



**GRUPEL**  
energy everywhere



# GRUPEL GENERATORS

[www.grupel.eu](http://www.grupel.eu)

# Why choose **GRUPEL**

## **EXPERIENCE**

More than 45 years developing, producing and selling power generators, with projects in sectors as diverse as power plants, oil and gas, industry and commerce or construction.

## **QUALITY**

We work with internationally recognized quality components, such as Perkins, Baudouin and Iveco engines and Leroy Somer and Stamford alternators, as well as, among others, our own brand, Grupel.

## **VERSATILITY**

Grupel has a wide range of products, from portable generators to solutions up to 3500kVA, gasoline, diesel or gas, with the possibility of extras, depending on the client's needs, location or context of use.

## **SUPPORT AND SERVICES**

Our team works daily to help you with any need or doubt you may have, or any intervention you may need. We have a specialized team in providing support and maintenance services for your power generator.

## **WORLDWIDE PRESENCE**

Grupel is a brand distinguished and awarded on several occasions in Portugal. But it is not only recognized in this country, being found in over 70 countries on 5 continents.



# With over 45 years of experience in the production and selling of generators, we bring energy to the whole world.

Grupel is a Portuguese company, founded in 1976, that produces and sells portable and stationary power generators up to 3500kVA, as well as portable lighting towers, with components from internationally renowned brands and our own.

With the largest production unit of power generators, in Portugal, equipped with state-of-the-art machinery and in a continuous process of digital transformation, Grupel develops solutions tailored to the needs of clients around the world, also ensuring services of technical assistance and supply of spare parts of great quality.

Grupel is distinguished with the Five Stars Award and holds the SME Leader Status, in Portugal. It is also internationally recognized, being present in over 70 countries.



# GRUPEL GENERATORS



## ALTERNATOR

Grupel guarantees quality and reliability, by using alternators from the renowned Leroy Somer and Stamford, as well as its own brand. With a wide range of powers, these alternators are easily coupled with several engines.

## CHASSI

- ✓ Steel frame
- ✓ Anti-vibration system
- ✓ Paint with anti-corrosion treatment
- ✓ Lifting system
- ✓ Integrated tank



### CONTROL PANEL

The control panel is responsible for monitoring and protecting Grupel's generators and can be considered the "brain" of the set. It can be found on the chassis, either in open or soundproofed versions.

### CANOPY

- ✓ Reduced welding points, minimizing the risk of oxidation.
- ✓ Insulated with anti-noise and anti-fire material
- ✓ Polyester epoxy paint
- ✓ Efficient air flow for engine cooling
- ✓ Easily accessible control panel
- ✓ Side doors
- ✓ Anti-corrosion treatment
- ✓ Steel, stainless steel or aluminum plate
- ✓ Plastic fuel tank, which is more durable



### AUTOMATIC TRANSFER SWITCH

The automatic transfer switch is responsible for the commutation between the electric grid and the genset (and vice-versa). While functioning automatically, it is also used to connect alternating generators.

### ENGINE

Grupel uses different engines in its generators, in order to adapt to the needs of its clients and the requirements of the projects it undertakes.



Over the years, we have been committed to the quality and differentiation of our products, always aiming to offer the best solutions to our customers.

That is why we have invested in the development of components of our own brand, which do not depreciate the quality of our generator sets and, on the contrary, add value to the final product.

As a result, Grupel+Grupel generators come to be. These products are manufactured with high quality and efficient components, designed by our R&D&I team. They are high-performance and long-lasting solutions, with a wide range of powers, and the capacity to operate in several sectors and activities.



## WHAT ARE THEIR **ADVANTAGES?**

- ▶ They are customizable, adapting to any need and requirement.
- ▶ They have a simple and easy-to-use technology but are resistant and robust.
- ▶ They are versatile and suitable to any application
- ▶ They have a competitive price and a warranty of 2 years or 2000 hours.
- ▶ They comply with EU quality standards
- ▶ They allow for more attractive delivery times and quick maintenance and parts replacement.

# GRUPEL COMPONENTS



## ENGINE

With powers from 10 to 1100kVA and electronic regulation, Grupel's engines are robust and reliable. They are available in 50 and 60Hz, which makes them suitable for any market.



## ALTERNATOR

Grupel's alternators are highly efficient and stable, besides being more robust than other models in the market. They may have several extra components.



## CONTROLLER

Very complete and intuitive, Grupel's controllers have numerous features thanks to the addition of plug-in modules for WIFI connection, or synchronization of generators, among others.



