



## Colloid Mills Bitumen Emulsion Production

### Features:

- ▲ Fitted with high speed bearings
- ▲ Fully assembled mill
- ▲ Available in 12, 20 and 40t/h and a 300l/h version for lab use
- ▲ Optimized to provide a fine and narrow particle distribution
- ▲ High efficiency resulting in low amperage use
- ▲ Frequency control as option
- ▲ Adjustable rotor / stator gap
- ▲ Direct flange mounting on electrical motor gives simple and low-noise installation

The DenimoTech colloid mills are especially designed for production of bitumen emulsion - regular as well as polymer modified.

The rotor and stator system is optimised to provide a fine and narrow particle distribution which gives the emulsion an increased storage stability and higher viscosity the latter especially significant in high-bitumen-content emulsions. The mills are further fitted with high-speed bearings, which if combined with frequency control (see optional equipment) of the motor allow:

1. Adjusting the speed up and down to optimise the particle distribution and thereby the emulsion characteristics to achieve desired properties and/or suit local requirements.
2. Using many bitumens that normally form too coarse particle distributions resulting in poor emulsion quality

## Technical information

| Mills fixed speed                                | DT 105                  | DT 202                  | DT 403                  |
|--|-------------------------|-------------------------|-------------------------|
| Capacity, 70-40% residue                         | 6 - 12 t/h              | 10 - 20 t/h             | 20 - 40 t/h             |
| Rotor/stator gap, standard                       | 3.0 mm                  | 3.0 mm                  | 3.0 mm                  |
| Noise level                                      | <80 dB (A)              | <80 dB (A)              | <80 dB (A)              |
| Length without manifold                          | 860mm                   | 960mm                   | 980mm                   |
| Length with manifold                             | 1060mm                  | 1250mm                  | 1350mm                  |
| Pipe connections<br>Bitumen/Water Phase/Emulsion | DN40/25/50              | DN65/40/80              | DN80/50/100             |
| W x H  | 350 x 430 mm            | 400 x 475 mm            | 450 x 500mm             |
| Weight   | 200 kg                  | 275 kg                  | 300 kg                  |
| Voltage  | 3 x 400V ~ 3 x 480V +PE | 3 x 400V ~ 3 x 480V +PE | 3 x 400V ~ 3 x 480V +PE |
| Power consumption                                | 18.5 kW                 | 30 kW                   | 37 kW                   |
| Frequency rate                                   | 50/60Hz                 | 50/60Hz                 | 50/60Hz                 |
| Amperage   | 34.5A                   | 55A                     | 68A                     |
| Revolutions per minute (RPM)                     | 3000/3600               | 3000/3600               | 3000/3600               |
|  |                         |                         |                         |
| Mills adjustable speed                           | DT 106                  | DT 202                  | DT 403                  |
| Capacity, 70-40% residue                         | 6 - 12 t/h              | 10 - 20 t/h             | 20 - 40 t/h             |
| Rotor/stator gap, standard                       | 3.0 mm                  | 3.0 mm                  | 3.0 mm                  |
| Noise level                                      | 79 / 88 dB (A)          | 79 / 88 dB (A)          | 79 / 88 dB (A)          |
| Length without manifold                          | 1095 mm                 | 1095 mm                 | 1125 mm                 |
| Length with manifold                             | 1315 mm                 | 1365 mm                 | 1415 mm                 |
| Pipe connections<br>Bitumen/Water Phase/Emulsion | DN40/25/50              | DN65/40/80              | DN80/50/100             |
| W x H  | 400 x 440 mm            | 400 x 440 mm            | 450 x 470 mm            |
| Weight   | 240 kg                  | 300 kg                  | 330 kg                  |
| Voltage  | 3 x 400V ~ 3 x 480V +PE | 3 x 400V ~ 3 x 480V +PE | 3 x 400V ~ 3 x 480V +PE |
| Power consumption                                | 30 kW                   | 37 kW                   | 45 kW                   |
| Frequency rate                                   | 40 - 70 Hz              | 40 - 70 Hz              | 40 - 70 Hz              |
| Amperage   | 55A                     | 68A                     | 82A                     |
| Revolutions per minute (RPM)                     | 2400 - 4200             | 2400 - 4200             | 2400 - 4200             |

For further information please visit us at [www.denimotech.com](http://www.denimotech.com)

DenimoTech A/S  
Haandvaerkervangen 12  
DK-5792 Aarslev  
Denmark  
T: +45 6390 5000  
F: +45 6390 5019

