

The pumps of the IRP series are industrial air handling pumps and are mainly used to pump a mixture of liquid and air. They are used in a variety of applications in almost all industries such as dairies, breweries, beverage industry, distilleries, etc. These air handling pumps have stainless steel 316L pump casings constructed in thick cold rolled plate, 100% non porous and extremely smooth. The pumps have open or closed investment cast impellers, constructed in 316L or duplex materials. Together with an electropolished design the industrial air handling pump series IRP are a reliable component into your production process.



### Application areas

Thanks to its unique air handling design based on a standard centrifugal pump, the IRP series are particularly suitable as a CIP return pump, as well as for unloading all type of collecting tankers and trucks.

### Your benefits

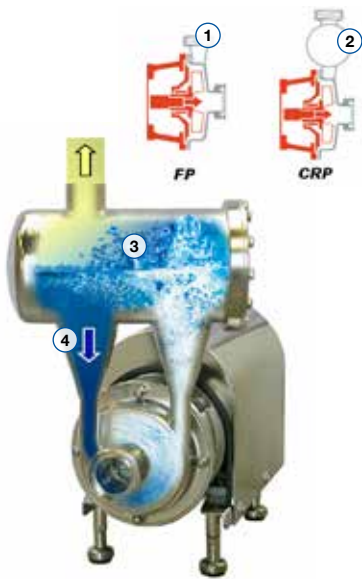
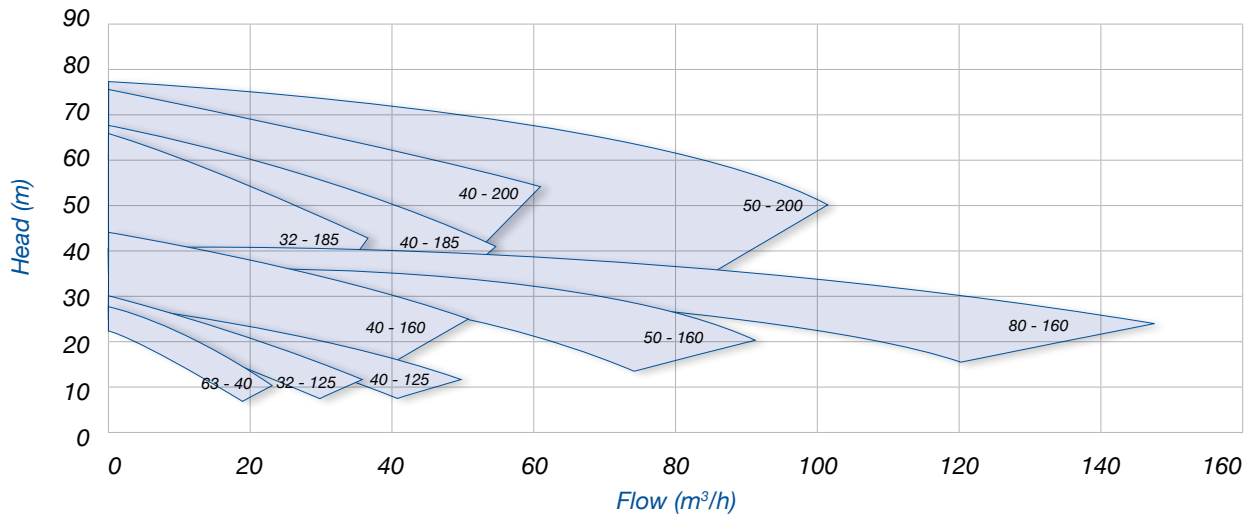
- Higher pump efficiency compared with a classic liquid ring pump
- Low NPSH values: less risk on cavitation
- Electropolished: higher resistance against corrosion
- Easy construction and easy maintenance: Less downtime
- Standard components
- Easy to install
- 2 mechanical seal diameters for the entire range
- Robust construction
- Limited noise level

### Technical specifications

Max. flow rate	120 m <sup>3</sup> /h
Max. differential head	75 m
Max. liquid viscosity	10 cP (to guarantee air handling capabilities)
Max. temperature	140°C
Impeller type	Open or closed
Max. free passage	22 mm
Max. motor power	22 kW
Max. speed	3000 / 3600 rpm
Available frequency	50 / 60 Hz
Connections	BSP thread, industrial flanges acc. to EN 1092-1/01 and ANSI (optional: hygienic fittings)
Materials wetted parts	Stainless steel 316L or similar
Available materials o-ring	EPDM, FKM, FEP-FKM, FFKM, Silicone
Mechanical seal configuration	Single, quench, double
Surface finish	Industrial finish: welds are not hand polished. Final surface treatment: electropolished
Certificates & Legislation	1935/2004 EC, FDA, ATEX



### Performance curves at 2900 rpm

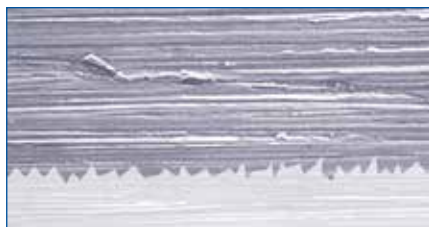


### Specifications

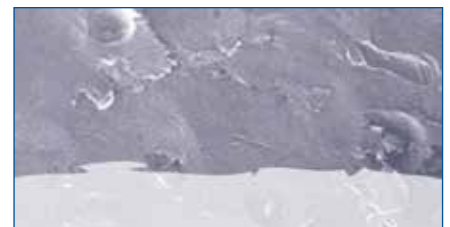
- Modular concept based on industrial pump series ICP2 & ICP3; the only difference is the pump casing (1+2)
- Unique air handling design with cleanable air separator (3)
- By-pass to casing taking care about air evacuation (4)
- Standardized mechanical seals to EN 12756
- FDA approved bellows mechanical seals or balanced O-ring seals available (spring not in contact with the liquid)
- 1 mechanical seal diameter 33 mm (except 80-160 has 43 mm seal diameter)
- Electropolished design (for wetted & non-wetted parts); easy to clean and increased corrosion resistance



Electropolished



Mechanical polishing 240 grit



Glass bead blasted

IRP\_Industrial\_air\_handling\_pump\_Technosheet\_rev01\_2016\_(eu)



Find your local supplier at [www.verder-liquids.com](http://www.verder-liquids.com)

For construction, installation and floor mounting drawings please contact your local authorised Verder® distributor.