## ATS

Grupel's ATS are multi-voltage and multi-frequency, therefore, suitable for any market worldwide. They are also easy to maintain and disassemble.



**OTHER COMPONENTS:** Circuit breaker; Battery; Current transformer; Terminal blocks; Diesel sensor; Battery charger



# PR

## PORTABLE RANGE

2 - 15 kVA

The **Portable Range** is ideal for supplying energy to low-power activities and equipment and can be used by both professionals and regular people.



**GR2500**



INVERTER  
TECHNOLOGY



PARALLEL  
OPERATION



**GR3000**



EASY  
MOBILITY



DIGITAL  
DISPLAY



**GR6500**



GREATER  
AUTONOMY



REMOTE/ELECTRIC  
START



**GR12000**



MORE  
POWER



REMOTE/ELECTRIC  
START



		GR2500	GR3000	GR6500	GR12000
Main Features	Type	Single-Phase	Single-Phase	Single-Phase Three-Phase	Single-Phase Three-Phase
	Continuous Power (PRP) (W)	2.000	2.800	6.300	11.000
	Starting Power (W)	2.200	3.000	6.900	12.000
	Frequency (Hz)	50	50	50	50
	AC Voltage (V)	230	230	230 / 400	230 / 400
	Automatic Voltage Regulator (AVR)	Yes / Inverter	Yes	Yes	Yes
	Fuel tank capacity (L)	4.5	15	25	40
	Fuel type	Unleaded petrol	Unleaded petrol	Unleaded petrol	Unleaded petrol
	Engine type	4 stroke	4 stroke	4 stroke	4 stroke
	Starter system	Manual	Manual	Manual / Electric / Remote	Electric / Remote
	Emissions certificate	STAGE V	STAGE V	STAGE V	STAGE V
	Safety for lack of oil	Yes	Yes	Yes	Yes
	Noise level (dBA)	68 @ 7m	96	96	96
	Autonomy at 100% load (h)	3,2	8,6	7	5,5
Other Features	L x W x H (mm)	500 x 285 x 455	660 x 600 x 500	760 x 700 x 650	1020 x 670 x 850
	Weight (kg)	22	52	104	183.5
	Sockets	1 schuko 16amp	2 schuko 16amp	1 Schuko 16amp + 1 single phase industrial 32amp + 1 3P+N+T 16amp	1 16A schuko + 1 32A/230V 3P CEE 1 16A/230V 3P CEE + 1 32A/400V 3P+N+PE
	Circuit Breaker	Yes	Yes	Yes	Yes
	Hour Counter	Digital	Digital	Digital	Digital
	Wheels and Handles	-	Yes	Yes	Yes
	Battery	No	No	Yes	Yes
	Voltmeter	Digital	Digital	Digital	Digital
	Frequency meter	Yes	Yes	Yes	Yes
	Auto Start	No	No	Yes (via Grupel ATS)	Yes (via Grupel ATS)
	ATS (optional)	No	No	Yes (Single and Three-phase)	Yes (Single and Three-phase)
	Remote Start	No	No	Yes	Yes
	DC Output	Yes (12vdc 8amp)	No	No	No
	USB	Yes (1.0A + 2.1A)	No	No	No
	Parallel operation	Yes	No	No	No

## PARALLEL KIT

With two GR2500 generators running in parallel it is possible to meet larger power needs. By connecting two sets of this model and using them simultaneously, you can power devices with more demanding loads or more equipment at the same time.

The power cables can be stored at the back of the unit when not in use.

