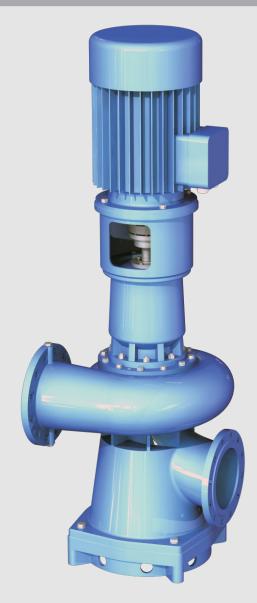


The power of proven technology

# NS NSM



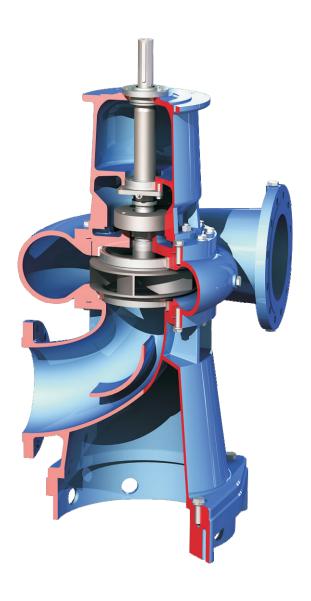
Vertical single casing volute pumps

# General design description

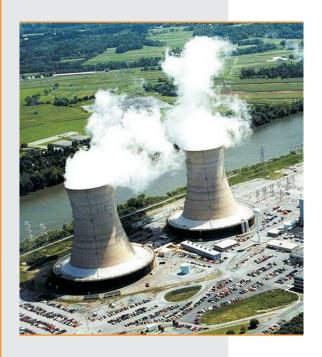
The NS range of pumps is a range of vertical non-self-priming pumps, suitable for handling low viscosity, clean or slightly contaminated liquids. The pump is basically designed in accordance to EN 733 however this range provide a larger range of hydraulic fields.

For heads above 45 m and 1450 rpm pumps are executed with 2 stages, diffusors 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 variety 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

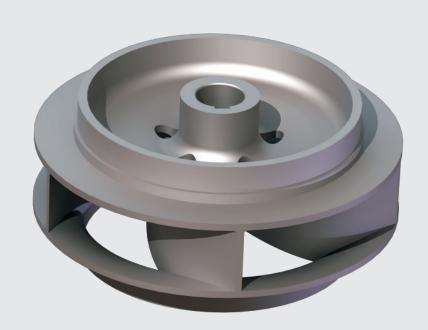
- Smooth suction entry in pump casing
- >Smooth surface
- ➤ Excellent NPSH
- ➤ Minimal flow distortion

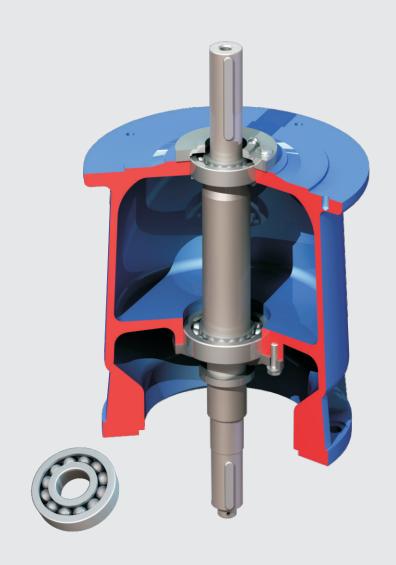
# Pump casing

- 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**

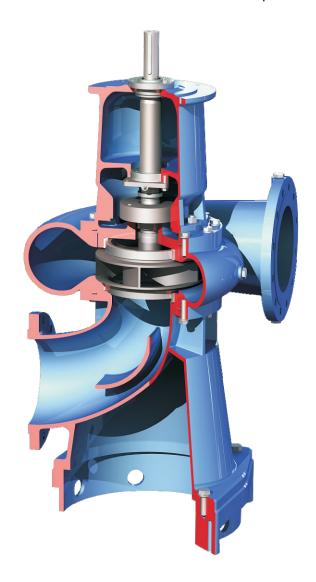
- ▶2 deep groove ball bearings sealed for life, or oil lubricated double row angular contact bearing and roller bearing greased for relubrication or oil lubricated
- **≻**Extended MTBF
- ➤ Economic bearing lockup
- ➤ Rigid cast iron bearing bracket construction
- >Exact alignment

# Easy and low cost maintenance

- ➤ Back pull out principle
- Reduced maintenance and easy impeller replacement
- ➤ Mechanical seal according to EN 12756cardridge 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

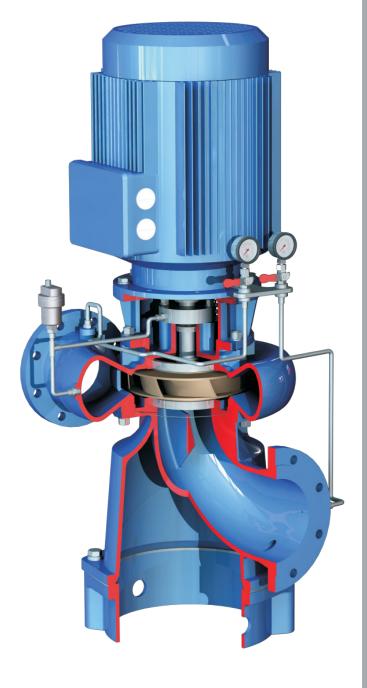


# Technical data

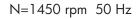
- >Max capacity 500 m³/h >Max head 120 m.l.c
- >Max working pressure 1000 kPa (10 bar)
- >Max temperature 200 °C
- ➤Max speed 3600 rpm

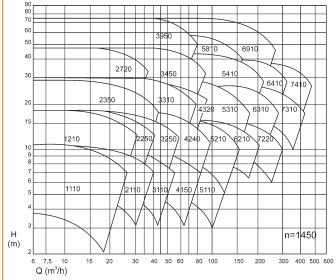
The NSM is the Close-coupled version of the NS pump.



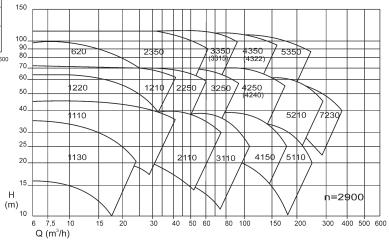


# **Curves**

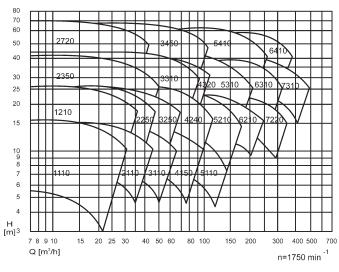




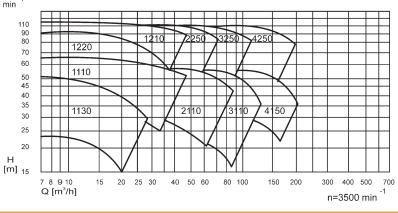
# N=2900 rpm 50 Hz



N=1750 rpm 60 Hz



N=3500 rpm 60 Hz



# **Materials**

# Material executions

Description	material	material	material
Pumpcasing / cover	cast iron	cast iron	CrNiMo steel
Wearring	cast iron	CrNiMo steel	CrNiMo steel
Impeller	cast iron	CrNiMo steel	CrNiMo steel
Shaft	steel	Cr steel	CrNiMo steel
Shaft sleeve	Cr steel	CrNiMo steel	CrNiMo steel
Bearing bracket	cast iron	cast iron	cast iron

Shaft sleeves provided with hard chrome

Other material upon request

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