



**ITT**

**Water & Wastewater**

# Sand pumps

**Vortex - NiHard4**

for sand and grid traps  
in sewage treatment plants

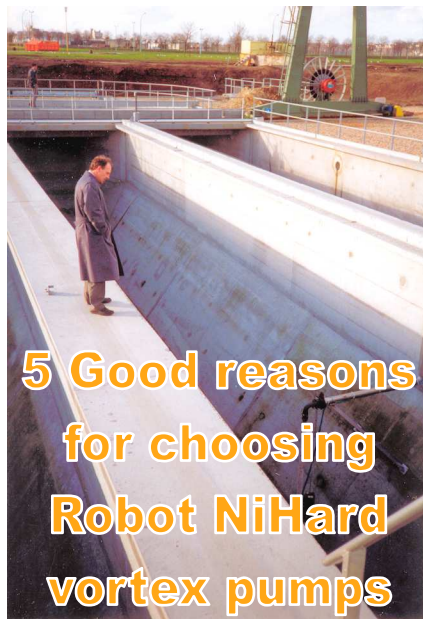


# Wear resistant sand pumps

## Vortex pumps

The Robot RD21 series wear resistant vortex pumps are specially developed for sewage treatment plants to remove sand and grid from the bottom of the grid channels. For over 25 years they prove their reliability and cost effectiveness in many plants worldwide.

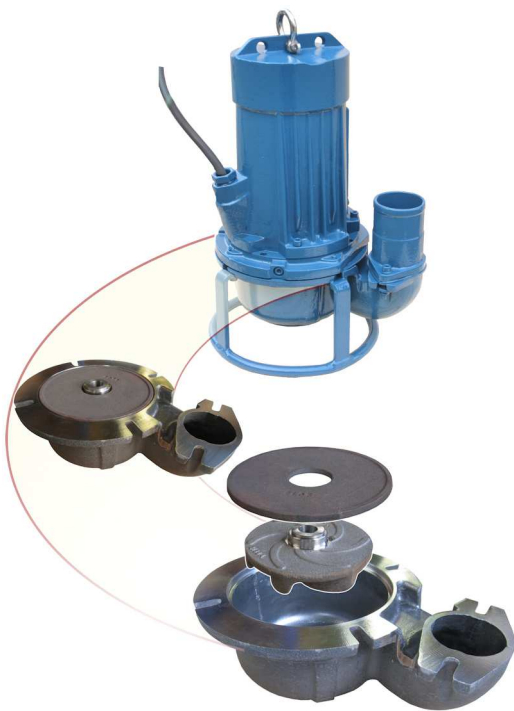
All hydraulic components are from abrasion resistant NiHard4. This includes the impeller, pump casing and the special wear plate that protects the mechanical shaft seal and seal housing.



**5 Good reasons  
for choosing  
Robot NiHard  
vortex pumps**

## NiHard4

NiHard 4 is a casted hi chrome nickel alloy that is naturally hard. With a Brinell hardness of over 500 it's harder than silica sand and yet strong enough to withstand shock impacts by rocks etc. as can be expected in pumps.

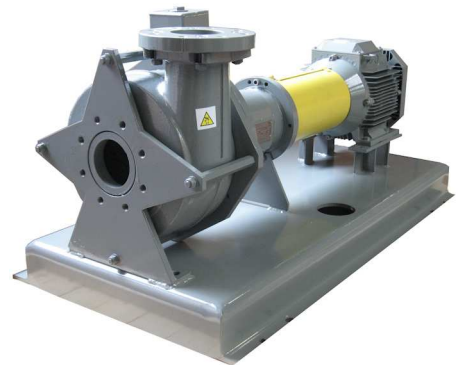


- ▶ Vortex pumps create that little extra turbulence just at the bottom of the channel needed to lift up the heaviest particles.
- ▶ The NiHard4 material for the hydraulic parts proved to have a very good price / life rating.
- ▶ Vortex pump show low to zero drops in performance over a long time without the need for impeller to liner re-adjustments.
- ▶ Replacing the wear parts is very easy and fast. No specific skills are needed, again due to the lack of adjustments.
- ▶ The vortex pumps are hardly affected by rags and other stuff that still floats in the grid channels.

## Sand wash pumps

The Robot BD series NiHard4 vortex pumps for dry installation are the equivalent of the submersible pumps. These pumps are used in the sand wash installations.

Where cast iron pumps show high wear rates the BD series NiHard4 pumps are a good alternative for circulating digester sludge.



For more details, contact:



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