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Spare Parts



Repair



ROBOT PUMPS
Pump Solutions

pompdirect.nl

POMP  IRECT

Partner in industrial Pumps

Pump Solutions with Robot Pumps

PUMP SELECTION

Selecting pumps for clean water is quite simple, but, selecting pumps in wastewater is a different story. Pompdirect will supply the right pump for your project by taking some basic rules into consideration. The best non-clogging performance is achieved with Vortex impeller pumps, whereas larger volumes are pumped using closed screw impeller pumps. Cutter pumps are employed in specific situations where longer fibers are involved.

In general Cast Iron is suitable for most purposes, Duplex is used for chemical and abrasive contaminated wastewater, and Nihard4 material is used for highly abrasive wastewater. Thanks to the modular construction of the pumps they can be built in various materials and combinations.

Selecting centrifugal pumps is achieved by adhering to the principles of form and size of solids, chemical contamination and the presence of abrasive materials or long fibers. Also the surrounding environment such as the possibility of explosion which needs to be taken into consideration.

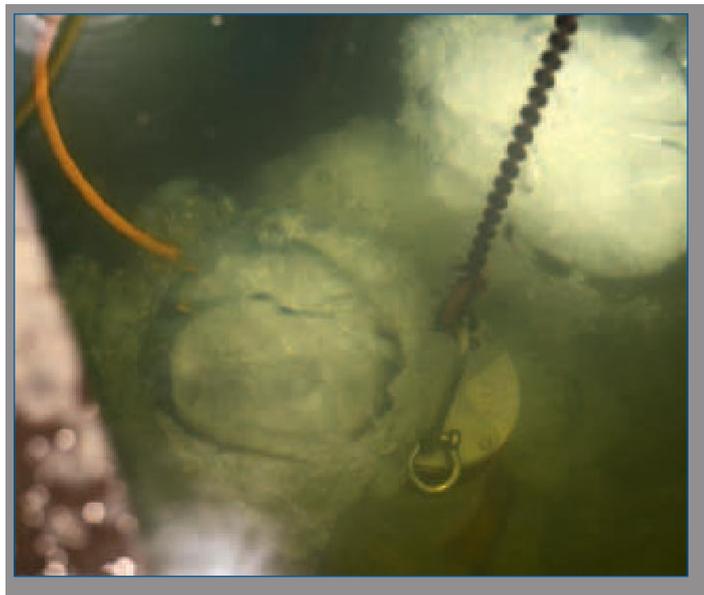
Typically, for water that is highly contaminated with solids and long fibers we will offer the Vortex principle which gives outstanding, non-clogging performance. In situations where power consumption is more important we will offer the closed screw centrifugal impeller. This type of impeller is the new generation single channel impeller performing with high efficiency and good non-clogging performance. For duties with very large capacity and low head we offer Archimedes screw pumps, which are non clogging, highly efficient and reliable. Cutter pumps are used in cases where there are high concentrations of solids and fibers

PUMP SELECTION PROGRAM

Our philosophy of “keep it simple” is continued in the pump selection program. Using a clear interface with basic questions the program guides you to the best selection. Pipework and friction loss calculations are also covered in the program along with the individual data sheets for all pumps.

TESTING FACILITIES

All pumps are checked hydraulically in our own test facility prior to shipping. A witnessed test certificate is available. All pumps are supplied with a unique serial number and test curve.





VORTEX PUMPS

Vortex impeller pumps are designed to pump a wide variety of liquids that are contaminated with solids. Their great advantage is the outstanding non-clogging performance.

In standard Cast Iron construction, Vortex pumps are used for sewage and other wastewater applications to pump large solids, highly concentrated solids, large fibers and heavy and gassy sludges. For industrial applications, hydraulic component parts are available in special materials to resist both abrasive and corrosive elements.

