

I Application

The horizontal blender is used to dissolve solid/powder products into a liquid, recirculated in a tank. The blender is limited to the suction of small amount of solids as it has no table for bags and the hopper is smaller than that of the table blender.

I Operating principle

Horizontal blender is a compact unit, it consists of a centrifugal pump with a venturi system on the suction side and a hopper with a butterfly valve above the venturi to add solid / powder products to the pumped liquid. In this blender, the suction and venturi system are set horizontally.

The venturi system and the suction of the pump create a negative pressure at the base of the hopper. When the valve of the hopper opens, the solids are drawn from the hopper and are dissolved in the liquid when they pass through the pump casing.

To achieve the best possible dissolution, it is recommended to recirculate the product (batch production) untill all the solid/powder product is suctioned in and then, when the solid product is completely incorporated into the liquid product, continue recirculating the product for a while.

In some cases, it can be used in-line depending on the solid product to add and the required level of dissolution.

I Design and features

Very simple and versatile system for a fast and homogeneous mixing of a wide range of solid products without any contact with the atmosphere.

Hygienic design.

Single mechanical seal.

ISO 2852 Clamp connections for easy assembly/disassembly.

Cleaning and disinfection without disassemby.





I Technical specifications

Materials:

Parts in contact with the product AISI 316L
Other metal parts AISI 304
Gaskets EPDM

Mechanical seal:

Rotary part Silicon carbide (SiC)
Stationary part Silicon carbide (SiC)

Gaskets EPDM

Surface finish:

Internal Bright polish Ra ≤ 0,8 µm

External Matt

BlenderMH-20MH-26Approximate flow $20 \text{ m}^3/h$ $40 \text{ m}^3/h$ Maximum differential height7 mwc15 mwcMaximum solids intake 1.300 kg/h^* 2.000 kg/h^*

Pump Hyginox SE20 with impeller Ø130 Hyginox SE26 with impeller Ø145

Motor 3 kW - 3.000 rpm 5,5 kW - 3.000 rpm

Maximum temperature 65° C 65° CConnections (inlet/outlet)CLAMPCLAMPHopper capacity25 L48 L

Hopper valve Butterfly valve CLAMP Butterfly valve CLAMP

I Options

Gaskets FPM or PTFE.

Connections DIN, SMS.

Drain port.

Vibrator for hopper.

Pneumatically actuated valve + low level sensor for solids.

Solids upper level sensor.

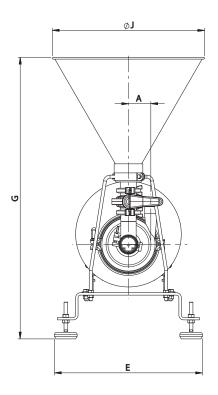
Control panel for the vibrator, level sensors and automated valve.

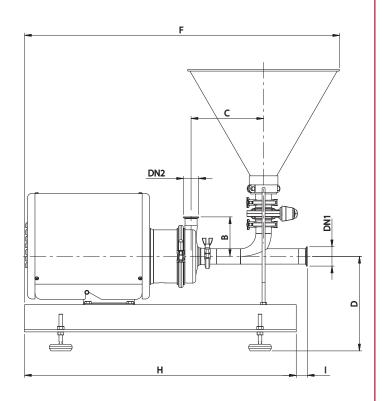
Grid for hopper.



^{*} Intake of solids may vary depending on their properties.

I Dimensions





Blender	Hopper volume (I)	kW	DN1	DN2	A	В	С	D	E	F	G	н	1	ØJ	Weight (kg)
MH-20	25	3	CLAMP 2"	CLAMP 1 ½"	74	131	240	313	490	1045	933	900	37	505	88
MH-26	48	5,5	CLAMP 3"	CLAMP 2"	72	145	322	325	490	1185	1060	1200	40	605	103

