

I Application

Table mixers for viscous products are used to incorporate solid ingredients into liquid products circulated by a centrifugal and a lobe rotor pump. The range of applications include applications like incorporation of solid ingredients into viscous sauces and incorporation of pectins into glucose in jam production. An in-line mixer can be installed right after the centrifugal pump to break up lumps.

I Operating principle

The table blender is a compact unit. It consists of a centrifugal pump with a venturi system at the suction side and a hopper with a butterfly valve at the upper part to add solid product to the pumped liquid. Optionally, a mixer can be installed right after the centrifugal pump. And a lobe rotor pump is installed after the mixer.

The ventury system and the suction of the pump create depression at the base of the hopper. When the valve of the hopper opens, the solid ingredient is drawn from the hopper and is totally dissolved when it passes through the casing of the pump.

When the product starts getting thicker, it is the lobe rotor pump that maintains the flow of the liquid, thus maintaining a high level of the solid ingredient absorption capacity.

To achieve the best possible dissolution, it is recommended to recirculate the product (batch production) till all the solid/powder product is suctioned and then, when the solid product is completely incorporated into the liquid product, continue recirculating the product for a while. In some cases, the table blender can be used in-line depending on the solid product to add and the required level of dissolution.

I Materials

Parts in contact with the product
Other metal parts
Gaskets
Mechanical seal
Internal surface finish, hopper and upper base
Frame surface finish

AISI 316L
AISI 304
EPDM according to FDA
C / SiC / EPDM
satin polish, Ra < 0.8
mat finish





I Design and features

Very simple and versatile equipment for a fast and homogeneous mixing of a wide range

of solid products without any contact with atmosphere.

Hygienic design.

Clamp connections for easy assembly/disassembly.

Cleaning and disinfection without disassembling the unit.

Complete mixing with recirculation.

Possible in-line mixing without recirculation for some applications.

Optional in-line mixer for total dissolution of possible lumps in the end product.

A table for bags at adequate height facilitates manual feeding.

Control panel with Stop/Start button and motor protection.

Skid with wheels: 2 rotating + 2 fixed with brakes.

Optional automation: flowmeter and frequency converter for the lobe rotor pump for stable flow; pneumatically actuated valves; solid ingredient level sensor for automatic closure of the valve when the solid ingredient reaches the lower level; automatic solid ingredient feeding, etc.

I Technical specifications

Table blender for viscous products based on MM260 blender

Flow aprox. 20 m³/h
Head max. 15 mwc
Suction of solid ingredients max. 1500 kg/h *

Maximum temperature 65°C
Connections (inlet/outlet) CLAMP
Hopper capacity 44 L

Hopper valve CLAMP butterfly valve

* The amount of suctioned solid ingredients depends on their properties.



Manual blender



I Options

Cooled double mechanical seals.

SiC/SiC mechanical seals. Gaskets: FPM or PTFE. Connections: DIN, SMS.

Drainage.

Vibrator for hopper.

Pneumatically actuated valve + low level sensor for solid ingredients.

Upper level sensor for solid ingredients.

Control panel for the vibrator, level sensors for solid ingredients and an automatic valve.

Grid for hopper.

Automation.



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