

SPECIFICATION

DT-CCM-P-2246



DT HIGH SHEAR MIXER

FOR POLYMER MODIFIED BITUMEN (PMB) PRODUCTION

MODEL: CCM P

Capacity 1-3 and 3-7 TPH

Manufacturer:

*DENIMOTECH A/S
Haandvaerkervangen 12
DK-5792 Aarslev
Denmark*



PRODUCT INTRODUCTION

Tailored for producing PMB

The DENIMOTECH Compact Colloid P Mills are especially designed for production of polymer modified bitumen (PMB).

The mill is further designed for high efficiency resulting in a low power use relative to the production rate. Direct flange mounting on the electrical motor gives a simple, space saving, low-noise installation.

Operational reliability

The mills are designed and build in full compliance with the latest European Standards of process machinery including mechanical and electrical design as well as documentation.

Only high-quality components and materials are used to ensure best possible operational reliability in tropical and tempered climates as well as industrial environment.

Maintenance

All parts are completely numbered and identifiable in manuals and part lists. Extensive manuals go with the mills. Maintenance and service instructions as well as technical data for the various components and systems. These mills from DENIMOTECH can be maintained by the costumer and do not have to be send to DENIMOTECH to be maintained. In the manual, a spare part list for stock purpose is listed and by having these and following requirements according to the manual, you can easily take care of maintenance yourself. Repair readiness is achieved with a relatively small stock of spare parts because of the uniform system design.

Fast and easy installation

The mills come fully assembled with electrical motors.

Testing is done at the factory prior to shipment.

The inlet and outlet are designed with standard DIN flanges and therefore easy to install in existing equipment or in a DENINOMTECH process plant.

EQUIPMENT SPECIFICATION

Shaft sealing

The shaft sealing system consists of 3 pieces of high temperature resistant lip seals, integrated with grease that will last for many hours of operation.

Blending principle

The rotor and stator system consist of two discs with a pattern of teeth and grooves. The polymer and bitumen enter the mill house through the centre of the stator and the milling takes place as the streams are pushed radially out between the rotor and the stator. The colloid mill has all wetted parts in stainless steel.

The rotor and stator are made from a special hardened steel, to increase the lifetime, by having better conditions to avoid wear and tear. The special surface also makes the rotor and stator able to mix/resist possibly steel particle and other difficult materials, which may occur in polymer.



The gap between the rotor and stator can be adjusted from 2 to 4 mm. (standard setting is 3 mm.)

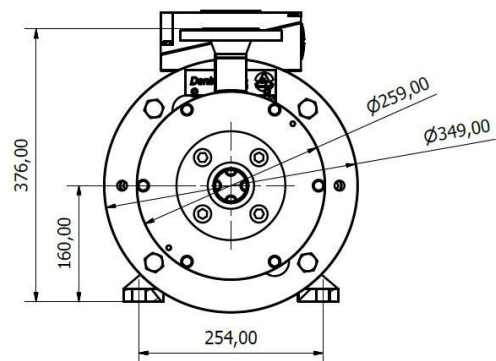
The adjustment can be done by adding or removing the shims.

The rotor and stator are designed to create the adequate turbulent forces with a minimum of energy input.

Options

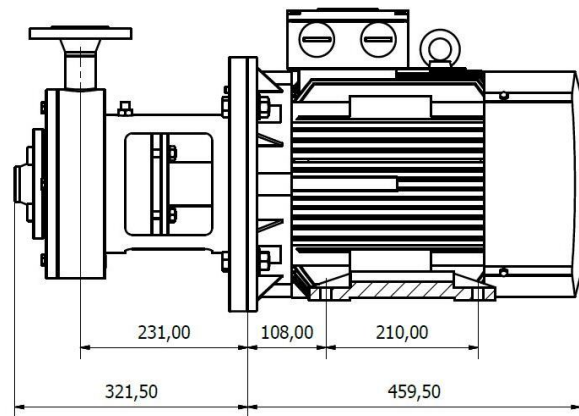
Pre-heating

- When sold as a stand-alone mill, the mill will be supplied with thermostatically controlled heating of the mill.
- When sold as part of a process plant, a PT100 sensor is monitoring the temperature of the mill head, and heating is controlled by our PLC.



The DenimoTech PMB CCM-P mills comes with the following

- Fully assembled mill
- Heating band with an 800 watts output
- Temperature sensor / Thermostat.
- PTFE / Silicone mill head insulation.
- Packing cords for servicing
- Special tools for disassembly of rotor
- Insulation capsule for mill head.
- Standard AC motor.



*Measures of 1-3 tph/model

TECHNICAL DATA

Parameter	Unit	Mill Size	
Capacity	ton/hr	1 - 3	3-7
Rotor Speed	RPM	3000/3600	3000/3600
Rated Pressure	bar	4	4
Rotor / Stator gap, standard	mm	3	3
Noise level	dB (A)	<80	<80
Pipe connection Inlet / Outlet	DN	DN40 / DN32	DN40 / DN32
Length x Width x Height	mm	781 x 350 x 376	
Weight	kg	188	265
Electrical data			
Voltage		3 x 400V ~ 3 x 480V +PE	3 x 400V ~ 3 x 480V +PE
Power consumption	kW	15	30
Frequency range	Hz	50/60	50/60
Amperage	A	27	52



DenimoTECH A/S
Haandvaerkervangen 12
DK-5792 Aarslev
Denmark

tel.: +45 6390 5000
email: sales@denimotech.com
www.denimotech.com

