



A Tsurumi Pump Company

CIVIL/INDUSTRIAL



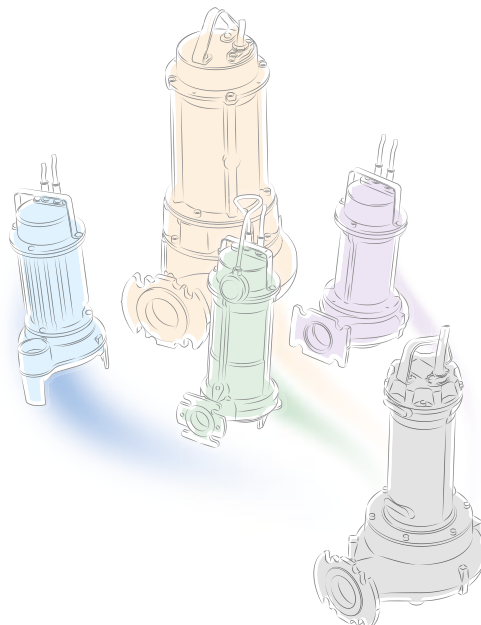
SUBMERSIBLE ELECTRIC PUMPS
FOR DRAINAGE, CIVIL AND
INDUSTRIAL LIFTING SYSTEMS

series
Grey

Why Grey?

The Zenit **Grey series** is a new solution for pumping clear wastewaters and black waters in civil, residential and industrial applications.

SERIES
Grey



The **Grey series** updates the offering with efficient, reliable products, while also **rationalising** the range.

The **Grey** project features completely **redesigned** hydraulics and motors, to guarantee high performance, low consumption and outstanding versatility.

This means clearer choices for end users selecting their products, and more efficient industrialisation. And greater efficiency means even better reliability and lower costs, all benefiting customers.

It's easily, with the **Grey series**.

Grey series

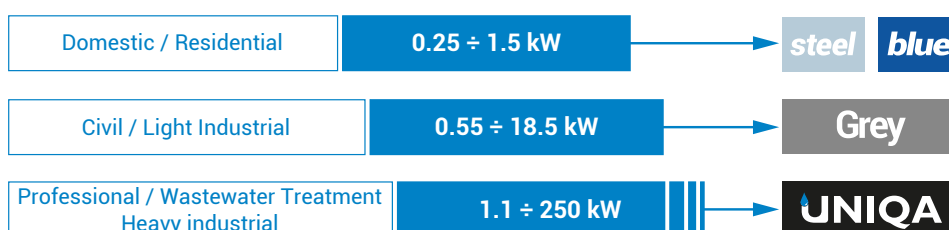
Motors

- from 0.55 to 18.5 kW operating at 50 and 60 Hz
- double mechanical seal in oil chamber

Hydraulics

- vortex (**DGG**)
- channel (**DRG**)
- grinding (**GRG**)
- high head (**APG**)
- channel impeller with innovative cutting system (**CTG**)

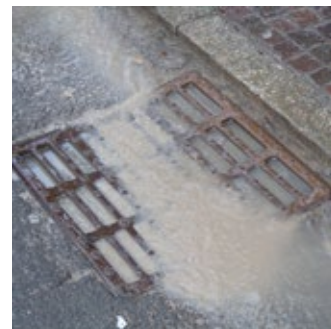
Development of the Zenit range for global water treatment



One range, a thousand applications

Thanks to its versatility, the **Grey series** can be used in a very wide variety of sectors, from civil/residential to industrial installations.

These units' strong points lie in the key principles that inspired and guided the design team throughout their development.



Innovation

The **Grey series** is highly innovative from many points of view. It is new in its practical, functional design.

New in its colour, standing out from the competition and other Zenit models.

New in its operation, thanks to leading-edge engineering, efficient motors and completely redesigned hydraulics that deliver excellent performances.



Reliability

A submersible pump must guarantee trouble-free continuous service.

Exceptionally reliable, the **Grey series** needs far fewer repairs, cutting the relative costs.

Running costs will be lower and there will be fewer plant stoppages, meaning less inconvenience and more effective service scheduling.



Economy

Every installation and maintenance engineer needs to cut submersible pump purchasing, assembly and maintenance times and costs.

With the **Grey series** all this is possible thanks to a wide choice of models and the use of immediately available standard components, which deliver optimisation of any application, shorter installation times and slashed maintenance costs.



