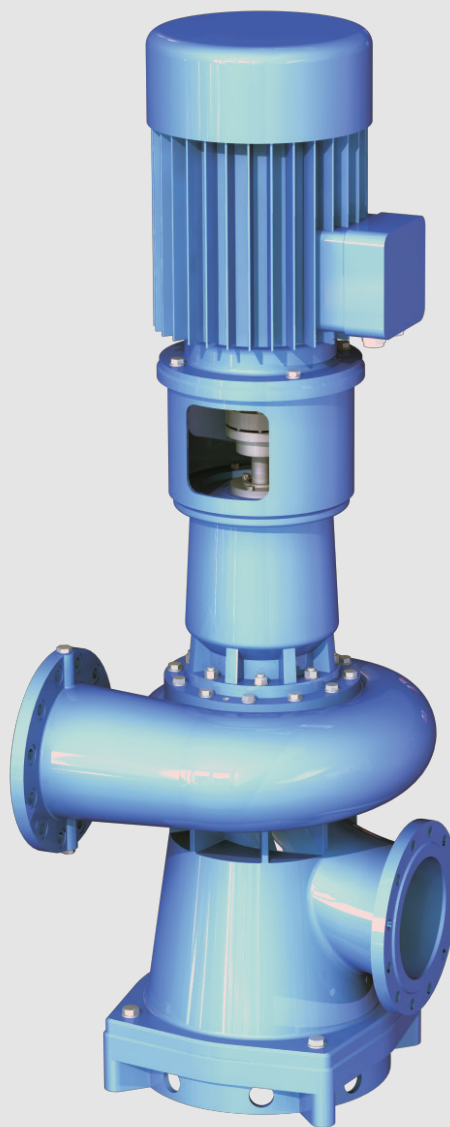




► The power of proven technology

NS
NSM



Vertical single casing volute pumps

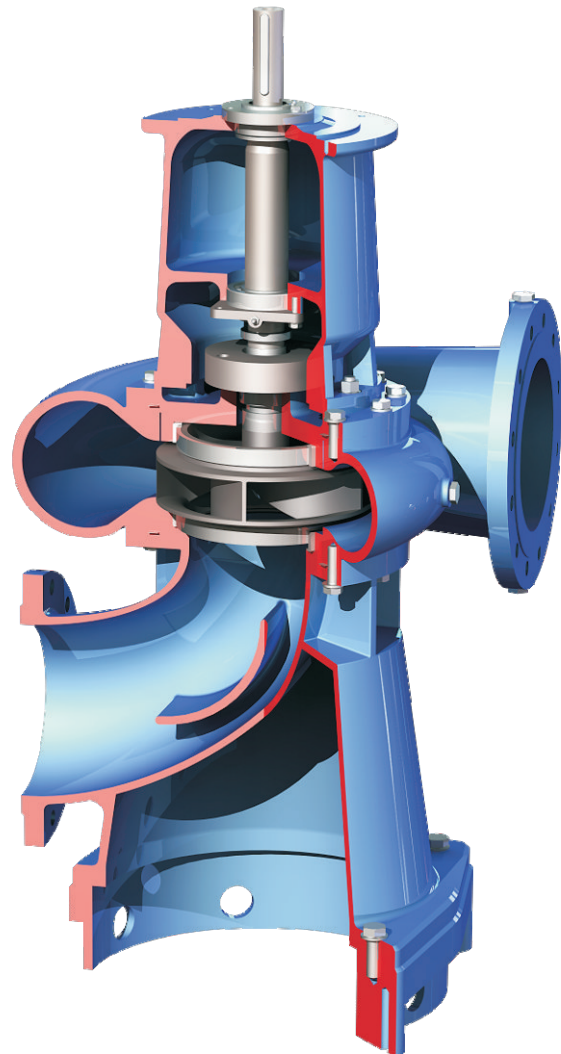


General design description

The NS range of pumps is a range of vertical non-self-priming pumps, suitable for handling low viscosity, clean or slightly contaminated liquids. The pump is basically designed in accordance to EN 733 however this range provide a larger range of hydraulic fields.

