

# POWER GENERATION INDUSTRY

PUMPING SOLUTIONS

**DP**   
**PUMPS**  
DRAKOS · POLEMIS



# INTRO

In the demanding sector of **Power Generation Industry**, **DP Pumps'** success is founded on expertise. Our know-how and competitiveness is based on many years of experience in the manufacturing of pumps for Projects. DP Pumps offers products with a deep breadth of expertise in the successful application of pre-engineered, engineered and special purpose pumps and systems.

For most types of power plants — fossil fired, combined cycle, Hydro-Electric, large and small industrial power plants, we offer an extensive range of innovative products and services. DP Pumps delivers, condensate extraction, cooling water and auxiliary pumps. Reliability of each pumping solution depends on the proper product design, the right selection, the manufacturing and delivery process, aftermarket service and all associated support. DP Pumps for the power generation are well known over the years for their project dedicated design providing customized products fully covering each project special requirement. The applied manufacturing technology together with strict quality control procedures assure high levels of efficiency, performance and reliability over a full range of process conditions.

Research and development have always been top priority at DP Pumps. Basic research focuses on hydraulics optimization, cavitation, erosion, corrosion and mechanical design to assure best performance and vibration free operation. Our engineers always collaborating closely with cus-

tomers on the practical implementation of our design, using their valuable feedback to optimize our products.

We offer total support to the customer before during and after project completion regardless how big or small the project is, DP Pumps always provides all necessary documentation and performs all required tests starting from raw material, performing NDT's to pumps critical parts, contacting tests and inspections to semi-finished parts and performing several tests to the final product such as:

- Hydrostatic Testing.
- Performance Test acc. ISO 9906 or HI procedures.
- NPSHr Testing acc. ISO 9906 or HI procedures, available even for vertical suspended pumps.
- Minimum Submergence test.
- Vibration Measurements.
- Noise Measurements.

DP Pumps engineers and technicians can offer installation and commissioning solutions that assure proper product installation and significantly reduce required time for project completion.

**Our goal is to be your business partner who delivers customized pumping solutions that improve your operations. Our measure of success is the loyalty of our customers year after year, decade after decade.**



## Combined Cycle

Combined Cycle Gas Turbine (CCGT) power generation is the cleanest and most efficient method of fossil fuel power generation. A CCGT power station combines the technologies of gas turbines and steam turbines to produce electricity more efficiently than can be done using either of these technologies separately.

### Cooling Water Pumps

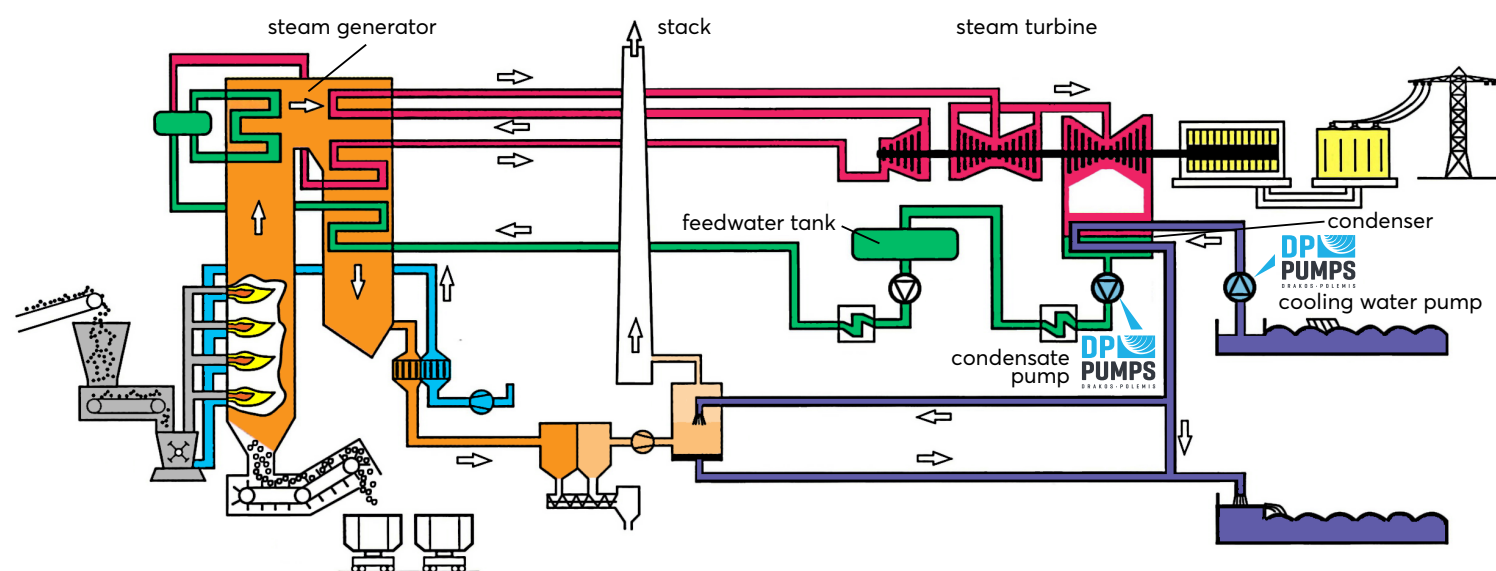
DP Pumps offers both horizontal and vertical pumps for condenser cooling water application. These are available in a wide range of hydraulic and material configurations. Non-pullout or pullout construction is available on vertical models.