Simplicity

A good motto for the **Grey series** would be "the strength of simplicity".

The Zenit engineers realised that simple things are unlikely to fail and easy to repair.

Exactly what installers, plumbers, heating engineers and everyone else who uses these pumps needs: machines that are easy to install and use, built to facilitate maintenance and compatible with existing systems.



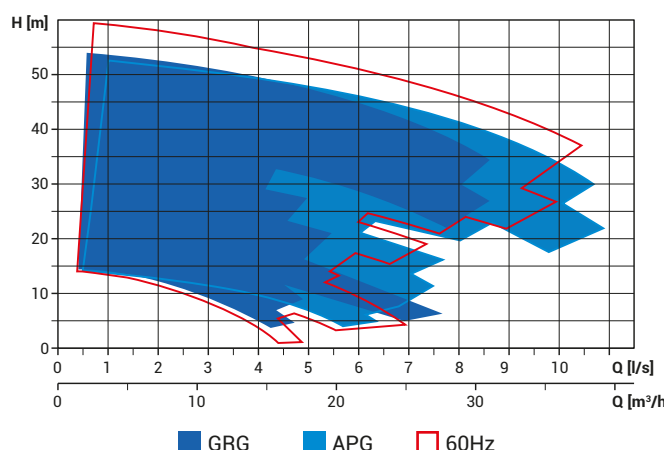
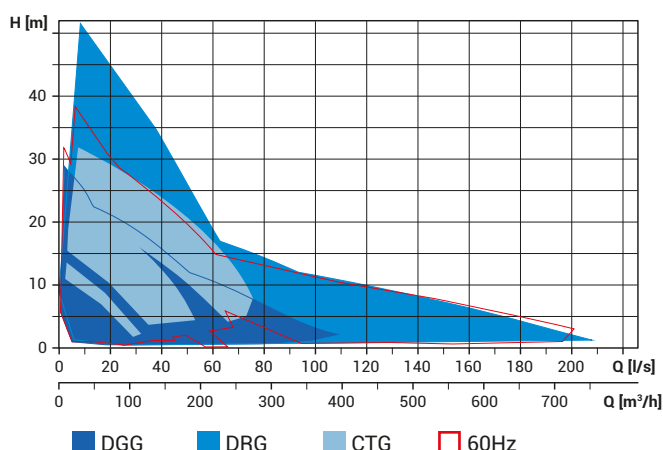
Characteristics

- Cast iron structure
- Three-phase motor from 0.55 to 18.5 kW
- Insulation: class H (180°C)
- Protection rating: IP68
- 50 Hz and 60 Hz versions
- Thermal protection devices incorporated in stator
- AISI 431 drive shaft
- Two silicon carbide mechanical seals in large oil chamber
- Discharge from DN32 to DN250
- Large free passage

Range with ATEX certification:



Overview of operating ranges



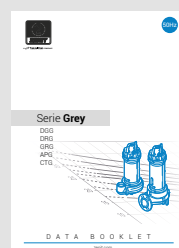
Construction materials

Motor casing	Cast iron GJL-250
Impeller	Cast iron GJL-250
Impeller [CTG]	
Suction flange with smashing system [CTG]	Cast iron GJS-600
Mechanical seals	Two in silicon carbide (2SiC)
Nuts and bolts	Stainless steel - class A2-70
Standard gaskets	NBR
Drive shaft	AISI 431 Stainless Steel
Chopper knife [GRG]	Chromium steel
Painting	Bicomponent epoxy paint with high resistance to corrosion

Operating specifications

Max operating temperature	40°C
pH of liquid	6 ÷ 14
Max submergence	20 m
Max liquid density	1.1 kg/dm³
Max acoustic pressure	<70 dB
Max. starts/hour	20 (<10 kW) 15 (>10 kW)