For heads above 45 m and 1450 rpm pumps are executed with 2 stages, diffusers are providing excellent guidance of liquids between first and second stage. This range is one of the most versatile pump types.

The NS range of pumps is able to handle most pump duties, one of its advantages is the large diversity of material executions. This pump has a wide range of shaft sealing options, varying from gland packing, standard mechanical to balanced double seal. Several bearing types are available, either grease or oil lubricated.



Applications



- Cooling water pumps for condenser systems
- Irrigation pumps for agricultural purposes
- Drainage pumps for water engineering and the building industry
- Flushing water pumps for filter-plants

In short, wherever clean and slightly contaminated liquids have to be transported.



Features and benefits

Pump Performance

- Optimised volute design
- High efficiency
- Smooth services

Material options

- Standard execution in cast iron, ductile cast iron and bronze
- Impellers available in cast iron, bronze, stainless steel and duplex material
- Other materials available upon request

Suction capabilities

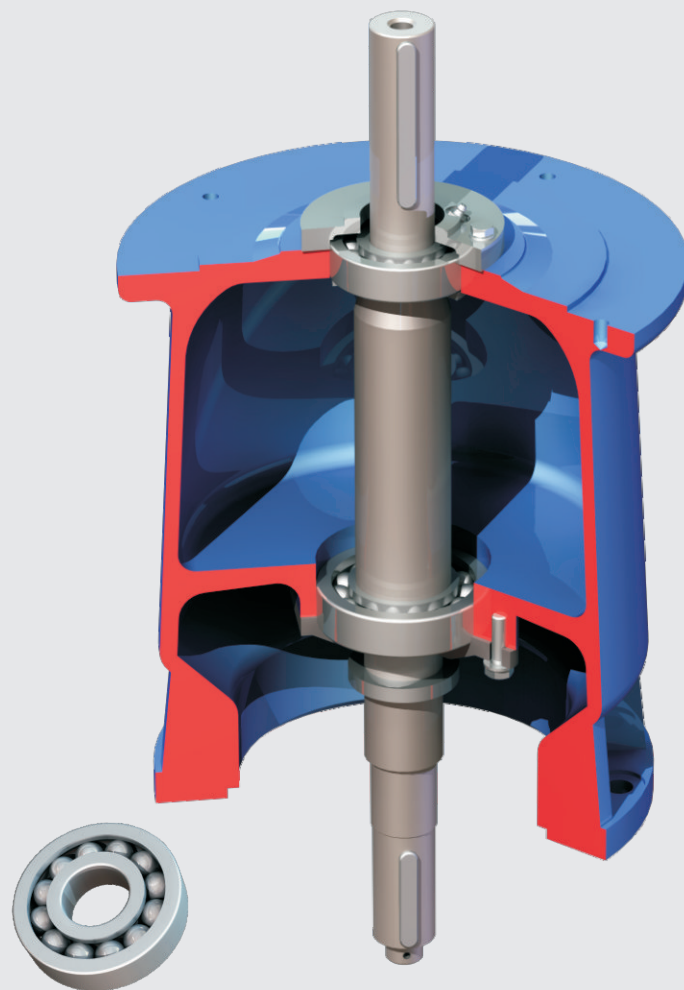
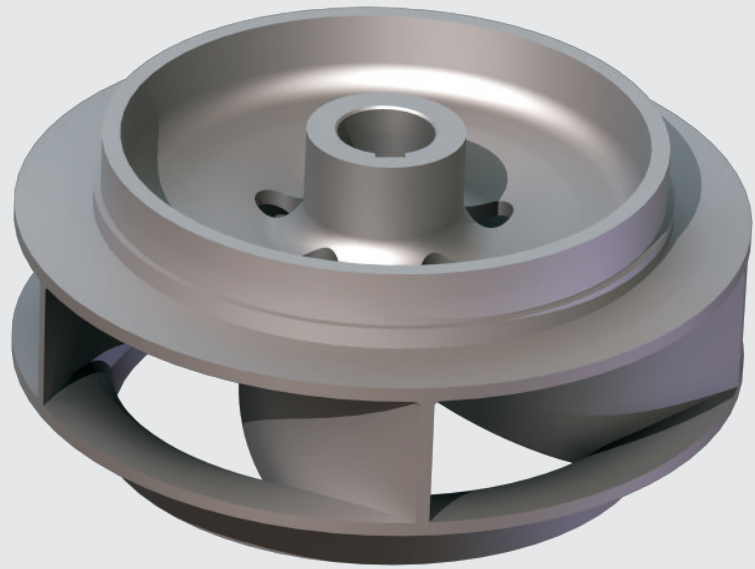
- Smooth suction entry in pump casing
- Smooth surface
- Excellent NPSH
- Minimal flow distortion

