Fast, Effective Impact Cleaning

Alfa Laval TJ MultiJet 25 Rotary Jet Head

Application
The TJ MultiJet 25 rotary jet head provides 3D indexed impact cleaning over a defined time period. It is ideal for applications where cost-effective impact cleaning with rotary jet heads is needed, but where compliance with hygienic design standards is not a requirement. The device is suitable for process, storage and transportation tanks between 15 and 150 m³. It is designed to work under conditions where finer particles, etc. in the cleaning media may be re-circulated through the machine.

Working principle
The flow of the cleaning fluid makes the nozzles perform a geared rotation around the vertical and horizontal axes. In the first cycle, the nozzles lay out a coarse pattern on the tank surface. The subsequent cycles gradually make the pattern more dense, until a full pattern is reached after 8 cycles.

TECHNICAL DATA

- **Lubricant**: Self-lubricating with the cleaning fluid
- **Max throw length**: 9 - 14 m
- **Impact throw length**: 4 - 8 m
- **Pressure**
  - Working pressure: 3 - 8 bar
  - Recommended pressure: 5 - 6.5 bar

Cleaning Pattern

![First cycle](image1)
![Full pattern](image2)

The above drawings show the cleaning pattern achieved on a cylindrical horizontal vessel. The difference between the first cycle and the full pattern represents the number of additional cycles available to increase the density of the cleaning.

Certificates
2.1 material certificate and ATEX.
### Flow Rate

<table>
<thead>
<tr>
<th>Nozzles mm</th>
<th>m³/h</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>10</td>
</tr>
</tbody>
</table>

### Impact Throw Length

<table>
<thead>
<tr>
<th>Nozzles mm</th>
<th>m</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>15</td>
</tr>
</tbody>
</table>

### Dimensions (mm)

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
</tr>
</thead>
<tbody>
<tr>
<td>173</td>
<td>230</td>
<td>76</td>
<td>133</td>
<td>ø110</td>
<td>max. 25</td>
<td>ø160</td>
<td>ø200</td>
</tr>
</tbody>
</table>
Standard Design
The choice of nozzle diameters can optimise jet impact length and flow rate at the desired pressure. The Toftejorg MultiJet 25 is also available with PEEK impeller. A welding adaptor with sealing for 1” ISO, 1” ANSI, 1 1/2” ISO Dairy Pipe or 1 1/2” SWG Pipe is available as an accessory.

TRAX simulation tool
TRAX is a unique software that simulates how the Toftejorg MultiJet 25 performs in a specific tank or vessel. The simulation gives information on wetting intensity, pattern mesh width and cleaning jet velocity. This information is used to determine the best location of the tank cleaning machine and the correct combination of flow, time and pressure to implement.

A TRAX demo containing different cleaning simulations covering a variety of applications can be used as reference and documentation for tank cleaning applications. A TRAX simulation is free and available upon request.

Wetting Intensity

D4.6m H5.5m, Toftejorg MultiJet 25. 4 x ø5.5 mm, Time = 2.08 min., Water consumption = 403 l
D4.6m H5.5m, Toftejorg MultiJet 25. 4 x ø5.5 mm, Time = 8.3 min., Water consumption = 1612 l