

MG12

High-Pressure homogeniser Model MG12

Pressures up to 600 bar
Capacities up to 8500 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.

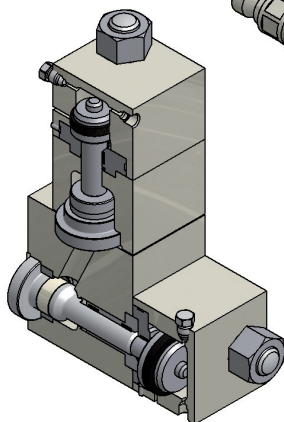
Drive end

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.

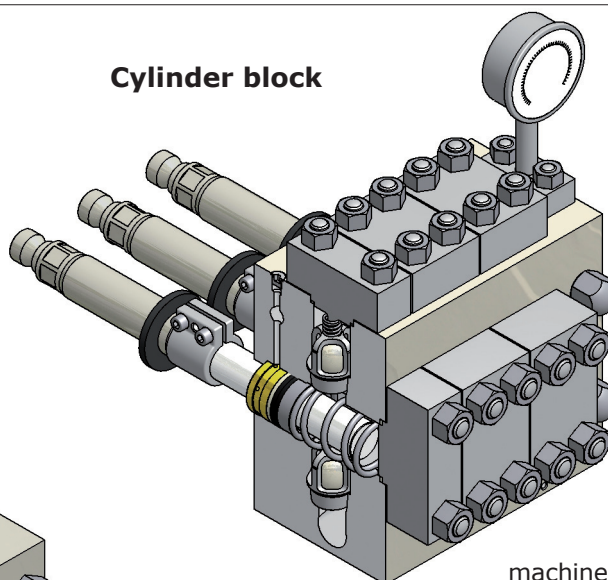
Two stage homogenising valve

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



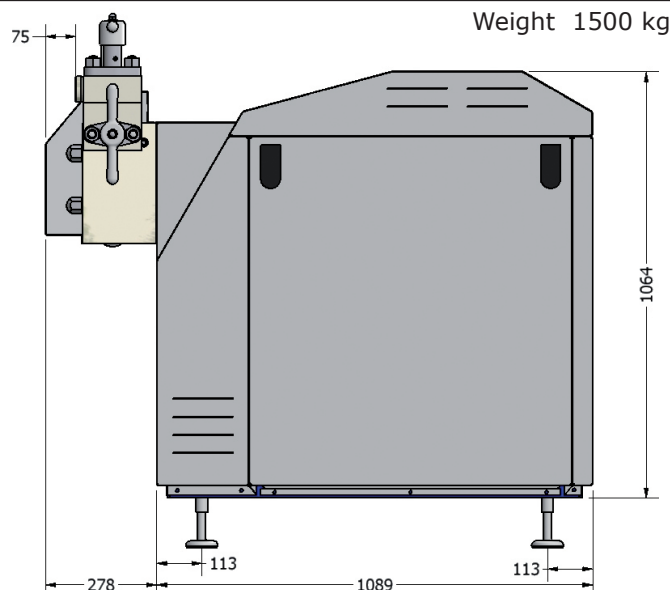
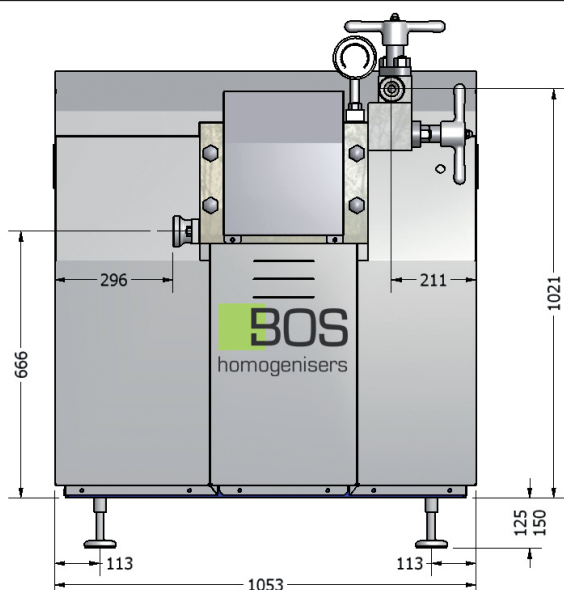
The pump block is a one piece precision

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.

MG12 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	1400 l/h	174 rpm	0 l/h	0 rpm	1100 l/h	141 rpm	
500 bar	1900 l/h	188 rpm	1800 l/h	180 rpm	1400 l/h	143 rpm	
425 bar	2200 l/h	174 rpm	2200 l/h	176 rpm	1800 l/h	147 rpm	
350 bar	2700 l/h	178 rpm	2700 l/h	180 rpm	2200 l/h	149 rpm	
300 bar	3200 l/h	177 rpm	3200 l/h	179 rpm	2600 l/h	148 rpm	
250 bar	3800 l/h	179 rpm	3800 l/h	181 rpm	3100 l/h	150 rpm	
200 bar	4800 l/h	182 rpm	4700 l/h	180 rpm	4000 l/h	156 rpm	
190 bar	5000 l/h	174 rpm	5000 l/h	176 rpm	4200 l/h	151 rpm	
175 bar	5500 l/h	182 rpm	5200 l/h	174 rpm	4500 l/h	154 rpm	
150 bar	6400 l/h	176 rpm	6400 l/h	178 rpm	5400 l/h	153 rpm	
115 bar	8400 l/h	185 rpm	8200 l/h	183 rpm	6700 l/h	152 rpm	



Weight 1500 kg