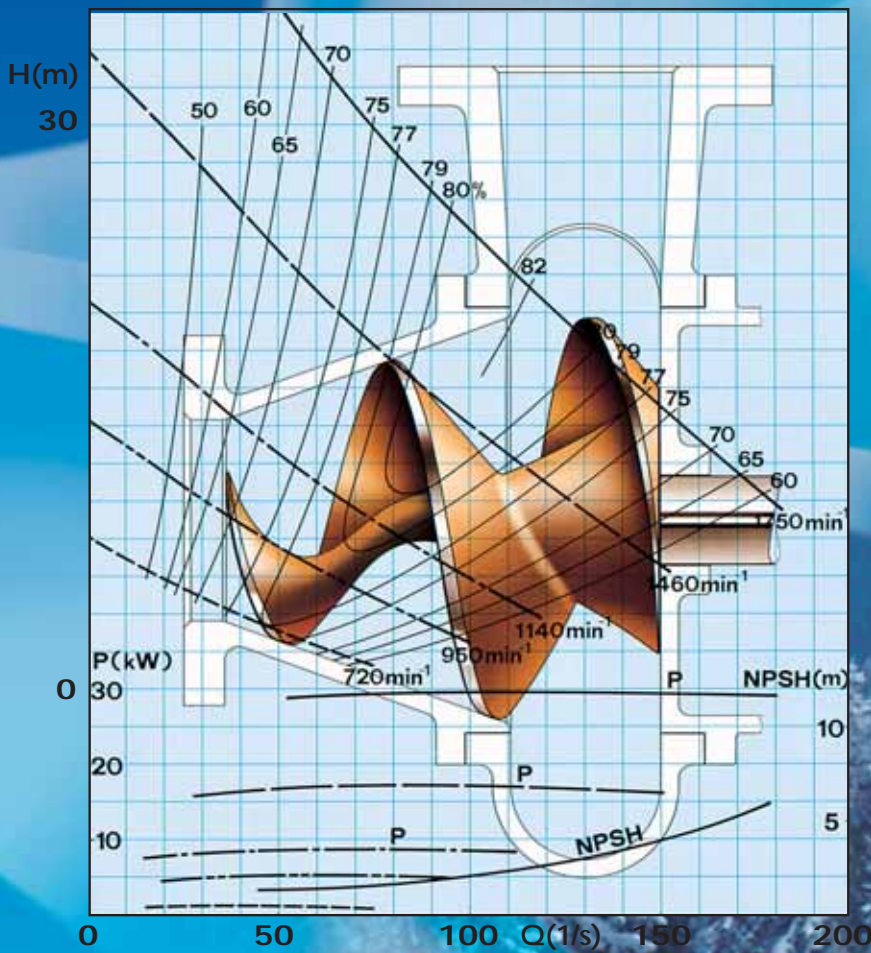


HIDROSTAL, THE INVENTORS OF THE SCREW-CENTRIFUGAL PUMP

MANY YEARS AHEAD IN HANDLING DIFFICULT MATERIALS



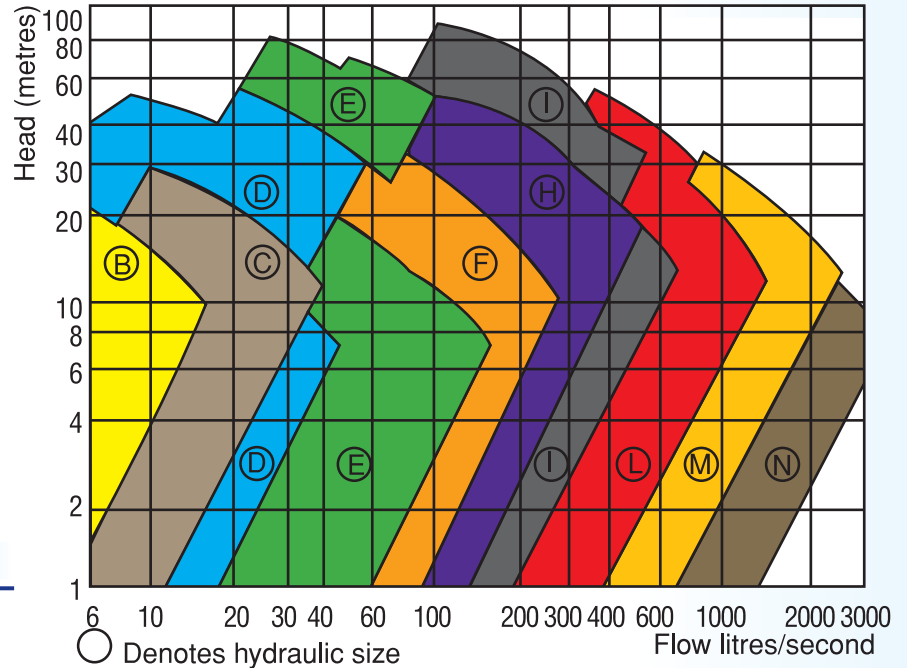
ENGINEERING EXCELLENCE

Hidrostal

SOUTHERN AFRICA (PTY)LTD

Martin Stahle, the founder of the Hidrostal pump company invented the now famous screw-centrifugal pump in 1960.