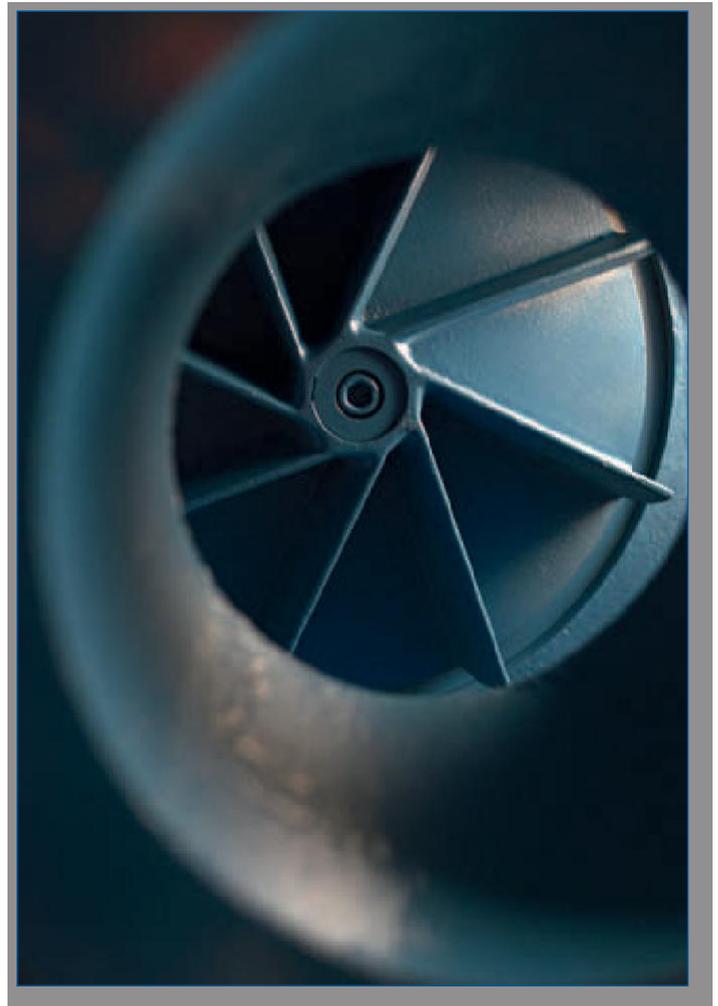
The Vortex impeller's non-clogging performance is based upon a simple law of physics, creating a Vortex in a fluid results in a vacuum directly underneath and around the pump. As the impeller does not come into contact with the solids in the pumped medium the pump cannot clog. A simple but very effective principle, resulting in a cleaner sump because the rotating movement of the fluid keeps the solids suspended.

LOW WEAR – LOW VIBRATION

Natural low wear is experienced in Vortex pumps, as most solids pass in front of the impeller without touching it. This also leads to low vibration levels.

CONSTANT PERFORMANCE – LOW MAINTENANCE

The absence of narrow clearances eliminates blockage problems. No need for adjustments or replacement of wear rings are necessary to maintain performance. Thus guaranteeing long-term, constant high performance with minimal maintenance, which means the total cost of ownership is therefore extremely low.



PROBLEM SOLVER

Pompdirect will recommend Vortex pumps in situations where other pumps fail and are clogging. Vortex pumps are real problem solvers!

ADVANTAGES

- Best non-clogging performance
- Most reliable principle
- Low impeller wear
- Minimal vibrations
- Constant performance
- Cleaner sumps due to the created Vortex

SUBMERSIBLE VORTEX PUMPS



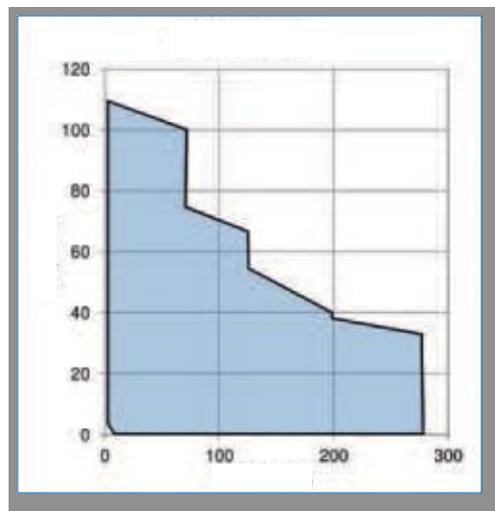
Cast Iron DWP22/42/62

The unmatched solids handling performance of this range makes these pumps your first choice for most applications. Vortex pumps handle larger and heavier solids, and fibrous materials, heavy and gassy sludges are pumped with ease.