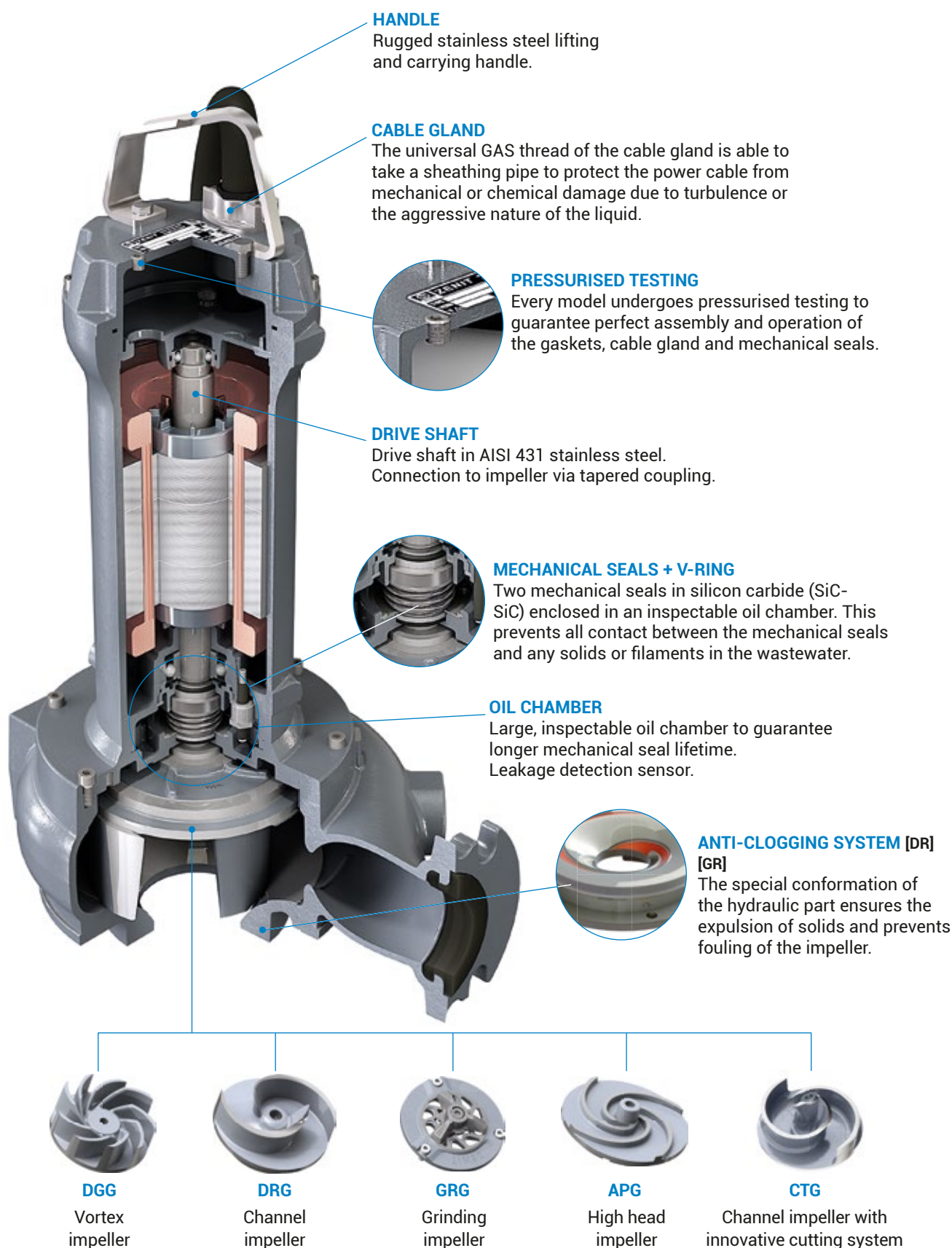
The data provided are not binding.
Zenit reserves the right to modify any product without notice.



ZENO
NAVIGATOR SUITE

The technical **Data Booklet** complete with duty curves is available for download in the download area of **zenit.com**. To select the pump best suited to your needs we advise you to use the **Zeno Pump Selector** configuration tool on the **zenit.com** website.

Your guide to Grey



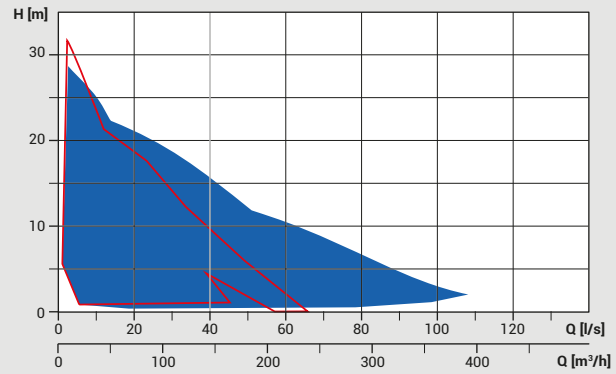
DGG

Hydraulics

- Vortex impeller
- Full free passage

Suitable for

- Biological liquids and wastewater
- Civil and industrial lifting
- Wastewater treatment plants and livestock farms



