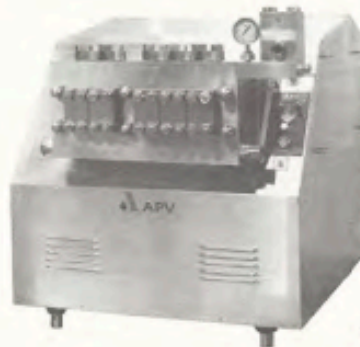


HOMOGENIZER

The Gaulin MC-120 homogenizer is a high pressure, positive-displacement, quintuplex, reciprocating plunger-type pump fitted with a homogenizing valve assembly specifically selected for the application. This can be single or two-stage with hydraulic or pneumatic actuation, or the patented Micro-Gap® valve for processing milk products at low pressure.



Gaulin MC-120 Homogenizer shown with stainless-steel skin (painted exterior also available)

HIGH PRESSURE PUMP

The Gaulin MCP-120 pump is a high pressure positive-displacement, quintuplex, reciprocating plunger-type pump. It can be fitted with a discharge connection, a bypass flow control valve or a relief valve. These can be either pneumatically or hydraulically actuated.

Special fluid-end designs and components are available for a variety of applications, including fibrous, abrasive, corrosive, highly viscous materials or high temperature operation. All models can be supplied to comply with 3A Standards.

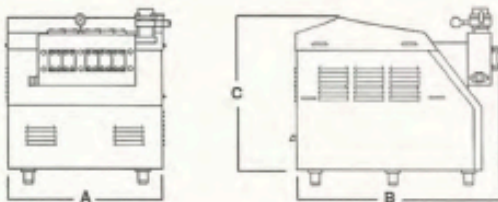
OPERATING SPECIFICATIONS

MAXIMUM CAPACITY				MAXIMUM OPERATING PRESSURE	
TPS/TPSX		TBS/TBSX			
GPH	LPH	GPH	LPH	PSIG	BAR
9,905	37,500	N/A		2,000	135
7,925	30,000	6,340	24,000	2,500	170
6,805	25,000	6,075	23,000	3,000	205
5,020	19,000	5,020	19,000	4,000	275
3,965	15,000	3,965	15,000	5,000	345
2,510	9,500	2,510	9,500	8,000	550
2,000	7,570	1,850	7,000	10,000	690

CONNECTIONS

Standard connections are clamp-type (sanitary) or N.P.T. (industrial). Others available upon request.

DIMENSIONS



	A	B	C
INCHES	61	82	61
MM	1,560	2,095	1,560

POWER BASE

The power base features Gaulin's unique, slow-speed drive, which utilizes both V-belt and gear speed reduction. The resulting reduction in mechanical cycles greatly reduces maintenance and extends the life of wearing parts.

- Frame - cast iron, feet or lug-type mounting.
- Lubrication - pressure lubrication with 3/4 hp, motor-driven oil pump, pressure gauge, low oil pressure cut-out switch, oil filter and cooler.
- Gears - double helical with pinion mounted on driveshaft. Self aligning driveshaft roller bearings.
- Drive - standard drive is constant-speed motor mounted on rocker base or motor rail with V-belt drive. Vari-speed drives of most types can be used. Consult Factory.
- Eccentric shaft is a single piece, high strength shaft with five cams heat shrunk to shaft.
- Connecting rods are self-aligning with babbitt-lined field replaceable bearings.

ESTIMATED WEIGHTS (without motor)

14,330 lbs. (6,500 kg.) crated

CYLINDER DESIGNS

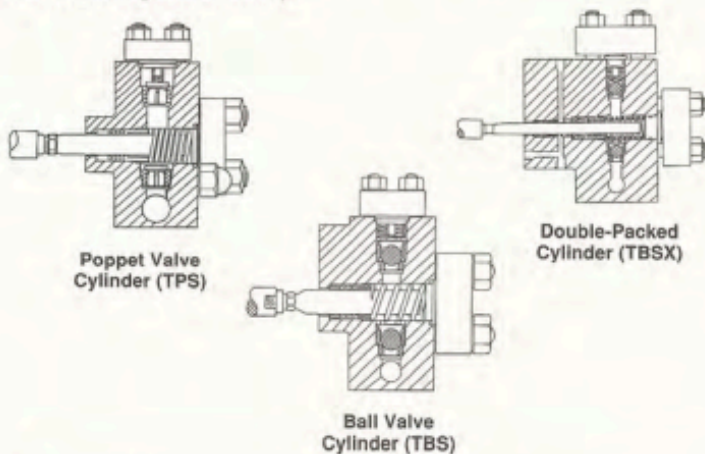
- Standard material is forged, 15-5, precipitation-hardened, stainless-steel selected for maximum strength and durability. Other materials are available for unique requirements.
- Simple plunger packing design; spring-loaded, self-adjusting packing assembly. Other packing arrangements available as required.
- Standard plunger material is 300 series s.s. Other materials available as needed for the application.
- Field-replaceable, Rexalloy pump valve seats and hardened s.s. pump valves (TPS) or Rexalloy ball-type pump valves (TBS). Tungsten carbide seats optional on TBS designs.
- Front and top cylinder caps allow easy maintenance and inspection of cylinder bores.
- Appropriate homogenizing/discharge pressure gauges supplied as standard.

POPPET VALVE CYLINDER (TPS) is for low-viscosity, moderately abrasive products such as vegetable oils, ice cream mix, silicone and sulfur.

BALL VALVE CYLINDER (TBS) is for high viscosity or abrasive products such as peanut butter, evaporated milk, wax emulsions, lubricants and pigments.

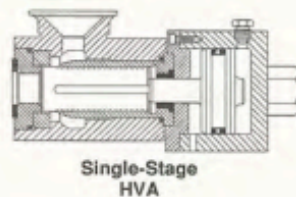
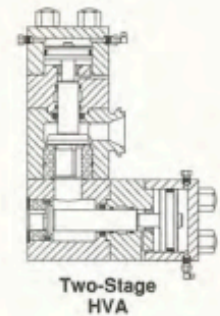
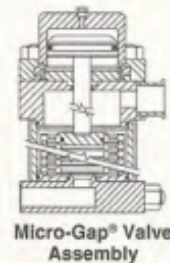
ASEPTIC/DOUBLE-PACKED CYLINDER (TBSX AND TPSX) is engineered for aseptic processing and can also provide containment of fugitive emissions (compounds that are pathogenic, toxic, radioactive, flammable, etc.)

Other custom-engineered designs available, such as high temperature, for your product application or process, contact APV Homogenizer Group.



HOMOGENIZING VALVE ASSEMBLIES

The key to any homogenizer is homogenizing valve technology, utilizing the optimum design and materials for the specific application. A two-stage configuration is recommended for all emulsions. For most dispersions, a single-stage assembly is recommended. Product enters the homogenizing valve assembly from the cylinder and flows through the adjustable gap between the homogenizing valve(s) and seat(s) and exits through the discharge connection to downstream processing.



HIGH PRESSURE PUMP DISCHARGE ASSEMBLIES

BYPASS FLOW CONTROL OR RELIEF VALVE ASSEMBLY - Product enters the discharge block from the cylinder. The pressure in the discharge port is then controlled by means of adjustment to the bypass/flow control valve. This assembly is used with constant-speed drive machines. The relief valve is used primarily with variable-speed drives.