*Kit sold separately.*





# SR

## SMART RANGE

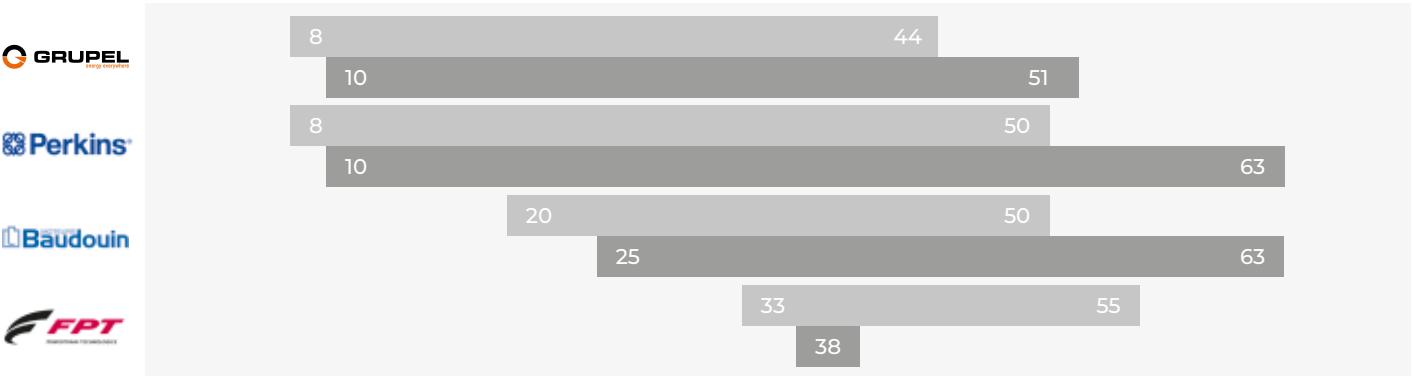
8 - 65 kVA

The Grupel **Smart Range** is composed of products with characteristics that are suitable for emergency applications. These gensets start operating automatically whenever there is a power failure, thus ensuring a competent and efficient supply



## ENGINES POWER IN KVA | STANDBY

50Hz 60Hz



## ALTERNATORS

## STANDARD MODELS

GRUPEL LEROY SOMER STAMFORD

1600 1600 1950



# IR

## INDUSTRIAL RANGE

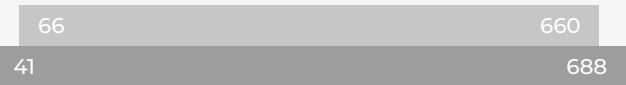
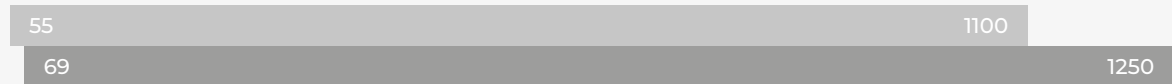
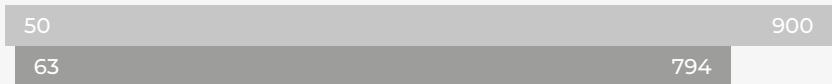
40 - 1250 kVA

The **Industrial Range** is aimed especially at industry and is designed to operate as a primary and emergency power source, in installations where there is no other source or where the existing one is very weak.



## ENGINES POWER IN KVA | STANDBY

50Hz 60Hz



## ALTERNATORS

## STANDARD MODELS





# HR

## HEAVY RANGE

800 - 3150 kVA

The **Heavy Range**, made up of diesel generators in containers, is designed to provide low and / or medium voltage energy, in a continuous regime, as well as to act as a power source, in case of emergency.



## ENGINES POWER IN KVA | STANDBY

50Hz 60Hz



1000-1100



800

2375

938

1900



1250

2800

1438

3125

## ALTERNATORS

## STANDARD MODELS



5800

20'

40'





# GR

## GAS RANGE

The **Gas Range** has some advantages, since gas is the most economical and environmentally responsible option to power generators.

The increasing use of gas, in energy generation for industry and domestic use, has a significant impact, since applications with this type of fuel are generally more economical and ecological.

### BASIC FEATURES

- ▶ 4-stroke combustion engine
- ▶ Self-excited alternator ip21 / ip23 class H
- ▶ Steel frame with anti-vibration pads
- ▶ Cooling radiator or heat exchanger
- ▶ Control panel with measuring devices
- ▶ Automatic circuit breaker
- ▶ Fully equipped gas ramp
- ▶ Steel exhaust system



*Special biogas project to aid a livestock farm in Dumbria, Spain.*

### OPTIONS

- ▶ Soundproof and weather protection steel canopy
- ▶ Automatic oil level control
- ▶ Engine preheating
- ▶ Stainless steel exhaust system
- ▶ ATS
- ▶ Remote control
- ▶ Possibility of synchronism
- ▶ Soundproofed marine container suitable for the outdoors
- ▶ Heat recovery systems for refrigeration and / or exhaust circuits
- ▶ Natural gas, biogas, syngas, etc ...
- ▶ Remote cooling



# SP

## SPECIAL PROJECTS

Grupel's **Special Projects** have "flexibility" as its motto, as they are designed and produced entirely according to the specific needs of each client.