Options:

BWK / OWK / VRS / Cooling jacket/

ATEX / IEC-Ex 



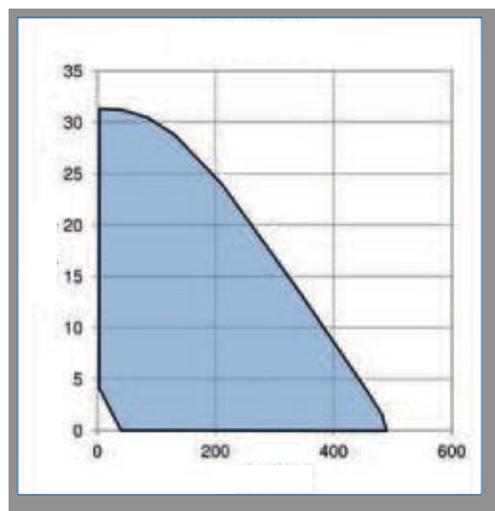
Nihard-4 DNP22/42/62

Vortex impeller pumps in wear resistant Nihard-4 for reliable transport of highly abrasive solids. For dredging, mining, construction works and other highly demanding applications.

Options:

BWK / OWK / VRS / Cooling jacket/

ATEX / IEC-Ex 



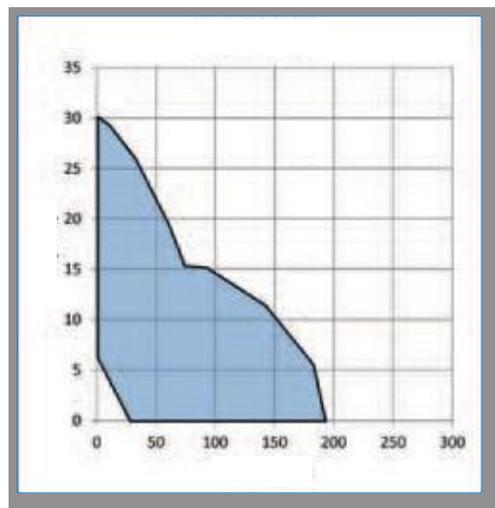
Duplex DWP22/42 - U

Vortex impeller pumps in Duplex for reliable transport of abrasive and aggressive solids. For wastewater in the food sector, chemical and other very demanding applications with either chemical, abrasive or a combination both.

Options:

BWK / OWK / VRS / Cooling jacket/

ATEX / IEC-Ex 



DRY INSTALLED VORTEX PUMPS

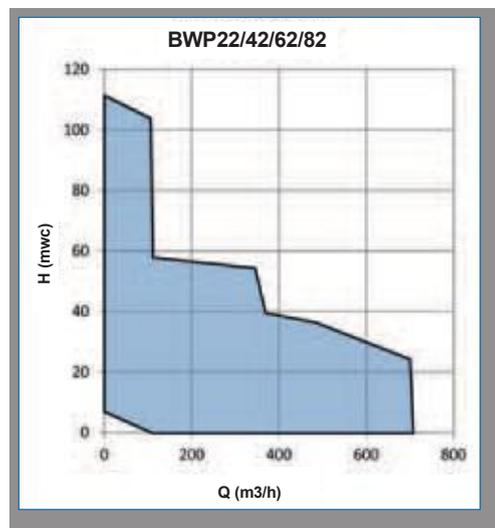


**Cast Iron
BWP22/42/62/82**

The unmatched solids handling performance of this range makes these pumps your first choice for most applications. Vortex pumps can handle larger and heavier solids, and fibrous materials, heavy and gassy sludges are pumped with ease

Options:

