## THE APPLICATIONS



DPA200 Pump - Dredging



ET10 and DP10 Pumps - Concrete factory



VH20 Pump - Mining industry

TOYO pumps have been in operation for more than 70 years in many applications, notably:

**IOV0** 

#### Construction

- pumping and recycling in cement mills
- preparation, pumping and recycling of bentonite
- transportation of mud, sand and gravel

#### Quarries

• sand and gravel winning cleaning and washing of tanks

#### Mining

- pumping of water in gold, diamond and coal mines
- extraction of very dense and abrasive liquids

#### Dredging

- cleaning and dredging of marinas, harbours, rivers, dams, lakes and irrigation channels
- sand extraction from rivers or seas



DPH300 pump - Civil works

#### Environment

- waste water treatment
- cleaning of sand filters

#### Industry

- cleaning of sedimentation tanks
- pumping of scales, tar, oil residues, wastes and tailings
- relay pumping of heavy slurries
- homogenizing and pumping of mixtures

#### Others

- marine salvage
- pipe laying systems

There are many more applications and a network of distributors is in a position to advise and support you.

## THE SERVICE



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# Ιογο

The TOYO pump is worldwide available through a network of specialists in pumping applications. This guarantees you to get the right equipment and the best technical support.

This service starts with pump selection but may include pumping installation project as well (electric cabel, control panel, discharge hose, jet ring, excavator, electric and hydraulic generator set, complete dredging system).

A comprehensive stock of pumps and spare parts is always available for immediate delivery and support.

## **TOYO PUMPS EUROPE**

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# Heavy slurry pumps

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## THE DIFFERENCE...

Our range of over 150 different models of centrifugal pumps, proposes the most suitable solution to pumping of solids that have settled out of fluid suspension.

Well known worldwide for more than 70 years, the TOYO pumps are famous for their reliability in many fields of applications, particularly in pumping very heavy and abrasive slurries, especially when very tough conditions are met.





The patented built-in agitator allows the stirring up in the liquid of all kinds of solids, of different grain sizes (e.g. mud, gravel, sand, scales, tars, etc.) and the continuous pumping of slurries with concentration in weight of up to 70%.

## The impeller

The semi-open, closed or single canal impeller perfectly matches solids handling requests. The impeller is made of high chrome casting as well as the wear plates and the agitator. The heavy duty design of the pump, available in different metallurgies, associated with the low rotation speed of the high torque powerful motor guarantee efficiency and exceptional lifespan.



Most of our pumps have, at least, one adjustable wear plate. This offers long lasting high level of performance, even in the case of wear of the impeller and wear plates. The design of the pump makes service and maintenance easy.



Between the impeller and the motor, the assembly of special seals, functioning in an oil bath, prevent from the possible entrance of liquids and solids into the upper part of the pump. The strong and short shafts as well as a series of carefully selected bearings allow the pumps to work in the hardest conditions.

## THE RANGE

## **GR Pumps**

**LOVO** 

#### SUBMERSIBLE ELECTRIC PUMPS

- Power from 2.2 to 22 kW
- Class F motor
- Number of poles: 4
- Axial flow of the liquid with partial cooling of the motor (partial immersion possible)
- Thermal protection in standard version
- Semi-open impeller
- One adjustable wear plate from GR15 up to GR30
- Double mechanical seal
- Solids handling up to 40 mm
- Submergence to minus 30m (60 m on request)
- Available in special executions for high temperatures



## **VH and VHA Pumps**

AMPHIBIOUS HORIZONTAL OR VERTICAL ELECTRIC PUMPS

- Power from 1.5 to 30 kW
- Class F motor
- Number of poles: 4
- Designed to work out of the liquid, as well as partially or fully immerged
- The motor is air or water cooled
- Two models both available in horizontal or vertical version VH: 1 outlet
- VHA: 3 outlets (mixing pump)Available with or without agitator
- Available with or withou
  Semi-open impeller
- Semi-open impeller
- One or two wear plates. The bottom one is adjustable.
- Double mechanical seal
- Solids handling up to 80 mm
- Submergence to minus 30 m
- Available in different metallurgies, as well as in special executions for high temperature and, for VH model, in very compact sledge version