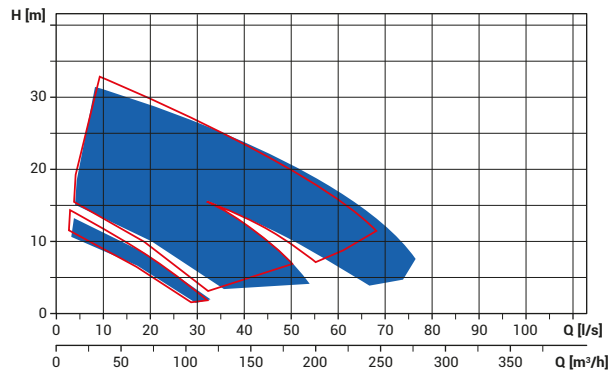
CTG

Hydraulics

- Cast iron GJS-600 channel impeller with Cutting System
- Large free passage

Suitable for

- Liquids containing solid parts and fibres
- Civil, industrial and agriculture applications



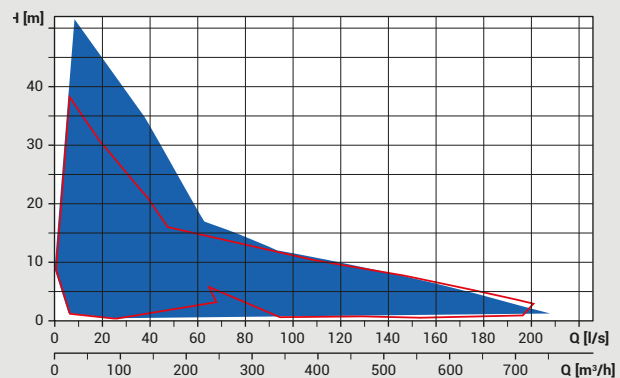
DRG

Hydraulics

- Channel impeller
- Large free passage

Suitable for

- Recirculation of industrial and process waters
- Civil lifting
- Drainage and lifting of water from first rainfall tanks



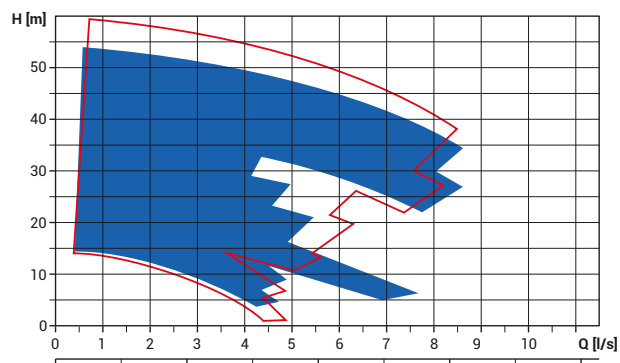
GRG

Hydraulics

- Multi-channel open impeller
- Grinding system with rotary knife

Suitable for

- Lifting of liquids containing fibres and filaments
- Professional and industrial applications
- Livestock farms



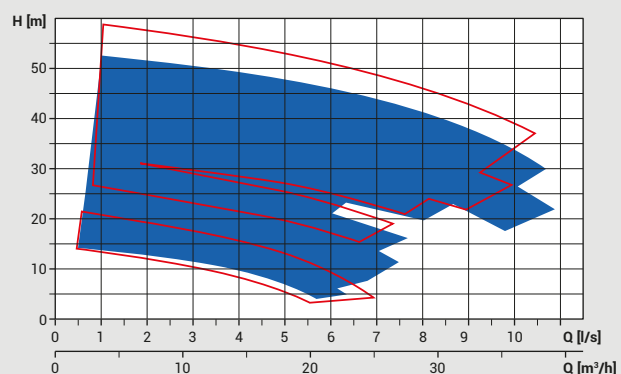
APG

Hydraulics

- Multi-channel open impeller
- High manometric head

Suitable for

- Industrial applications and car-washes
- Clean water in fountains and water features
- Irrigation and fish farming