HX / HS / HM / HF / KM / VX / VS / VM /
ATEX / IEC-Ex

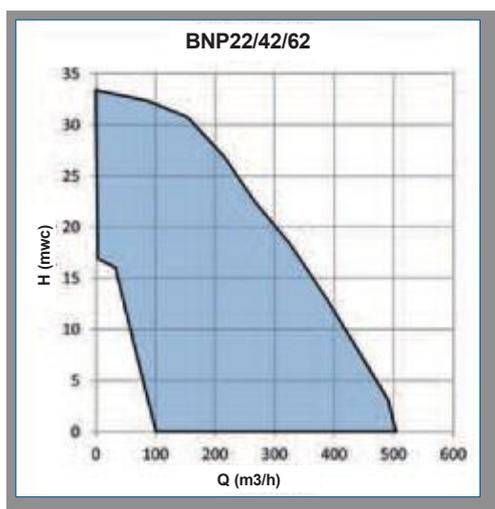


**Nihard-4
BNP22/42/62**

Vortex impeller pumps in wear resistant Nihard-4 for reliable transport of highly abrasive solids. For dredging, mining, construction works and other demanding applications.

Options:

HX / HS / HM / HF / KM / VX / VS / VM /
ATEX / IEC-Ex

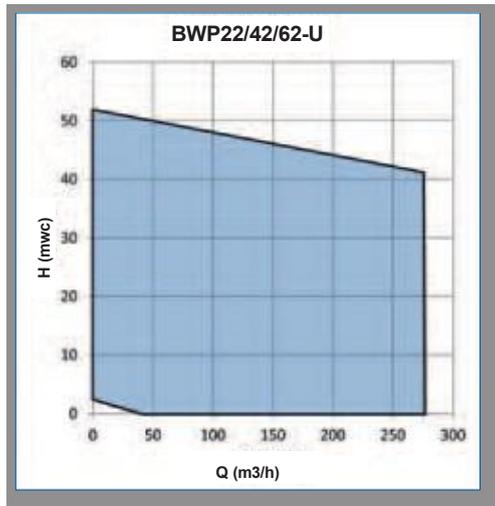


**Duplex
BWP22/42/62 - U**

Vortex impeller pumps in Duplex for reliable transport of abrasive and aggressive solids. For wastewater in the food sector, chemical purposes and other demanding applications either chemical, abrasive or a combination of both..

Options:

HX / HS / HM / HF / KM / VX / VS / VM /
ATEX / IEC-Ex





CLOSED SCREW CENTRIFUGAL IMPELLER PUMPS

The closed screw centrifugal impeller pumps are a perfect combination of non-clogging performance and high efficiency. Closed screw impeller pumps are designed to pump a wide variety of solids and fibrous contaminated Liquids in many applications. The unique design of the self cleaning closed impeller makes these pumps superior to both channel and screw impeller pumps.

Pompdirect recommends the closed screw impeller pumps in situations where standard channel pumps are clogging and higher efficiency is needed. By operating directly in the pumped liquid the installation benefits from reduced construction costs as the submersible version of these pumps do not require a special housing or structure. As they are submerged the pumps take up very little space, are quiet and do not require extra cooling. The submersible pumps are smaller than the dry installed version as they have the motor and hydraulics in one unit. That is why pump stations for the submersibles are smaller and less complex to build.

CONSTANT PERFORMANCE – LOW MAINTENANCE

The shape of the impeller eliminates blockage problems. No adjustments or replacement of wear rings are necessary to maintain performance. Thus guaranteeing long-term, constant high performance with minimal maintenance, which means the total cost of ownership is therefore extremely low.



ADVANTAGES

- Best balance between non-clogging and high efficiency
- Suitable for large volumes
- Reliable principle
- Low impeller wear due to the closed design
- Reduced energy consumption
- Ideal for storm water, irrigation, drainage & dewatering

SUBMERSIBLE CLOSED SCREW CENTRIFUGAL IMPELLER PUMPS

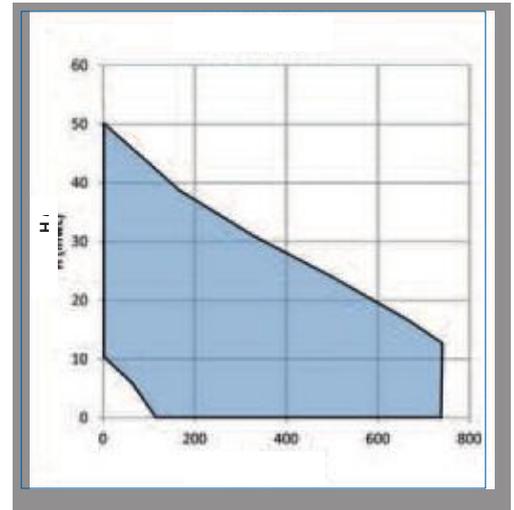


**Cast Iron
DTP22/42/62**

The solids handling performance in combination with high efficiency of this range makes these pumps your first choice for most applications.

