Superior Mixing – Liquid, Gas and Powder

IM 25 Rotary Jet Mixer

The patented IM 25 Rotary Jet Mixer (RJM) does not only mix fast, efficient and uniform but creates also the necessary process flexibility that makes it easy to switch to new product formulations with diverse viscosities, densities and volumes. Besides classic liquid to liquid mixing the RJM is excellent for gas and powder dispersion plus a superb tank cleaning machine.

Applications
Process and storage vessels between 10-1000 m³ used in a wide range of industries such as: beer & beverage, food & ingredients, home & personal care, health care, biotech and chemical industry etc.

Operation
Secure that the mixer is positioned in the correct level and submerged into the liquid before round pumping or when adding any additional products from any up-stream pipe works.

TECHNICAL DATA
Lubricant: ..................... Self-lubricating with the mixing/cleaning fluid
Connection: ..................... Standard thread 2.5" BSP, female
Min. tank opening: ............. See dimension drawings

Pressure
Working pressure: .................. 2-12 bar
Recommended pressure
during mixing: ..................... 4-8 bar
Recommended pressure
during CIP: ...................... 5-10 bar

PHYSICAL DATA
Materials: ...................... AISI 316L, AISI 316, SAF 2205, PEEK, PVDF, Carbon, Tefzel, Ceramics

Weight
Weight: ......................... 13.2 kg

Temperature
Max. working temperature: ........ 95°C
Max. ambient temperature: ........ 140°C

Benefits
Using the IM 25 Rotary Jet Mixer makes it possible, at a modest investment, to perform fast and efficient mixing in a sanitary system. In traditional systems, using propeller mixers, a rotating shaft penetrates the tank wall and a mechanical seal and a gear box are installed. With the Rotary Jet Mixing technology the shaft, seal and gearbox are eliminated, and a more sanitary design is obtained. With the Rotary Jet Mixing technology good mixing is achieved without the use of baffles. The Rotary Jet Mixing technology can also be used for gas dispersion and for dispersion and dissolving of powder. The IM 25 can furthermore be used for efficient CIP when the tank is empty, saving liquid, chemicals and energy compared to a fixed spray ball CIP system.
Flow rate
Relationship between inlet pressure and flow rate for liquids with waterlike properties for the IM 25 Rotary Jet Mixer.

Reach of jet
Reach of jet for the IM 25 during cleaning, and indicative reach of jet for mixing of liquids with water-like properties.

Volumetric flow rate [m³/h]

<table>
<thead>
<tr>
<th>Volumetric flow rate [m³/h]</th>
<th>Inlet pressure [bar]</th>
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<tbody>
<tr>
<td>2</td>
<td>4</td>
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<td>3</td>
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<td>7</td>
<td>9</td>
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Inlet pressure

Nozzles
A) 2 x ø21 mm
B) 2 x ø19 mm
C) 2 x ø17 mm
D) 2 x ø15 mm

Dimensions (mm)

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<thead>
<tr>
<th>Dimensions (mm)</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
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<tr>
<td></td>
<td>286</td>
<td>156</td>
<td>80</td>
<td>337</td>
<td>220</td>
<td>ø600</td>
<td>ø424</td>
<td>ø223</td>
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The Rotary Jet Mixing technology

Traditional Mixing technology

Round pumping

Propeller mixing

A = Rotary Jet Mixer
B = Gas
C = Product
D = Liquid feed

A = Liquid feed
B = Product