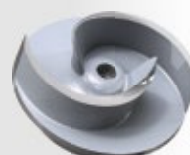
		50Hz	60Hz
Type of impeller		Vortex	Vortex
Power (P2)		0.55 ÷ 15 kW	0.55 ÷ 11 kW
Poles		2 / 4	2 / 4
Discharge	V	GAS 1½" / GAS 2½"	GAS 1½" / GAS 2½"
	H	G2" / DN32 ÷ DN150	G2" / DN65 ÷ DN100
Free passage		max 125 mm	max 100 mm
Max flow rate		105.6 l/s	66 l/s
Max head		24.5 m	31.8 m



		50Hz	60Hz
Type of impeller		Channel with cutting system	Channel with cutting system
Power (P2)		2.2 ÷ 15 kW	2.2 ÷ 15 kW
Poles		4	4
Discharge	V	-	-
	H	DN80 ÷ DN100	DN80 ÷ DN100
Free passage		max 44 mm	max 44 mm
Max flow rate		75.5 l/s	68 l/s
Max head		33.4 m	32.8 m



		50Hz	60Hz
Type of impeller		Channel	
Power (P2)		0.55 ÷ 18.5 kW	0.55 ÷ 15 kW
Poles		2 / 4 / 6	2 / 4 / 6
Discharge	V	G1½" ÷ G2½"	G1½" ÷ G2½"
	H	G1½" DN32 - G2" DN32 DN65 ÷ DN250	G1½" DN32 G2" DN32
Free passage		max 100x70 mm	max 100x70 mm
Max flow rate		205.3 l/s	201 l/s
Max head		50 m	38.5



		50Hz	60Hz
Type of impeller		Grinder	Grinder
Power (P2)		1.1 ÷ 7.5 kW	1.1 ÷ 7.5 kW
Poles		2	2
Discharge	V	-	-
	H	G1½" DN32 / G2" DN32	G1½" DN32 / G2" DN32
Free passage		-	-
Max flow rate		8.4 l/s	8.4 l/s
Max head		53.3 m	59.5 m

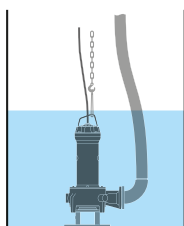


		50Hz	60Hz
Type of impeller		High head	High head
Power (P2)		1.1 ÷ 7.5 kW	1.1 ÷ 7.5 kW
Poles		2	2
Discharge	V	-	-
	H	G1½" DN32 / G2" DN32	G1½" DN32 / G2" DN32
Free passage		max 10 mm	max 10 mm
Max flow rate		10.5 l/s	10.5 l/s
Max head		51.9 m	59 m

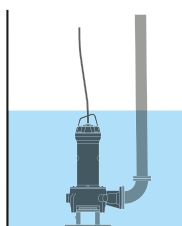


Installations and accessories

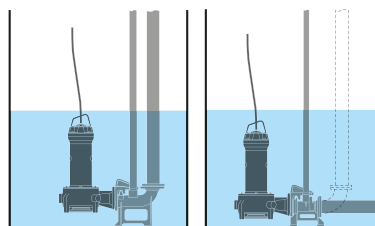
A full range of **accessories** supplied as standard simplifies any **installation**.



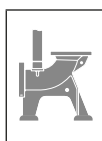
FREE installation



PERMANENT installation



Installation with BOTTOM COUPLER



Bottom coupling devices

- Cast iron body - steel screws
- Vertical and horizontal outlet
- GAS 1½" - GAS 2" / DN65 ÷ DN250



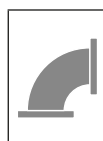
Ball check valve

- Cast iron body - steel screws
- Rubber ball
- GAS 1½" - GAS 2" / DN65 ÷ DN250



Gate valves

- Cast iron body with bronze seats
- Integral free passage



Outlet curves

- Cast iron or galvanised steel
- Integral free passage
- DN65 - DN250



Bases

- Cast iron or galvanised steel
- Ideal for free installation



Chains

- Stainless steel and galvanised steel
- Ø 5mm, 8mm, 12mm

Maintenance and Service

Grey models allow **easy maintenance** thanks to their simple, rational construction.

The **Grey series** has been designed and built to facilitate the routine replacement of parts subject to wear and tear, to extend the life-cycle and cut operating costs.