### Condensate Water Pumps

Vertically suspended, Mixed Flow design impellers for high capacities or Radial Flow impellers for High Heads, canned pumps in many cases with special first stage for very low NPSHr provide reliable duty in these difficult services. Horizontal pump designs are also available.

### Auxiliary Pumps

DP Pumps offers a wide range of horizontal and vertical pumps, including ISO and EN designs for all auxiliary services within the power plant. These are available in a wide range of hydraulic and material configurations.



## Fossil Fuel

DP Pumps provides a great deal of solutions in supplying pumps and pumping systems for fossil fuel power generating plants. In the demanding process applications of a fossil fuel plant DP Pumps offers the most comprehensive package of pump products, technical support and service for most of the process stages among with a lot of auxiliaries services.

### Cooling Water Pumps

DP Pumps offers both vertical and horizontal circulating pumps in a wide range of configurations, hydraulics and materials to meet any application requirement. Pullout or non-pullout construction is available on vertical pump models. Fabricated Metallic volute pumps are also available for these services.

### Condensate Pumps

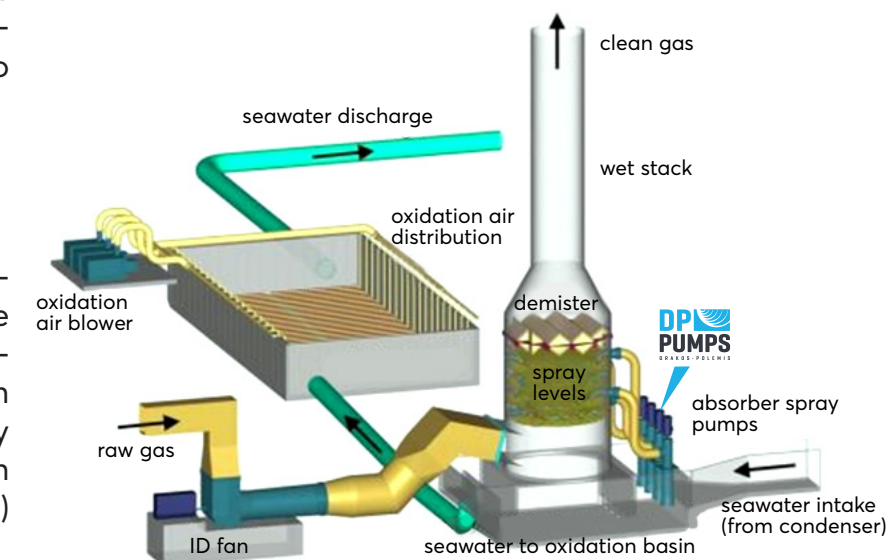
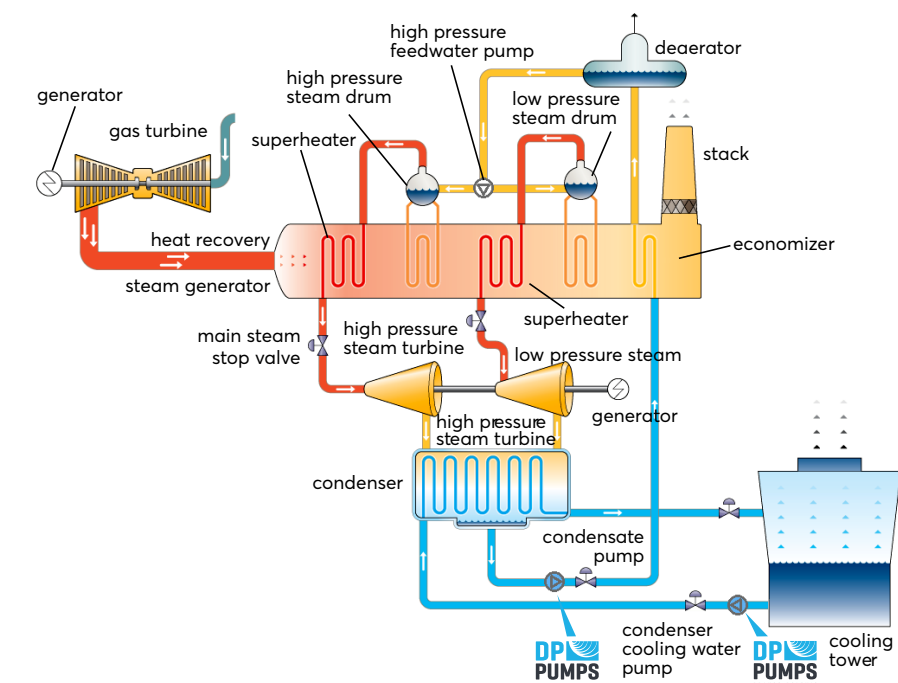
DP Pumps offers a wide range of solutions for this critical service. Pumps are designed including Both single and double-suction, first-stage, depending on the application requirement. Vertically suspended pump designs along with Horizontal designs (where applicable) are available.

