



# FBF North America

High Pressure Homogenizers and P.D. Pumps

**FBF0160 | FBF0200 | FBF0250**



## COMPRESSION HEAD AND HOMOGENIZING VALVE

The Compression head is manufactured from a single block of high quality stainless steel, of a special type, forged and checked with ultrasounds, with a 5 year guarantee against cracking and defects

Each valve assembly is housed within an individually inspected special AISI 316 stainless steel block

Pumping Pistons manufactured with a rear cooling chamber, a double guide to keep a perfect alignment, and a special "Diamond Like Carbon" plating (as a standard)

Valve group assemblies have replaceable seats and hemispherical valve shutters, ideal for processing a very wide range of products

Homogenizing valves designed to provide efficient use of energy, with high stability and alignment of the moving parts (impact head) due to the hydrodynamic assembly, which ensures a vibration free homogenization

Safety valve, in sanitary execution, of spring type with replaceable shutter and seat

## MOTORIZATION - STRUCTURE

The Pump body is made from a thick walled premium grade high-resistance cast iron, engineered to withstand heavy loads and cancel out vibration

The crankshaft is made from a special forged steel, machined from a solid piece, "multi-step" heat treatments, super-finishing of the goosenecks and complete nitriding, is checked using ultrasounds. The crankshaft is supported by 5 robust roller bearings (with bronze bearings used only on the crank pins)

Power transmission with double reduction stage: "V" belts/pulleys, with semi-automatic tensioning system, with two helicoidal gears within the pump body (slow gear coupled directly on the crankshaft)

Lubricating plant of pressurized type with the level of the oil detected by a proper sensor, cooling of the oil by a tubular heat-exchanger,

an alarm for irregular pressure, an alarm for high temperature, and driven filtering of any possible impurities. For the best thermal balance/dissipating all transmission components are immersed in an oil bath

3 phase, 4 pole, AC electric drive motor of leading Company

The frame is constructed from a square-section carbonated steel pipe coated in a powder painting, and supplied with dismountable stainless steel panels with satin finish

## MAINTENANCE KIT

Initial set of spare parts supplied with the machine include the following: full set of gaskets, a set of springs for valves and a complete safety valve set

Set of tools for ordinary maintenance

Lubrication oil

Instruction and maintenance manuals (2 copies + CD ROM)



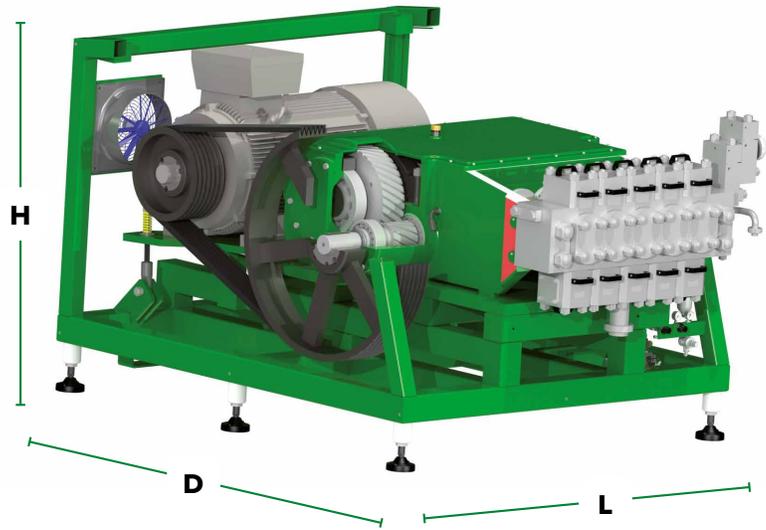
3A certification available for U.S.A., on demand for Canada

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## TECHNICAL FEATURES

<b>FBF0160</b>	kW	160
<b>FBF0200</b>	kW	200
<b>FBF0250</b>	kW	250
Pumping pistons	N.	5
Water consumption	gph	47.55 – 63.40
Weight	lbs	15,145.76 – 16,093.75
Dimensions (LxDxH)	in	78.74 x 102.36 x 70.86



### STANDARD OPTIONS

2<sup>nd</sup> stage homogenizing valve controlled by a special oil-pneumatic system

Fixed capacity (external electrical plant, stainless steel made with soft-starter equipment)

Variable Capacity (remote stainless steel

cabinet; conditioning unit with 200/250 kW at 380/460V and with all at 200/240V)

Aseptic Version with “sterility barriers” traced with steam condensate created by an integrated plant

Pulsation dampeners on product inlet and/or outlet connections, for special aseptic version as well

Digital pressure transducers and analogue gauges with 4-20 mA output

Pressure gauge with alarm contacts for the automatic cut-off of the homogenizing pressure, complete with timing device to manage the start/stop of the homogenizing valves

Automatic homogenization pressure controller

## FUNCTIONAL FEATURES

<b>Operating pressure</b>	psi	<b>1,450</b>	<b>1,885</b>	<b>2,175</b>	<b>2,610</b>	<b>2,900</b>	<b>3,335</b>	<b>3,625</b>	<b>4,351</b>
<b>Capacity</b>	from (gph)	11,095.23	10,566.89	8,981.85	7,396.82	6,868.48	6,340.13	5,811.79	4,755.10
	to (gph)	17,435.37	16,378.68	14,265.30	11,887.75	10,566.89	9,246.03	8,453.51	7,132.65

Technical specifications can vary and are subject to change without notice