

BOS

homogenisers

MG 18

High-Pressure homogeniser
Model MG18

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

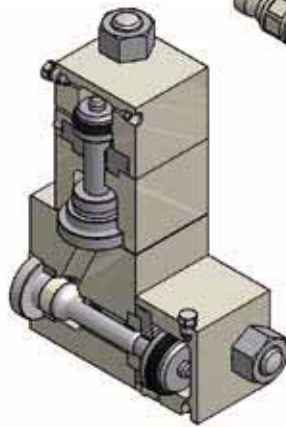
The drive end

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.

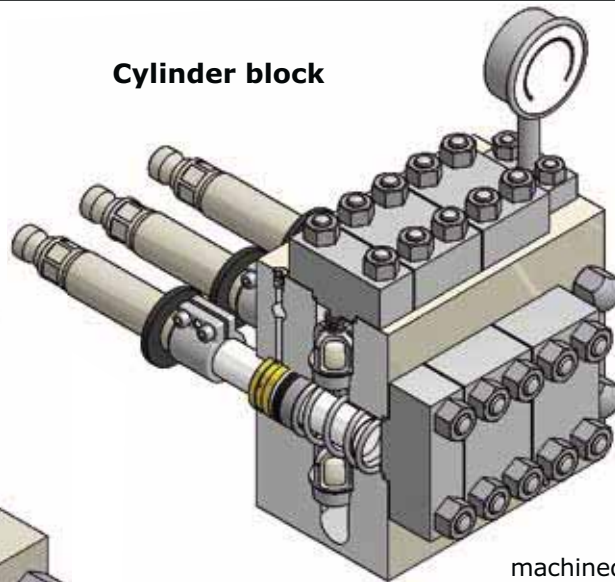
Two stage homogenising valve

A typical two stage 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 CAPACITY RANGE						
MG18 with SPHERICAL TYPE pump valves for viscose and moderate abrasive products				MG18 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
MG18-600S	3200 l/h	166 rpm	600 bar	MG18-600B	2800 l/h	150 rpm
MG18-550S	3800 l/h	181 rpm	550 bar	MG18-550B	3100 l/h	152 rpm
MG18-500S	4200 l/h	183 rpm	500 bar	MG18-500B	3400 l/h	153 rpm
MG18-430S	5000 l/h	186 rpm	430 bar	MG18-430B	4000 l/h	153 rpm
MG18-350S	6500 l/h	194 rpm	350 bar	MG18-350B	5000 l/h	154 rpm
MG18-300S	7500 l/h	196 rpm	300 bar	MG18-300B	5800 l/h	157 rpm
MG18-250S	9000 l/h	195 rpm	250 bar	MG18-250B	7000 l/h	157 rpm
MG18-200S	11000 l/h	192 rpm	200 bar	MG18-200B	8200 l/h	147 rpm
MG18-175S	12500 l/h	196 rpm	175 bar	MG18-175B	9000 l/h	146 rpm
MG18-150S	15000 l/h	194 rpm	150 bar	MG18-150B	10600 l/h	142 rpm

Weight 2300 kg