Options:

BWK / OWK / VRS / Cooling jacket

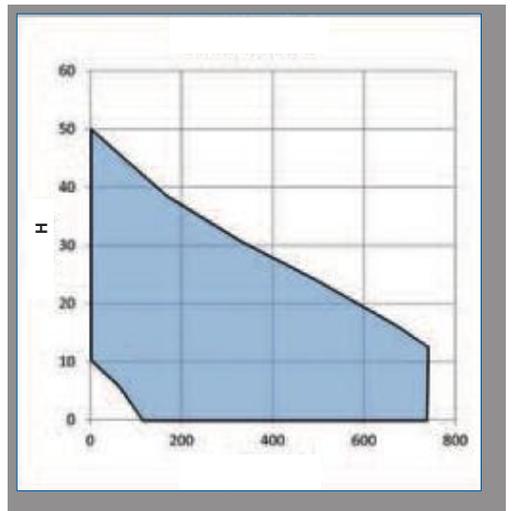


**Duplex
DTP22/42/62 - U**

In Duplex the solids handling performance in combination with high efficiency of this range makes these pumps your first choice for most chemical, abrasive or the combination of the both applications.

Options:

BWK / OWK / VRS / Cooling jacket



DRY INSTALLED CLOSED SCREW CENTRIFUGAL IMPELLER PUMPS

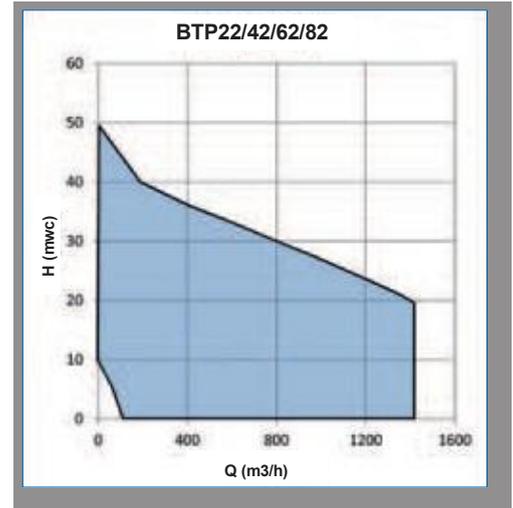


**Cast Iron
BTP22/42/62/82**

The solids handling performance in combination with high efficiency of this range makes these pumps your first choice for most applications.

Options:

HX / HS / HM / HF / KM / VX / VS / VM / ATEX / IEC-Ex 

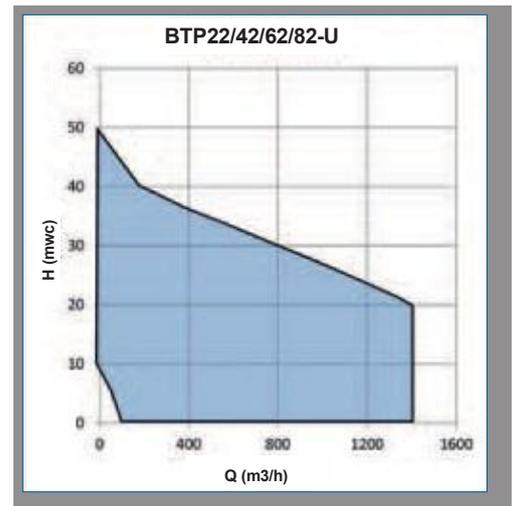


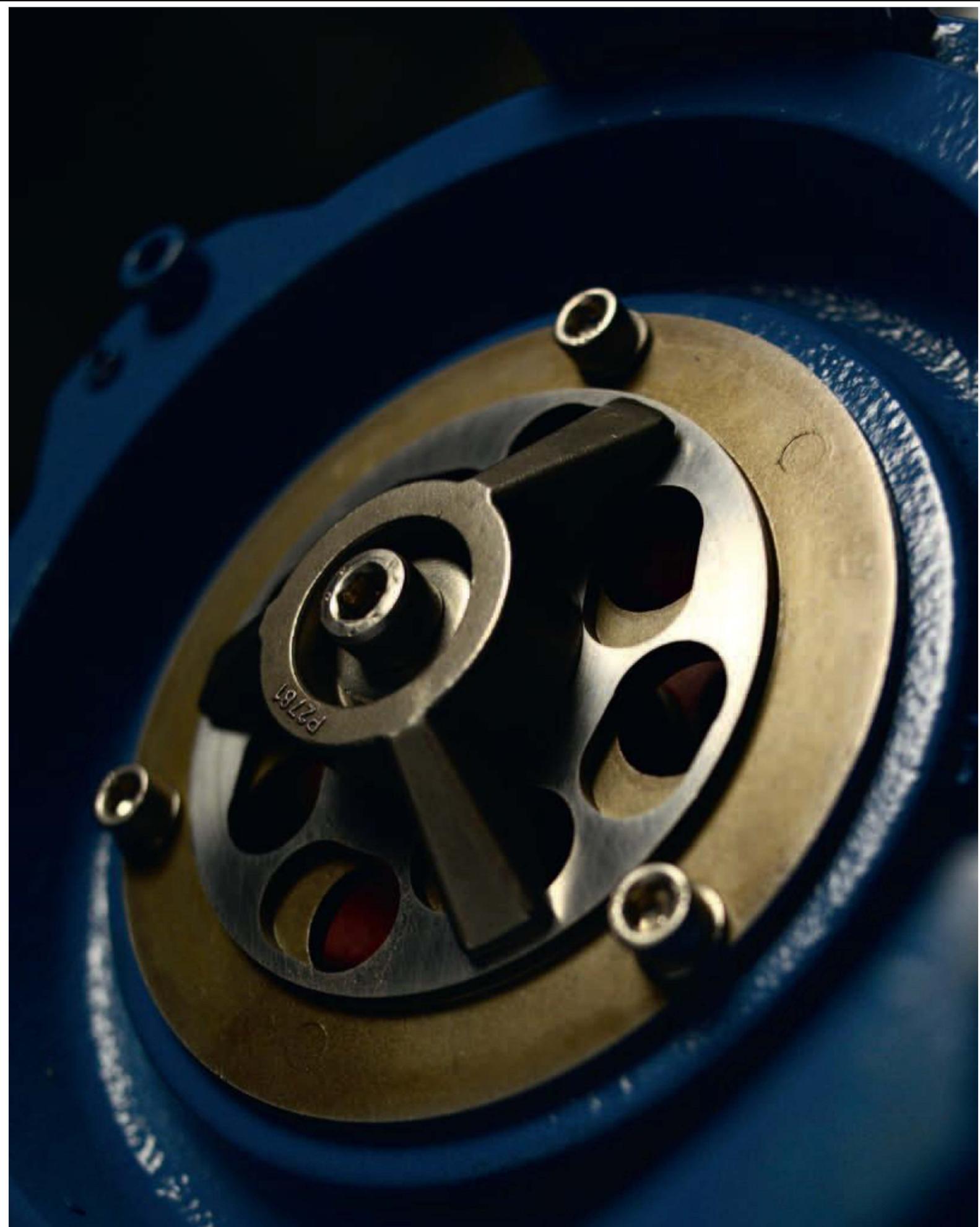
**Duplex
BTP22/42/62/82 - U**

In Duplex the solids handling performance in combination with high efficiency of this range makes these pumps your first choice for most chemical, abrasive or the combination of the both applications.

Options:

HX / HS / HM / HF / KM / VX / VS / VM / ATEX / IEC-Ex 





CUTTER PUMPS

The heavy duty cutter pumps have been specifically designed for sewage and other wastewater applications that do not allow for large solids handling. All the solids are effectively cut into small particles that can be pumped through pipes as small as 32 mm diameter without the risk of blocking. By utilizing small diameter piping, the initial capital cost of the installation is kept to a minimum. This design has proved most successful in solving the problems associated with fibrous tissues in wastewater.