### BLACK START SYSTEM FOR COMBINED CYCLE POWER PLANT

 Ivory Coast

Special project that consists of a medium voltage generation plant, composed of 5 generator sets of 3125 kVA, each inserted in a 40" HC container, and with a total power of 15.6 MVA. Each equipment has an independent fuel system with high autonomy (5000L), inside the container, but separated from the generator and the control room, through soundproof and fireproof panels. Each group also has a CO2 fire detection and extinguishing system, integrated in the container.

The Black Start is meant to guarantee the start of the combined cycle in the absence of a grid, and to assist the main auxiliary equipment of the plant. For this, it

has a fully automated control system with redundant PLCs and a Supervision and Data Acquisition System (SCADA) with connection to the command center (DCS) of the Azito's Combined Cycle Power Plant.





## TERMOCANDELÁRIA POWER PLANT

📍 Colombia

Special project designed to supply power to the most modern power plant in Colombia that provides electricity to the entire Caribbean region. The facility has two high-tech electricity generation units, which operate on natural gas and diesel. Grupel designed, produced and installed a 1,470 kVA genset, with MTU engine and Leroy Somer alternator, in a 40" container. This power generator has a tropicalized radiator, in order to maintain a high level of performance at high temperatures; two fuel tanks of 1000l each: oil level, water and fuel temperature sensors; as well as a power box for access to the output busbars.



## NATURAL GAS COGENERATION PLANT

📍 Mexico

Special project consisting of an 1875kVA PRP generator, which operates on gas and makes use of heat, both for the refrigeration circuit and for the exhaust. The generator is in a 40" soundproof container, divided into two spaces - an electrical room and a generation room that houses the entire auxiliary system, equipped with a gas and fire detection system.

The system was designed to produce energy continuously (24h / 365 days).



## NSPA GENERATORS FOR THE SPANISH ARMY

📍 Spain

Special project composed of seven 600 kVA generators for military application. All generators are high performance, highly customizable, robust, soundproofed and ready to be airborne. The equipment was designed for parallel or island operation and for automatic start, in case of grid failure. Each generator is equipped with an electrical panel with CETAC sockets, to facilitate the connection and disconnection of loads.





# LT

## LIGHTING TOWERS

Grupel **Lighting Towers** are the ideal solution when natural light is scarce. They are robust and easily transportable, so they can be used in various applications and in adverse conditions.



### MODELS M4.5 & P4.5



#### LIGHTED AREA

They can light an area of 2 500m<sup>2</sup> (min 10lux)



#### AUTONOMY

Depending on the generator used, they have an autonomy of up to 15.2h



#### MOBILITY

Mobile and easily transportable, they offer light to any place and application



#### SIMPLICITY

According to your needs, you may include the portable generator you want

### MODELS M7 & P7



#### LIGHTED AREA

They can light an area of 4 500m<sup>2</sup> (min 15lux)



#### GREAT AUTONOMY

Depending on the chosen engine, they have an autonomy of up to 50 hours



#### ROBUSTNESS

With a steel canopy, they resist adverse conditions and winds up to 75km/h.



#### CONTROL AND SUPERVISION

They contain an automatic controller with access to all information





CHARACTERISTICS	UN.	M4.5 MODEL	P4.5 MODEL
Light coverage	m <sup>2</sup>	2.500 (minimum 10 lux)	2.500 (minimum 10 lux)
Lamps		LED	LED
Lamp durability	h	50.000	50.000
Mast		Manual vertical	Pneumatic vertical
Engine		GRUPEL	GRUPEL
Alternator		GRUPEL	GRUPEL
Fuel tank	l	4.5 / 15 / 25	4.5 / 15 / 25
Autonomy (50% of charge)	h	5.4 / 15.2 / 10.9	5.4 / 15.2 / 10.9
Dimensions for transport with fixed tow bar (l x w x h)	m	1.38 x 0.88 x 1.90	1.38 x 0.88 x 1.90
Weight	kg	110 (without the generator)	130 (without the generator)



CHARACTERISTICS	UN.	M7 MODEL	P7 MODEL
Light coverage	m <sup>2</sup>	4.500 (minimum 15 lux)	4.500 (minimum 15 lux)
Lamps		LED	LED
Lamp durability	h	50.000	50.000
Mast		Manual vertical	Pneumatic vertical
Engine		GRUPEL 3GA14D50	YANMAR 2TNV70
Alternator		GRUPEL - 164GB11	GRUPEL - 164GB11
Fuel tank	l	40	40
Autonomy (50% of charge)	h	27	50
Dimensions for transport with fixed tow bar (l x w x h)	m	2.70 x 1.22 x 2.55	2.70 x 1.22 x 2.55
Weight	kg	780	640



# RR

## RENTAL RANGE

Grupel's **Rental Range** power generators are highly resistant to operate in adverse weather conditions and to ensure an efficient use in different locations, keeping up with high performance levels, even with recurring transportations.