Installation Engineers and Authorised Service Centres are provided with full documentation and detailed installation diagrams, to offer unbeatable maintenance service and ensure high product quality standards.



Full territorial coverage and an efficient organisation assure the **customer** support in all phases of the process, from design to shipping arrangements.



BEFORE-SALES

Product selection
Customisation
Cost and consumption estimate



CONSULTING

Evaluation of solutions
Design of system
Presence on site



AFTER-SALES

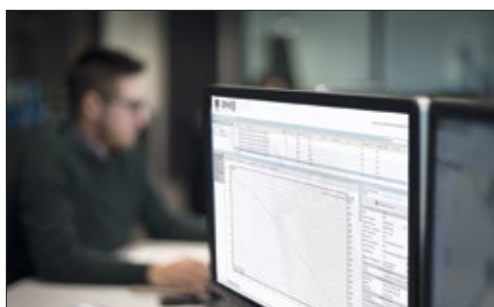
Support during installation
Assistance during testing
Authorised service centres

ZENO Navigator Suite: one-click access to the right solution for you

The Zenit online and mobile service platform for managing the before- and after-sales process.

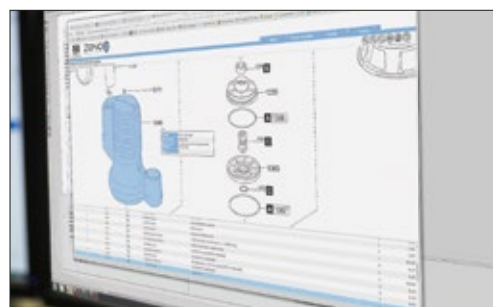
Designed to meet the needs of sector professionals, whether you are an engineering firm, a plant operator or an installer, the ZENO portal is the most effective tool for managing your business.

The **ZENO Pump Selector** application provides useful assistance during the electric pump selection and configuration process, and the product that meets the search parameters can be swiftly identified through selection by duty point or by choosing the type of hydraulics directly.



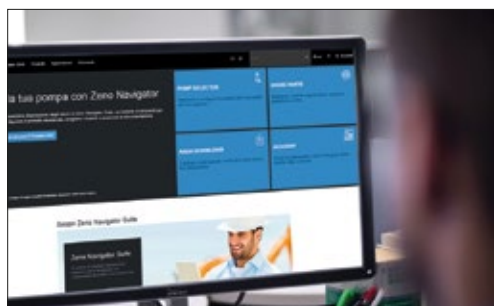
PUMP SELECTOR

The solution that provides invaluable assistance for the entire Zenit electric pump selection and configuration process, right through to generation of the final quotation.



SPARE PARTS

A quick, user-friendly tool enabling you to easily select the spare part you require, add it to your cart and send off your order automatically, with just a few clicks.



DOWNLOAD

You have access to a library of Zenit and industry technical and commercial documentation.



ACADEMY

The Academy selection offers you all information required for knowledge of and training in Zenit products and services.



Mobile, ZenoApp on smartphone and tablet,
available for iPhone and Android

www.zenit.com



Zenit Group

Today the Zenit Group ranks among the top national and international names in the design and manufacture of submersible electric pumps for domestic, civil and industrial use, and water treatment systems.

With the know-how and experience acquired over the years, Zenit offers the market a comprehensive range of products designed to meet the most demanding needs.

Our organisation

Zenit is a modern industrial organisation with a workforce of over 250 and 4 locations worldwide, that manages its markets directly and with success, thanks to full territorial coverage. This international expansion is driven by our desire to serve our customers better with closer proximity.

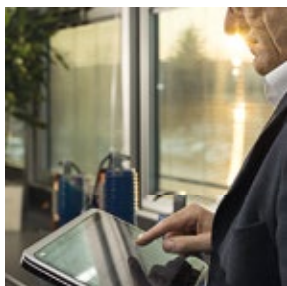
Each **Zenit** group company has its own organisation, but they all operate in pursuit of a single mutual objective. Our origin as a family business has enabled us to stay streamlined and flexible, quick to respond with effective solutions.

WE STRIVE TO BE A
VALUABLE PARTNER YOU
CAN TRUST IN YOUR SEARCH
FOR WATER TREATMENT
SOLUTIONS AND SERVICES.





Come and visit us at
www.zenit.com



A  **TSURUMI PUMP** COMPANY



For further information, visit www.zenit.com