This construction enabled many pumping problems to be solved and was granted worldwide patents.



Performance

Materials

Code	Pump Casing	Impeller	Liner/ Suction Cover
1	Cast Iron	Nodular Iron	Cast Iron
2	Cast Iron	Nodular Iron	Hidro Iron
3	Cast Iron	Cr. Mo Steel	Hidro Iron
4	Cast Iron	Hidro Iron	Hidro Iron
5	316 St. Steel	316 St. Steel	316 St. Steel
6	Duplex St. St	Duplex St. St	Duplex St. St

The above components are standard build and components can be interchanged. Other materials are available to suit specific applications

Many years of experience in different applications

Delicate handling

Because of the delicate handling ability, the pump is used worldwide for food transportation such as fish or vegetables.

Handling of live fish on vessel.



Non clog pumping

The construction of the Hidrostal screw-centrifugal impeller prevents clogging of even large solids, permitting pumps to operate in lift stations for unscreened raw sewage.



Large sewage lift station equipped with the famous "Prerostal"® flow regulating system

High consistency handling

The Hidrostal pump combines the properties of a centrifugal pump with the advantages of a positive displacement pump. This enables high consistency material to be pumped.



Sludge handling with hydraulically driven mobile Hidrostal pump.

The well known properties of the invention are:

- Steep stable performance curve
- Efficiencies up to 80% and over
- Low NPSH
- Non overloading power curves

Delicate handling

For delicate handling of products, the Hidrostat Screw-centrifugal principle has been modified to produce a special pump having extremely low flow velocities, low inertia forces and friction.

The new pump generation

For more than 30 years a continuous research and development programme has given Hidrostat a technological advantage in handling difficult materials.

For the process industry Hidrostat are now offering a new generation of pumps which in addition to the well known properties has patented features which give the following benefits:

- Handling of **viscous materials** which until now could only be handled by positive displacement pumps.
- **High solids concentrations** require no correction factors, therefore flow is unchanged even with varying concentrations.
- Easy handling of **gas laden** viscous liquids.
- Pumping of **long fibrous solids** is made possible by the specially shaped discharge edge of the impeller blade, which prevents stringy material from becoming wrapped around the impeller.
This permits much smaller pumps to handle rag laden sewage without clogging.
- Constructions and materials for **abrasive and corrosive** liquids.

Applications

Hidrostat process pumps are particularly suitable for handling viscous liquids such as:

- Oil, paint, glue, paper stock
- Food pastes, molasses
- Chemical/process slurries
- High consistency sludges

Hidrostat pumps for delicate handling are used for:

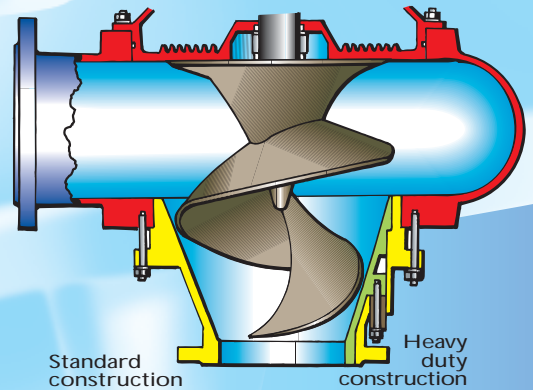
- Shear-sensitive liquids
- Crystals
- Fruit and vegetable handling
- Fish transportation
- Cereals

Hidrostat sewage pumps have nearly unlimited applications for:

- Raw unscreened sewage
- Sludges
- Industrial sewage
- Activated sludge



Immersible pump in dry installation



Hidrostat Hydraulic Section



Hidrostat process pump installation.



Vegetable transportation system.



Immersible Hidrostat pump.

Products

Hidrostal submersible and immersible pumps



Portable submersible pump



Submersible pump for lowering device



Immersible pump with oil cooling jacket.



Axial pump with screw centrifugal impeller

The Hidrostal submersible and immersible pumps are available in sizes from 1,5 to 275 kW. Many types can be built in explosion proof or stainless steel construction.

Hidrostal bearing frame pumps



Heavy duty process pump



Close-coupled process pump



Large bearing frame pumps for vertical or horizontal installation

The process pump line is available in many mounting and driving configurations and materials of construction to suit most applications.

Hidrostal systems



Transportation system for delicate solids handling including feeder devices



Automatic flow regulation system "Prerostal"® without any moving parts.

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