The high heads generated by these pumps enables the use of longer discharge pipes without the need for bigger motors, and they are used extensively in small sewage stations for single or groups of houses where it is not possible to utilize gravity systems. Several pumping stations can be connected to the same discharge. The extreme high head capability of these pumps, with only limited power consumption makes this range ideal in agricultural applications to feed sprinkler installations.

CUTTING SYSTEM

The high torque cutting system cuts, where others grind, and most fragments pass the cutting system without wearing the actual cutting edges. This results in better cutting and a longer lifetime. The cutting system can be easily replaced if necessary.



ADVANTAGES

- Heavy duty bearings greased for life
- Low motor power requirement.
- High head capability
- Adaptable
- Reliable
- Trustworthy
- Many adapters available for easy replacement of other pump brands

SUBMERSIBLE CUTTER PUMPS



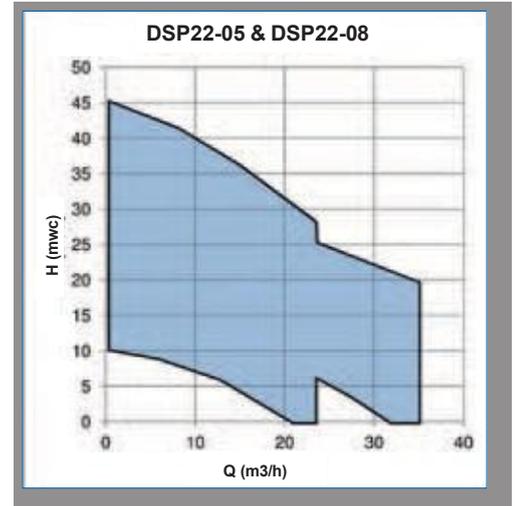
Cast Iron DSP22-05/08

Large solids are cut into small particles that can be pumped through reduced diameter pipelines with no risk of blocking. They are often used for small sewage stations servicing single or groups of houses in areas where gravity systems cannot be utilised.

In industrial applications, the cutter pumps are used when there are fibrous materials in the wastewater.

Options:

BWK OWK / VRS / ATEX / IEC-Ex 



DRY INSTALLED CUTTER PUMPS

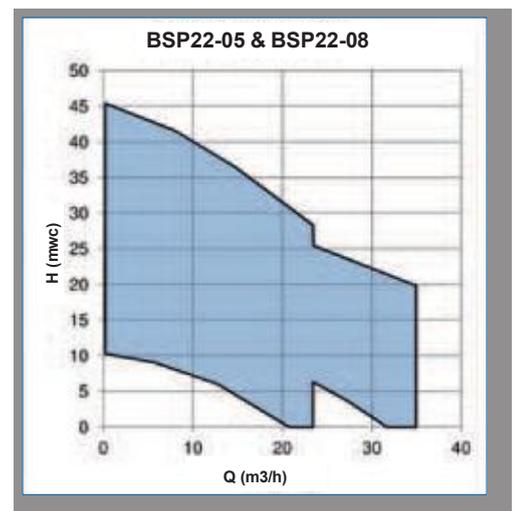


Cast Iron BSP22-05/08

Large solids are cut into small particles that can be pumped through small diameter pipelines with no risk of blocking. They are often used for small sewage stations servicing single or groups of houses in areas where gravity systems cannot be used. In industrial applications, the cutting pumps can be used when there are fibrous materials in the wastewater.

Options:

HX // HS // HM // HF // KM // VX // VS // VM /
ATEX / IEC-Ex 



SPECIALS

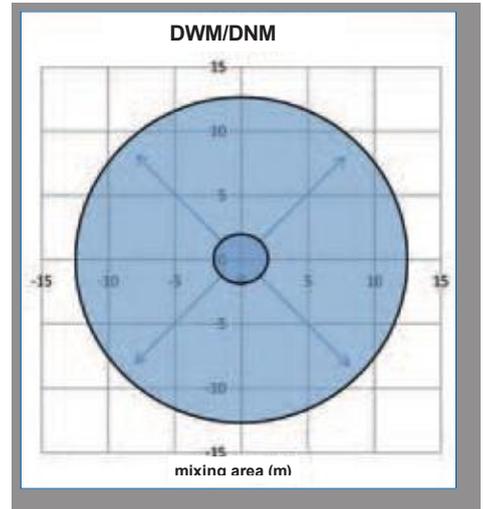


Mixers (DWM/DNM)

