



ISO-MIX

A head in technology

IM 7.5

IM 7.5 rotary jet head mixer

The patented ISO-MIX'er IM 7.5 is a rotary jet head mixer which provides efficient, hydraulically-balanced tank mixing within a short defined time period. It is also often used for effective gas dispersion.

Applications

The IM 7.5 is typically used in process and storage vessels of up to 5 cubic metres used in the food and beverage industries, the biotech/pharma industries, the petrochemical industry and many others, where fast, efficient mixing and/or gas dispersion in liquids is important. Applying this technology will normally offer a more hygienic and economic solution to a given mixing requirement than traditional mixing technology. The ISO-MIX'er is most effectively used for mixing of liquids with a viscosity below 350 – 450 centipoise and containing no abrasive or fibrous materials. In order to optimize mixing time, gas dispersion and/or energy consumption, installation of additional or higher capacity ISO-MIX'ers should be considered.

Operation (see illustration)

The flow of the liquid to be mixed is recirculated from the tank via a pump to the ISO-MIX'er, which is properly positioned under the liquid surface. The liquid flow causes the nozzles on the mixer to perform an indexed simultaneous rotation around the horizontal and vertical axes.

When in-mixing smaller volumes into a large volume, the ISO-MIX'er is most effective if the liquid to be mixed into the larger liquid volume is added at the suction side of the pump, and in the case of gas dispersion, the gas to be dispersed in the liquid is most

effectively injected on the pressure side of the recirculation pump.

Benefits

Using the IM 7.5 as a mixer makes it possible for the client, with a modest investment, to perform fast and effective mixing, with comparatively low energy input, in extremely hygienic systems. The ISO-MIX'er eliminates the necessity of penetrating the tank wall with a rotating shaft, as required for traditional propeller mixers. Efficient temperature control is also much easier using ISO-MIX'er technology. When the tank is empty, the IM 7.5 may be used as a very effective automatic tank cleaner as well.

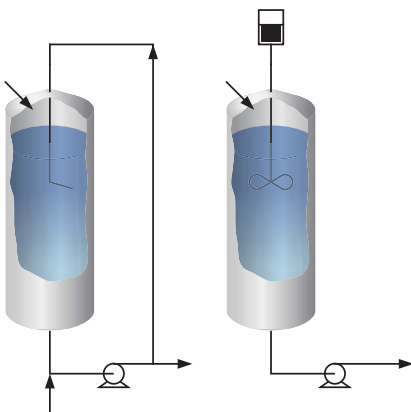
Quality systems

The IM 7.5 is manufactured in accordance with ISO 9001 standards.

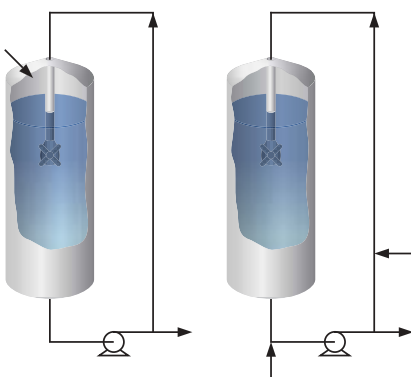
Ordering information

Please specify nozzle size, required connections and confirm application suitability.