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## **ET Pumps**

#### SUBMERSIBLE ELECTRIC PUMPS

- Power from 0.75 to 15 kW
- Class F motor
- Number of poles: 4
- Axial flow of the liquid with full cooling of the motor (partial immersion possible)
- Thermal protection in standart version
- Semi-open impeller
- · One adjustable wear plate
- Double mechanical seal
- Solids handling up to 30 mm
- Submergence to minus 30 m (60 m on request)
- Available in different metallurgies and special executions for high temperatures

# Illurgies and special executions for

ET

## K Pumps

#### NON CLOGGING SUBMERSIBLE ELECTRIC PUMPS

- Power from 2.2 to 30 kW
- Class F motor
- Number of poles: 4
- New patented agitator
- Single channel impeller
- Two level mechanical seals systems
- Solids handling up to 70 mm
- Submergence to minus 30m in standard
- Motor is designed to be air as well as water cooled
- Available in special execution for high temperatures
- Thermal protection is standard. Moister sensor is available on special versions
- Available in different metallurgies, including stainless steel, and with detachable bend



THE RANGE

## **DP Pumps**

#### SUBMERSIBLE ELECTRIC PUMPS

- Power from 2.2 to 110 kW
- Class F motor (class B from 75 kW on)
- Number of poles: 4 6 8 10
- Semi-open or closed impeller
- One or two wear plates. The bottom one is adjustable.
- 2+5 lip seals (mechanical seal in option)
- Solids handling up to 120 mm
- Submergence to minus 30 m (120 m on request)
- Thermal protection is standard (2.2kW to 7.5kW).
- Special versions with thermal protection and moister sensor (11kW to 110kW).
- Available in different metallurgies, including stainless steel, and special executions for high temparatures.
- Available with bend and base from 2.2 to 55kW



## **DPH Pumps**

#### SUBMERSIBLE HYDRAULIC PUMPS

- Power from 11 to 220 kW
- Hydraulic piston motor as standard
- Cooling of the motor by the hydraulic fluid of the power pack (partial immersion possible)
- Closed impeller
- Two wear plates, the bottom one is adjustable
- 2 + 5 lip seals
- Solids handling up to 120 mm
- Submergence to minus 30 m as standard and minus 120 m for special executions
- Adjustable rotation speed
- Numerous possibilities of mounting (hydraulic excavators, dredgers, etc.)
- Available in different metallurgies as well as in special executions for high depths



## **DPFS Pumps**

#### SUBMERSIBLE ELECTRIC PUMPS

- Power from 15 kW to 37 kW
- Class F motor
- Number of poles: 4
- Specially designed to pump heavy and abrasive slurries at high manometric heads
- Closed impeller
- Two wear plates, the bottom one is adjustable
- Lip seals + mechanical seal
- Solid handling up to 35 mm
- Submergence to minus 30 m as standard and minus 120 m for special executions
- Available in different metallurgies with thermal and moisture sensor as well as in special executions for high temperatures



DPFS

## **DV Pumps**

#### VERTICAL ELECTRIC PUMPS

- Power from 2.2 to 110 kW
- Class F motor (from 11 kW up to 110 kW)
- Number of poles: 4 6 8 10
- Semi-open or closed impeller
- One or two wear plates, of which the bottom one is adjustable
- Double mechanical seal (DV3 to DV10), 2+5 lip seals (DV15 to
- DV150)
- Solids handling up to 120 mm
- Motor, oil tank and grease pump are fixed on the base plate
- Available with very long shaft
- Air cooled motor available in explosion proof version
- Maximum slurry temperature up to 80°C in standard and 100°C in special version
- Wet part available in different metallurgies including stainless
   steel