### Flue Gas Desulfurization Process Pumps

DP Pumps designs and manufactures pumps for a lot of FGD system services. Some of these services include, absorber Spray pumps, absorber recirculation pumps.

### Auxiliary Pumps

DP Pumps offers an extensive line of pumps, including ISO and EN designs. They are available in a wide variety of materials and in many design and hydraulic configurations vertical or horizontal to meet all plant pumping needs.







## PRODUCT RANGE

### Circulating Pumps (Cooling)

DP Pumps provides a great deal of solutions in supplying pumps and pumping systems for fossil fuel power generating plants. In the demanding process applications of a fossil fuel plant DP Pumps offers the most comprehensive package of pump products, technical support and service for most of the process stages among with a lot of auxiliary services.

#### Concrete Volute Pumps (Type CVP-NA)

**Pull out assembly.** Construction simplicity and maintenance facility.

**Concrete volute casing and suction bell.** Reduced vibrations, increased pump life.

**Low total life cycle cost.** Reduced structure cost, low maintenance cost, low operation cost.

**High flow rate.** Suitable for flow rates that the conventional pumps could not reach.

**Low speed.** Slower running speed, shorter submerged setting depth, long bearings life.

**Prefabricated parts.** Optimal hydraulic shape, finest surface quality, simplicity to construction. Steel liner available.

**Corrosion and erosion resistance.** Longer operating life.

#### Operating Parameters

- Flows to 105000 m<sup>3</sup>/h
- Heads to 35 m
- Speeds from 100 to 300 rpm
- Temperatures to 50 °C

#### Vertical, Mixed Flow Wet-Pit Pumps (type MV)

Vertical Mixed flow pumps (type MV), custom designed to perfectly much project needs. Detailed engineered for best performance and vibration free operation. Designed for extended operation in condenser cooling and circulating water service. Available in pullout and non-pullout designs

#### Operating Parameters

- Flows to 50,000 m<sup>3</sup>/h
- Heads to 200 m
- Temperatures to 65 °C

## PRODUCT RANGE



### Circulating Pumps (Cooling)

#### Vertical, Axial Flow

#### Wet-Pit Pumps (type AV)

Vertical Axial flow pumps (type AV), specifically designed for high capacities and low heads pullout and non-pullout designs

#### Operating Parameters

- Flows to 50,000 m<sup>3</sup>/h
- Heads to 10 m
- Temperatures to 65 °C
- Pressures to 6 bar