Traditional mixing technology



ISO-MIX technology



ISO-MIX A/S

Baldershøj 28
DK-2635 Ishøj
Denmark

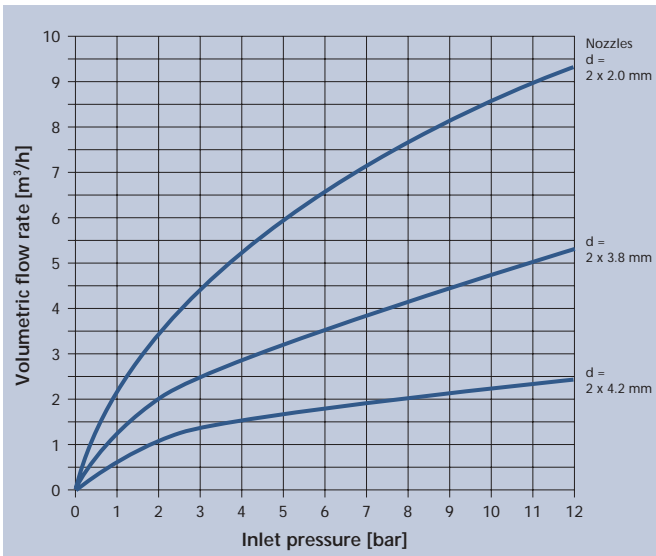
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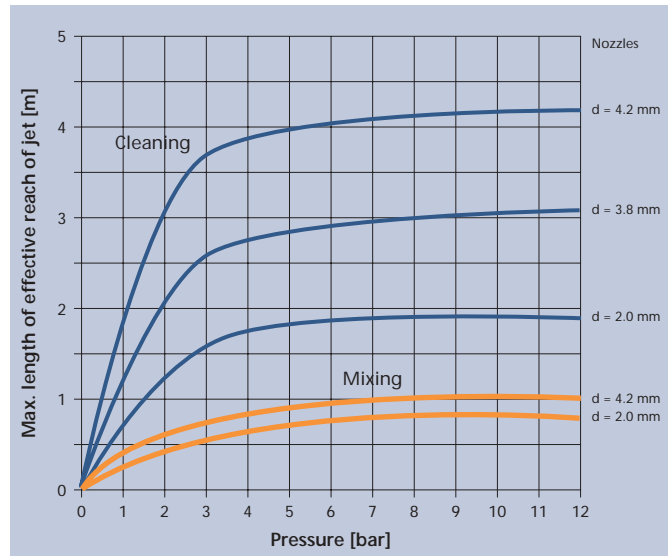


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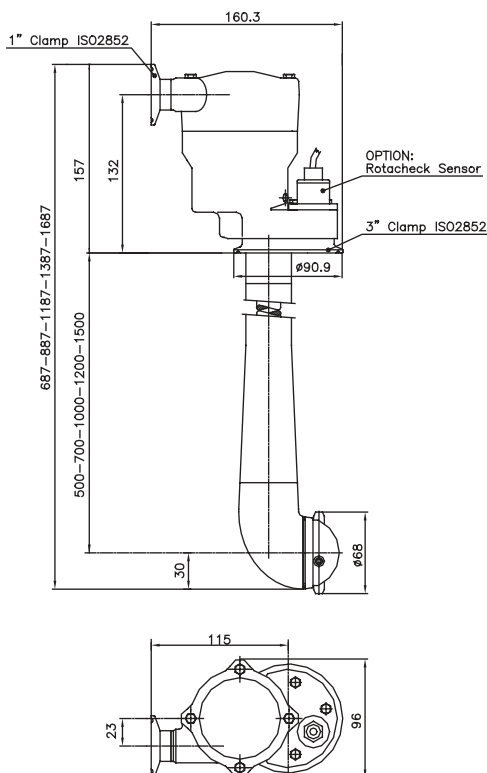
Flow Rate



Length

For **mixing** the effective reach of jet is dependent on a.o. viscosity, specific gravity of the liquid, the jet periphery velocity and the desired mixing time. For **cleaning** the effective reach is primarily dependent on jet periphery velocity and type of soilage.

Dimensions [mm]



Specifications

Materials AISI 316L, PEEK, E-CTFE

Sealing: EPDM

Polymers FDA-approved 21 CFR §177

Surface Finish Product contact surfaces: Ra=0.8µm

Weight Media driven machine 9.5 kg (21 lbs)

Lubricant Self-lubricating with the mixing/cleaning fluid

Working pressure 3 - 13 bar (45 - 185 psi)

Recommended pressure 3 - 8 bar (45 - 115 psi)

Max. working temperature 110°C (232°F)

Max. ambient temperature 140°C (284°F)

Effective reach Mixing 0.5 - 1 m (2 - 3 ft.)
Cleaning 1.5 - 4 m (5 - 13 ft.)

Inlet connection Clamp: 1" ISO 2852

Min. tank opening 3" clamp (ø73 mm/2.87")
max. 50 mm/2" high

Tank connection Clamp: 3" ISO 2852