Pump casing

- Flanges in according to ISO 7005 PN 10/16
- Maximum working pressure 1000 kPa (10 bar)
- Wide range of applications
- Large drain opening
- Complete and fast draining of the casing

Impeller locking

- Stainless steel impeller cap nut with flat gasket
- Reliable and economic locking



Foot

- Machined foot
- Exact positioning on baseplate and in pipework

Shaft

- Steel alloy or stainless steel shaft
- Rigid, reliable shaft
- Most seal options with shaft sleeve
- No contact between shaft and pumped liquid when shaft sleeve applied

Oil lubrication

- Breather / filling plug on top
- Oil bath
- Oil sight glass
- Constant level oiler
- Large drain plug

Bearings

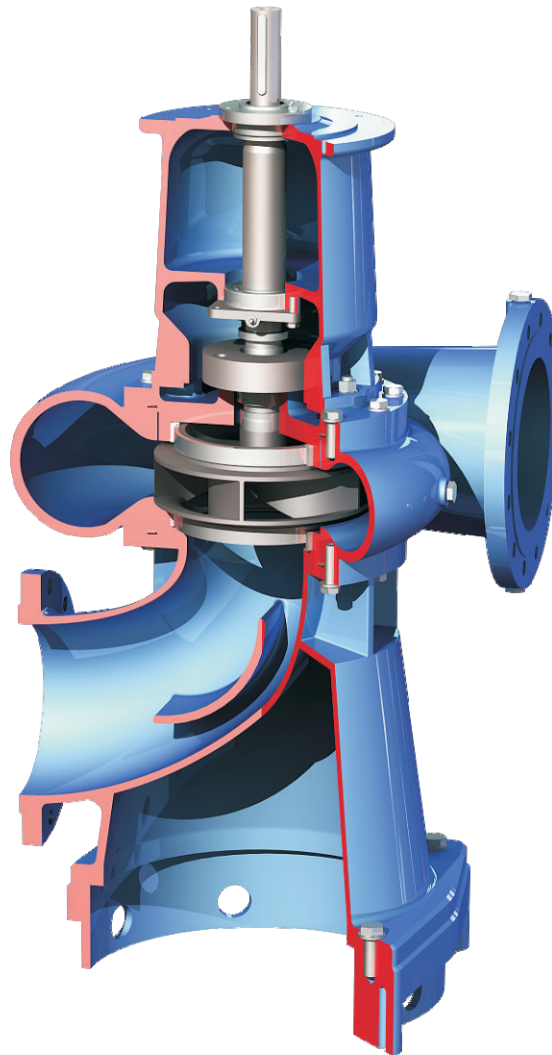
- 2 deep groove ball bearings sealed for life, or oil lubricated double row angular contact bearing and roller bearing greased for re-lubrication or oil lubricated
- Extended MTBF
- Economic bearing lock-up
- Rigid cast iron bearing bracket construction
- Exact alignment

Easy and low cost maintenance

- Back pull out principle
- Reduced maintenance and easy impeller replacement
- Mechanical seal according to EN 12756 cartridge seals
- Changeable wear ring
- Reduced maintenance cost '2RS1'

Pump cover

- Flat gasket, fully chambered
- No gasket blow out
- Machined fits
- Integrated stuffing box Mechanical seal chamber
- Perfect alignment of all components