#### Horizontal Axially Split Casing Pumps (Type ASN / ASN-E)

Axially split, single or double volute, double-suction pumps (type ASN / ASN-E). Robust construction specifically designed for extended cooling water and circulating water services

#### Operating Parameters

- Flows to 15,000 m<sup>3</sup>/h
- Heads to 200 m
- Temperatures to 140 °C
- Pressures to 25 bar

#### Fabricated Metallic Volute Pumps (Type NA/FV)

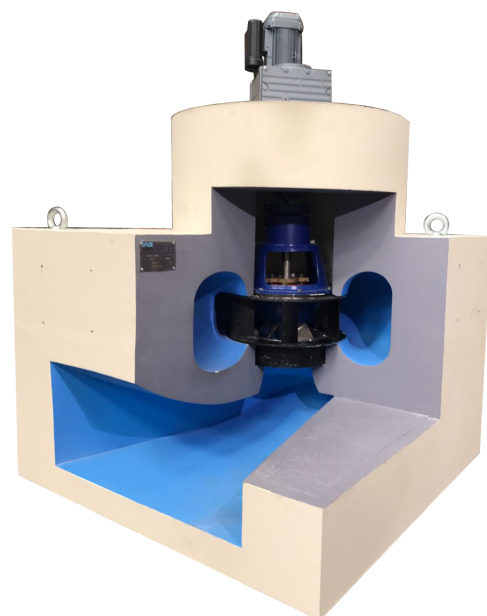
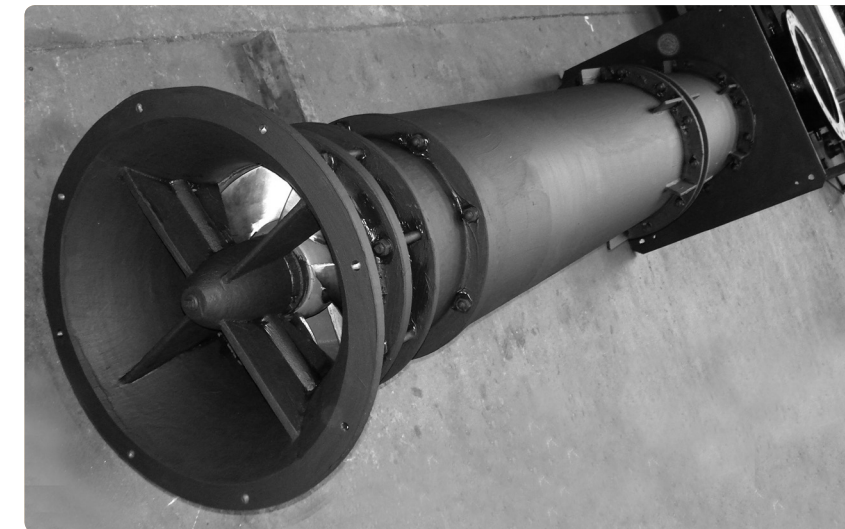
Pre-fabricated Metallic sections form intake and casing structure of the pump.

#### Pump types

- Mixed flow, open impeller
- Mixed flow, closed impeller
- Radial flow, closed impeller

#### Operating Parameters

- Flows to 50,000 m<sup>3</sup>/h
- Heads to 100 m







## PRODUCT RANGE

### Condensate Extraction Pumps

#### Vertical, Multistage, Canned Pumps (Type CP)

Multistage design with mixed flow impellers for higher capacities or radial flow impellers for high head requirements. Heavy-duty pumps with single- or double-suction first stage to meet NPSH(a) requirements. Designed for continuous and extended operation.

##### Operating Parameters

- Flows to 10,000 m<sup>3</sup>/h
- Heads to 400 m
- Temperatures to 140°C

### Flue Gas Desulfurization Pumps

#### Absorber Recycle Pumps (Type NAX)

Horizontal Radially split pumps (Type NAX) with back pullout design for recirculation services

##### Operating Parameters

- Flows to 15,000 m<sup>3</sup>/h
- Heads to 40 m
- Sizes 250 mm to 1000 mm

#### Absorber Spray Pumps (Type MV)

Vertical Mixed flow pumps (type MV), custom designed to perfectly much project needs. Detailed engineered for best performance and vibration free operation. Specifically designed for extended operation in absorber spray water service; pullout and non-pullout designs

