EXCAVATORS AND WATER JET-RING

Dragflow hydraulic cutters EXHY can be attached directly to the pump creating a self-contained excavating system for hard compacted soil where a mechanical excavator would otherwise be required. Excavators mounted on pump also have the effect to increase average solid production of the dredge system.

Dragflow Submersible Cutters features:
- Cutting head is designed to reduce cost of wear parts thanks to interchangeable hard teeth.
- Robust hydraulic motor guarantees strong torque and long life.
- Cutters are designed to work up to 250m working depth, handled by steel cable.

JET RING: break materials with the power of WATER!
High pressure water jet ring system can be used in presence of compact, very dry or clay materials. For electric pumps jets system can be used as an alternative to hydraulic cutters, it consists of a jet ring frame, mounted on the pump strainer, a high pressure centrifugal pump (available in electric and hydraulic versions), a suction hose with water filter and non-returns valve and a delivery line.

Dragflow Jet ring is also available for sea and aggressive mining water.

ACCESSORIES

- Mechanical seal. Dragflow standard sealing system is its superb lip seals combination. A double silicon carbide mechanical seal in combination with a front deflector is available as an option for very abrasive applications.
- Cooling Jacket. Dragflow pumps from 3.7 to 18 kW come with top discharge that creates a natural cooling jacket for the pump. This allows the pump to work even if not completely submerged. An external cooling jacket can be available also for pumps bigger than 26kW and up to 110 kW thus allowing all the range to work also in semi-submerged conditions.
- Acid application package. In cases of high or low pH pump strainer and lifting plates can be supplied in stainless steel (316SS). This choice together with Teflon layers in the seal zone makes Dragflow pumps suitable for environments with pH from 2 to 10.
- Automatic greasing system. Pumps installed in semi-fixed position, or in a "not easy-to-reach" installation, can be equipped with an automatic greasing system that provides fresh grease to the seals on a regular basis. This operation not only increases the overall sealing system life but also allows the operators to dramatically reduce maintenance and checks on the pump.
- Extra coating and Hardened Casing. The quality and type of coating used in Dragflow pumps are designed to face the most difficult and abrasive applications. For some specific applications an extra hardened coating layer can be applied inside the pump casing or pump can be supplied with an hardened casing to ensure extreme long life to this wear part.
- Lower Membrane protection. Often the bottom of mine ponds is covered with a water-proof plastic lining. Action of the pump during dredging operation could damage this lining. With Dragflow you have the option to add a protective ring to the pump strainer in order to prevent any damage.
- Weed cutter-knife. When the slurry is covered by a layer of vegetation, grass or seaweed Dragflow cutter-knife, together with a modified strainer, will help the pump to perform the task without clogging.
- Anti turbidity bell. The sea sediments can be polluted by metals, hydrocarbons, bacteria, chemical substances which in most cases are toxic, resilient and accumulate as debris. A digging operation without turbidity limitation of the surrounding waters could cause serious damage to the marine ecosystem. This problem has been solved by Dragflow through the addition of a bell to capture the sediments and prevent water turbidity.
- Sensors. Temperature sensor, embedded in the motor, and Moisture sensor, in the oil chamber, are available options to protect the pump in the most demanding application.
- Pumps frames. Dragflow pumps are used in the most diversified industrial sectors. Custom frames can be supplied to for specific application such as high depth project, piling project or bentonite slurry wall.

PUMP OPTIONS

- Double mechanical seal
- Cooling Jacket - cooling ring
- Acid slurry package
- Automatic Greasing system
- Rubber and Ceramic coating
- Lower membrane protection
- Cutter-knife for vegetation/organics
- Horizontal Auger
- Pressure compensator for high working depth
- Anti turbidity bell
- Temperature Control
- Moisture sensor
- Frame for Excavators
- Flexible heavy duty hoses
- HDPE Pipes
- Frames for high depth projects
- Frames for piling projects
- Hardened Casing