Intended for applications such as the construction sector, infrastructures (like roads, underground structures), events or telecommunications, they are characterized by having soundproofed canopy, reinforced with rock wool, in order to decrease the rate of noise emissions.

## APPLICATIONS

FARMING AND LIVESTOCK

CONSTRUCTION

COMPANIES AND RETAIL

EVENTS

INFRASTRUCTURES

MILITARY

### IN ADDITION, THEY INCLUDE:

- ▶ Bolt-on canopy (not welded) to allow greater durability, as it prevents oxidation points due to welding;
- ▶ Large capacity metallic fuel tank, easily accessible and with removable cover for washing and maintenance;
- ▶ Output bus for cable connection;
- ▶ Power-lock type sockets for external connection;
- ▶ Welded and reinforced chassis for easy towing and recurrent transport;
- ▶ Opening in the chassis for forklift and lifting eyebolt use;
- ▶ AdBlue tank (purification system made with urea solution) with robust and functional design, easy to access [optional].



## TAKING YOUR PROJECT TO THE NEXT STAGE

At Grupel, we are always looking to the future... of our business, our planet and the new generations.

So, we are dedicated to develop power generators aligned with a sustainable future, adapted to our customers' needs and to the market demands.

That is why we have developed a new range of more efficient and less polluting power generators, complying with the European STAGE V standard.

## ENGINES



**Grupel STAGE V models, with powers from 7 to 670kVA, include features such as:**

- ▶ Two-stage particulate filter for fuel injection (DOC + DPF):
  - a) DOC (Diesel Oxidation Catalytic) reduces the amount of carbon dioxide and increases the NO<sub>2</sub> that enters the Selective Catalytic Reduction, accelerating the conversion of NO<sub>x</sub> to nitrogen and water, which are harmless;
  - b) DPF (Diesel Particulate Filter) reduces the emission of unburned diesel particulates and ash, and reduces fuel consumption;
- ▶ Common Rail injection system with optimized computer calibration to minimize pollutant production;
- ▶ Fuel tank and AdBlue tank (purification system made with urea solution), easy to access for maintenance and cleaning purposes.