##### Operating Parameters

- Flows to 50,000 m<sup>3</sup>/h
- Heads to 200 m
- Temperatures to 65°C

## PRODUCT RANGE



### Auxiliary Services Pumps

#### Horizontal Pumps acc. EN standards and Process type ISO Standard Pumps (Type LDP, MDP, NA)

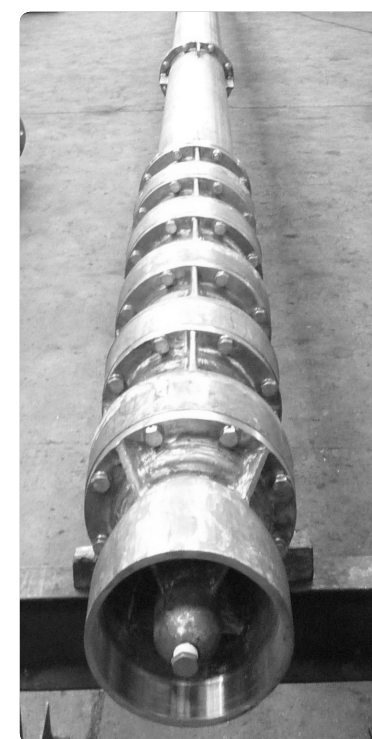
- Flows to 2500 m<sup>3</sup>/h
- Heads to 150 m
- Temperatures to 140°C

#### Vertical Sump Pumps (Type LDP-VW, SP-VW)

- Flows to 2000 m<sup>3</sup>/h
- Heads to 100 m
- Temperatures to 100°C
- Seal-less design

#### Desalination Intake Pumps (Type DWP, MV, AV)

- Flows to 10000 m<sup>3</sup>/h
- Heads to 100 m
- Temperatures to 50°C







# PRODUCT RANGE



## Booster Sets

- Flows to 1000 m<sup>3</sup>/h (per pump)
- Heads to 160 m
- Temperatures to 140°C
- Complete Skid Mounted Set **Including:**

- Pumps with Motors
- Hydraulic Equipment
- Control Panel
- Control Sensors
- Pressure Vessel

## Fire Fighting Sets

- Flows to 1500 m<sup>3</sup>/h (per pump)
- Heads to 160 m
- Complete Skid Mounted Set **Including:**

- Pumps with Motors
- Hydraulic Equipment
- Control Panel
- Control Sensors
- Pressure Vessel
- Flow Meter (optional)
- Test Line (optional)

## Diesel Fuel Supply / Feeding Skids

**Skid-Mounted system, Engineer - to - Order (ETO)**

Designed and manufactured based on very specific customer requirements

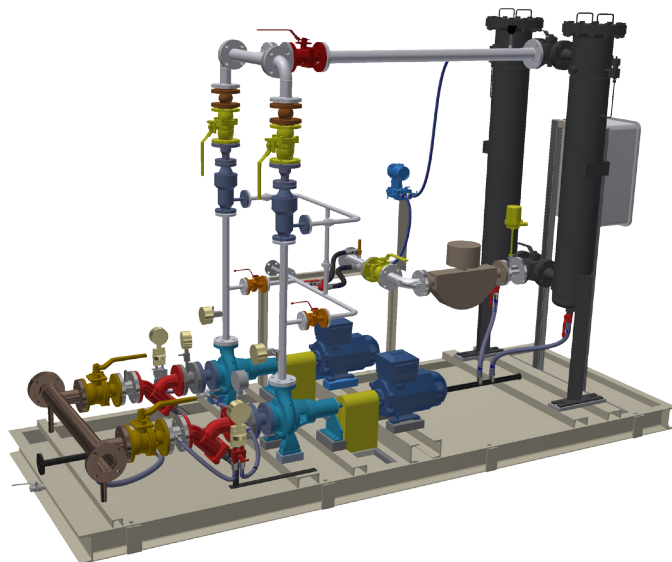
### Applications:

- GT Fuel Feeding
- Diesel Oil Transfer

### System Components:

- Pumps
- Motors
- Control Panel
- Fuel Dual Filter (Filtration degree as per application specs)
- Pressure & Heat Transmitters
- Valves & Hydraulic Equipment
- Flow Meter (Custody Transfer available)

\* All equipment is ATEX certified







WATER BRINGS LIFE. WE BRING WATER.

[www.dppumps.global](http://www.dppumps.global)