-140S	20500 l/h	159 rpm

Weight 3000 kg