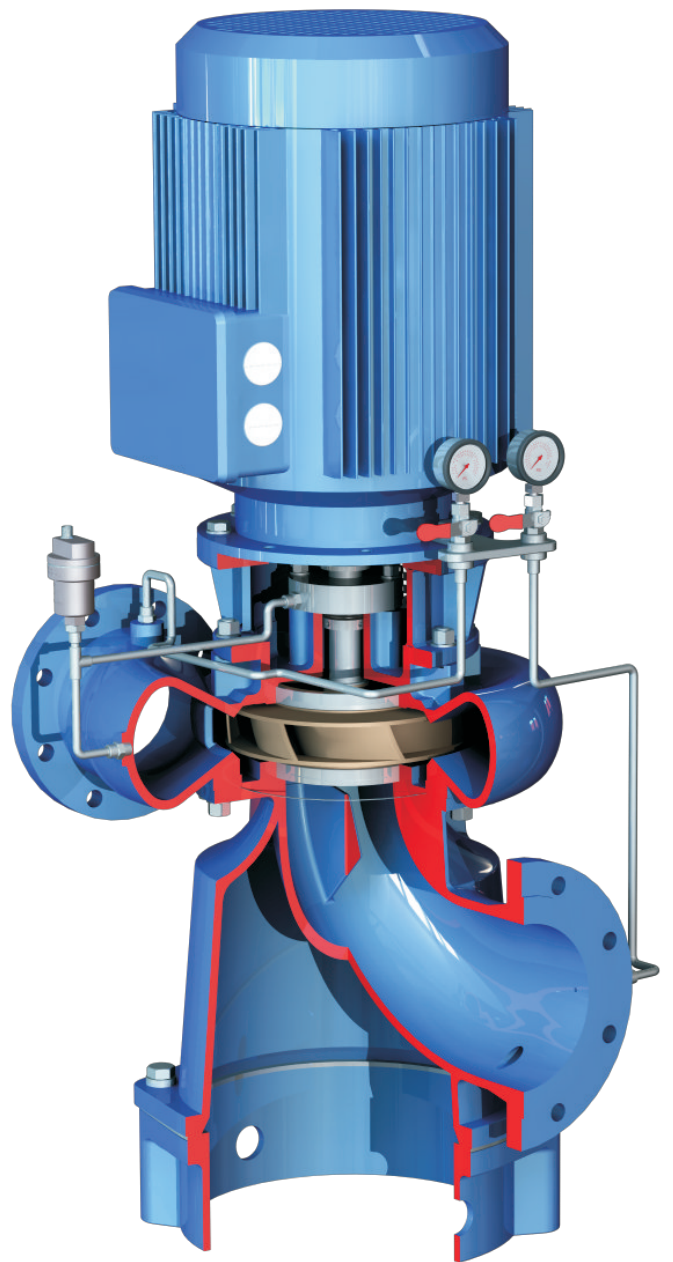
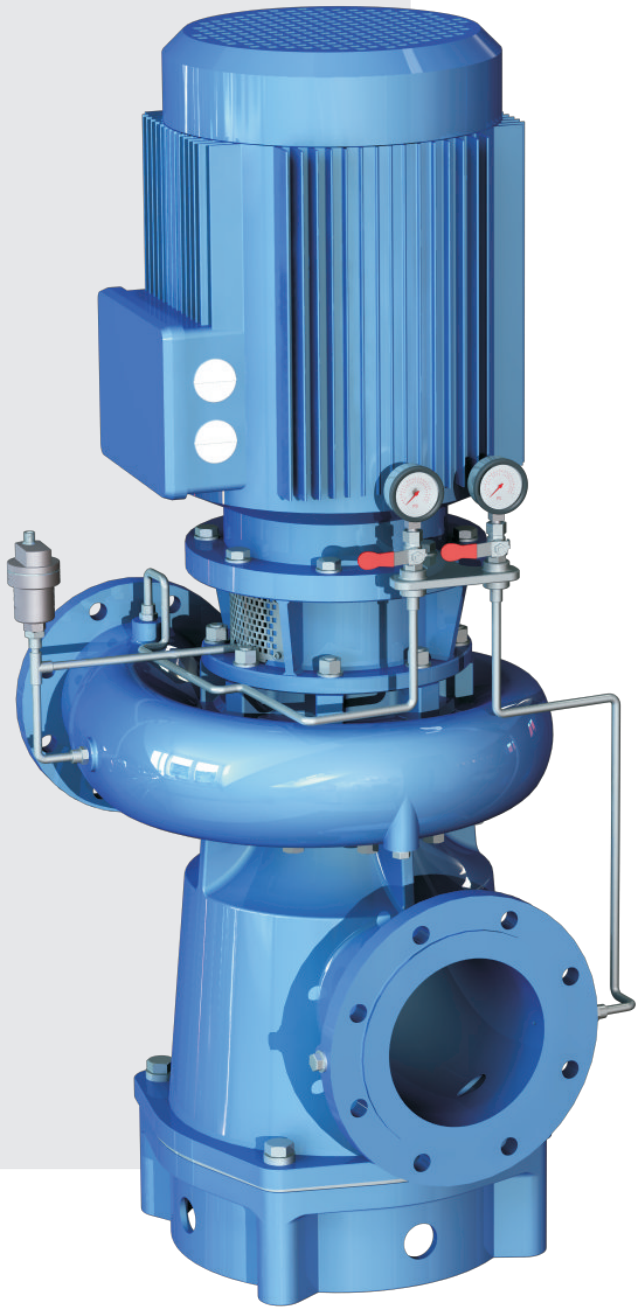