## APPLICABLE TO THE RANGES

**PR**

PORTABLE RANGE

**SR**

SMART RANGE

**IR**

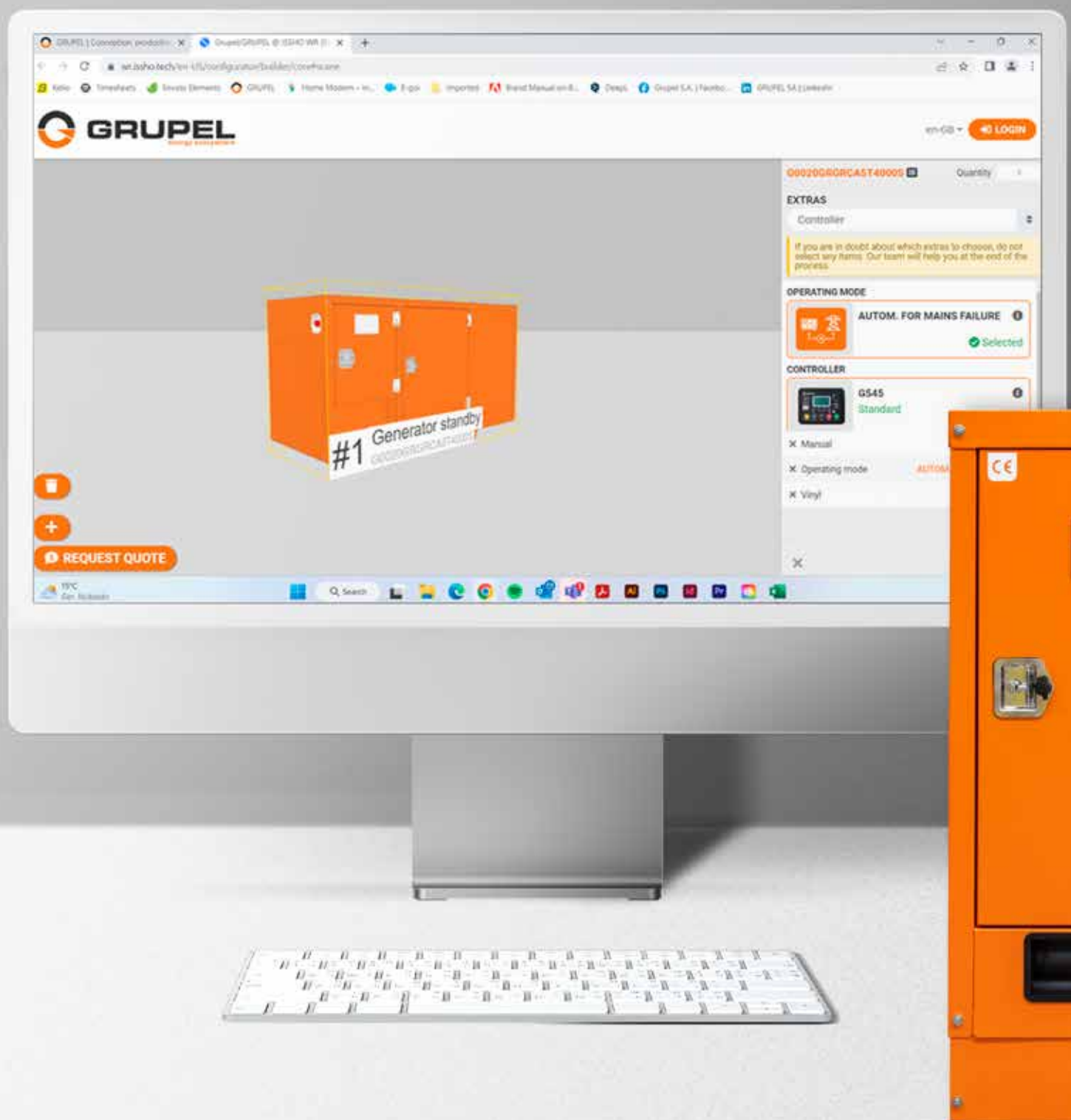
INDUSTRIAL RANGE

**LT**

LIGHTING TOWERS

# GRUPEL

## 3D CONFIGURATOR



**A tailor-made solution just a click away.**



## OUR ENERGY EVEN CLOSER TO OUR CLIENTS

On the path towards the digitalization of our processes and the continuous improvement of the service we provide, comes Grupel's 3D Configurator.

This digital tool helps sizing power generators, according to the needs of each client, in terms of power, extras, location and mode of operation. Making possible to obtain an immediate quote, which facilitates the decision-making process, as well as the access to the technical data sheet and delivery times in real time.

For Grupel, our clients' satisfaction is a priority. Only this way, are we able to make our work more efficient in time and costs, and our solutions better suited to meet the needs and requirements of the market.



# APPLICATIONS

Each application and context has specific requirements and energy needs, to which our teams try to respond with their daily work.

Whether you are looking for power generators for residential, industrial and business units, hospitals, telecommunications, construction or power plants, Grupel has the ideal solution for any challenge.



FARMING AND LIVESTOCK



POWER PLANTS



DATA CENTERS



CONSTRUCTION



WWTPS



COMPANIES AND RETAIL



EVENTS



INDUSTRY



INFRASTRUCTURES



MILITARY



OIL AND GAS



RESIDENTIAL



HEALTHCARE



COGENERATION SYSTEMS



TELECOMMUNICATIONS

# TECHNICAL SUPPORT & AFTER-SALES SERVICES



## TECHNICAL ASSISTANCE

Performed remotely, by phone or on site.



## SPARE PARTS SERVICE

Spare parts for engines, alternators and generators of all brands.



## GENERATOR MAINTENANCE

Full and personalized monitoring of your equipment.



## STARTING AND TRAINING

Functional tests and training for the use of the equipment.



## GENERATOR REMODELING

Improvement of obsolete generators or components in poor condition.



## SOLUTIONS AND PROJECTS

Proposals tailored to your needs.

Order one of these services at  
**[www.grupel.eu](http://www.grupel.eu)**

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**GrupeL, S.A.**

Parque Empresarial de Soza, Parcela-A, Lt-5

3840-342 Soza – Vagos – Portugal

T: ( +351 ) 234 790 070 · grupel@grupel.eu · www.grupel.eu



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