Mixers have been designed to keep sumps that are highly contaminated with solids and fibres in suspension. This enables the emptying of the sump with a pump. The Vortex mixers will keep the floor clean and the sewage suspended due to the Vortex principle in all directions. Our customers have found the mixing capacity outstanding, which is why you will find mixers in many industrial mixing and suspension applications. Mixers can be supplied in Cast Iron, Duplex and Nihard4

Options:

VRS / ATEX / IEC-Ex

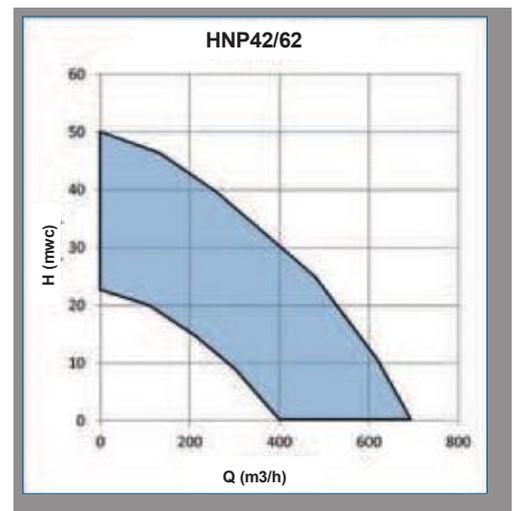


Hydraulic motor (HNP)

The pumps can be supplied with a hydraulic motor. Often used in the marine sector where an oil driven motor is preferred. In mining the hydraulic motor is preferred as it meets the stringent Explosion proof requirements. Great benefits are the compact sizes combined with very powerful motors, and no risk of overloading

Options:

BWK / OWK / VRS / HS / VS / ATEX / IEC-Ex



INSTALLING SUBMERSIBLE PUMPS

Duck foot coupling

For easy submersible installation, Robot has developed the duckfoot coupling. The pump slides easily down the guide rail(s) and will be firmly located on the duckfoot, a great advantage when servicing or checking the installation.



Header coupling

To facilitate the building of compact installations Robot supplies various header couplings. The design is simple, the seal is achieved and sustained by the weight of the pump. Mounting the pump horizontally the pit/sump can be very small. One of the great advantages is a clean sump floor due to the Vortex developed in the sump. When lifting the pump all parts of the coupling are visible and available for inspection. In deeper sumps and/or when installing heavy pumps we advise a duckfoot coupling.



INSTALLING SUBMERSIBLE PUMPS

Vertical



Without options



Optional: claw for Duckfoot



Optional OWK duckfoot coupling set



Vertical with hose connection or threaded connection



(VRS) Vertical freestanding optional hose connection or threaded connection



Optional BWK header coupling set

Horizontal



Without options



With hose connection and/or suction elbow



Optional BWK header coupling set

INSTALLING SUBMERSIBLE PUMPS WITH COOLING JACKET

OWK, BWK, VRS are available as shown on page
"Installing Submersible Pumps".

Vertical



With the immersible installation option

Horizontal



INSTALLING SUBMERSIBLE NI-HARD4 PUMPS (DNP)

OWK, BWK, VRS are available as shown on page
"Installing Submersible Pumps".



Vertical without options



Vertical with agitator,
 stand and discharge bend
 With hose or threaded connection



Vertical slimline, with agitator,
 stand and hose or
 threaded connection

INSTALLING DRY INSTALLED PUMPS

Vertical



(VX) Bare shaft



(VS) Short coupled



(VS) Short coupled with optional immersible installation



(VM) With flexible coupling end fixed electric motor



(VM) With flexible coupling and fixed electric motor with optional immersible installation

Horizontal



(HX) Bare shaft



(HS) Short coupled



(HM) With spacer coupling, base frame and electric motor



(HF) With flexible coupling, base frame and fixed electric motor



(KM) With frame, V-belt drive and electric motor

Fast and well
packed from
our factory



Transparent
Service oriented
Pumps in Stock

pompdirect.nl



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