Technical data

- Max capacity 500 m³/h
- Max head 120 m.l.c
- Max working pressure 1000 kPa (10 bar)
- Max temperature 200 °C
- Max speed 3600 rpm

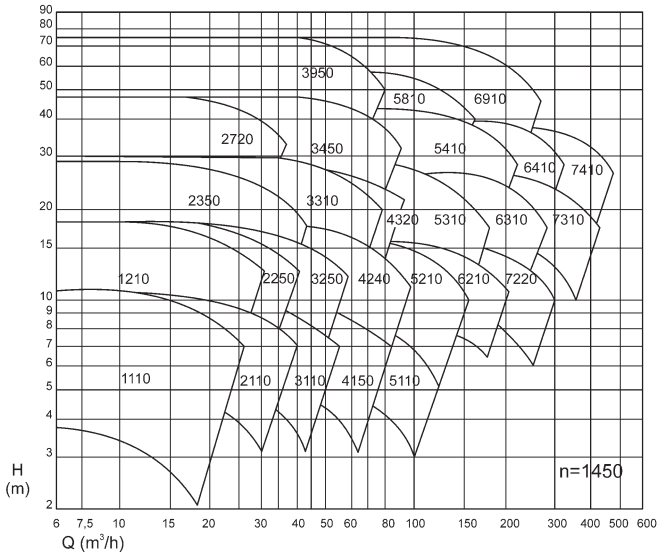
NSM

The NSM is the Close-coupled version of the NS pump.

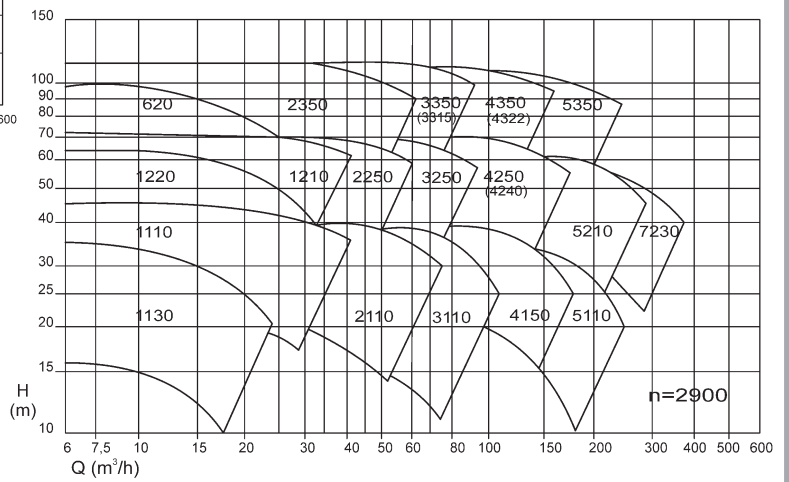


Curves

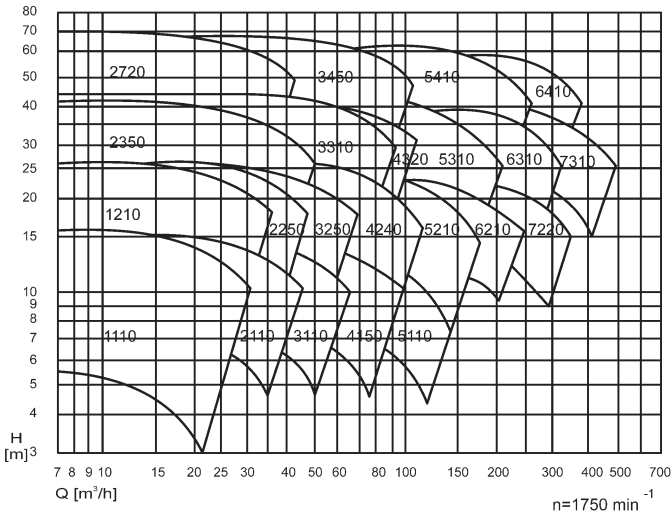
N=1450 rpm 50 Hz



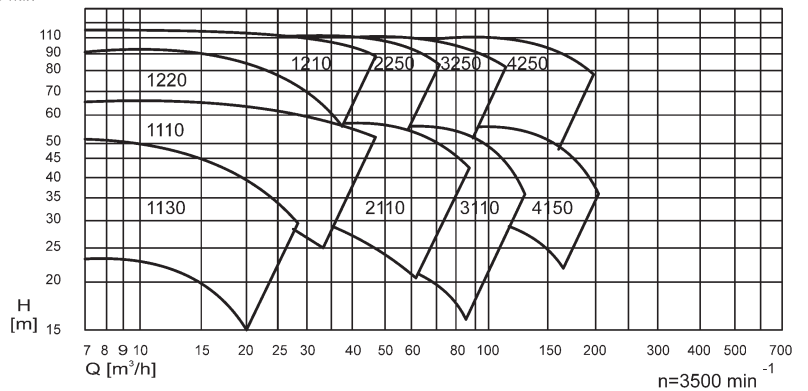
N=2900 rpm 50 Hz



N=1750 rpm 60 Hz



N=3500 rpm 60 Hz



| NS/NSM | | | | | |
|---------------------------------|-----------------|---------------------|---------------------|--|--|
| Material class | Standard | 1.1.1 | 1.4.7 | | |
| <i>Pump casing</i> | EN | EN-GJL-250 | EN-GJL-250 | | |
| | ASTM | A 278 Class 30 | A 278 Class 30 | | |
| <i>Impeller</i> | EN | EN-GJL-250 | GX 2 CrNiMoN 25-6-3 | | |
| | ASTM | A 278 Class 30 | A 182 F51 | | |
| <i>Stuffing box cover</i> | EN | EN-GJL-250 | EN-GJL-250 | | |
| | ASTM | A 278 Class 30 | A 278 Class 30 | | |
| <i>Wearing</i> | EN | EN-GJL-250 | GX 2 CrNiMoN 25-6-3 | | |
| | ASTM | A 278 Class 30 | A 182 F51 | | |
| <i>Shaft (N.A. for NSM)</i> | EN | X 39 CrMo 17-1 | X 2 CrNiMo 17-12-2 | | |
| | ASTM | SA-815 WP430 | A 479 Type 316L | | |
| <i>Shaft sleeve</i> | EN | X 39 CrMo 17-1, HCr | X 39 CrMo 17-1, HCr | | |
| | ASTM | SA-815 WP430, HCr | SA-815 WP430, HCr | | |
| <i>Bearing bracket</i> | EN | EN-GJL-250 | EN-GJL-250 | | |
| | ASTM | A 278 Class 30 | A 278 Class 30 | | |



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