

# INMESOL ADDS NEXT-GEN VOLVO PENTA ENGINES TO ITS INDUSTRIAL AND STAND-BY RANGES (50 Hz Y 60 Hz)

**INMESOL INCREASES THE POWER RANGE OF ITS INDUSTRIAL AND STAND-BY RANGE GENERATOR SETS UP TO 800KVA (LTP) AT 60Hz.**



As usual, INMESOL manufactures its equipment with state-of-the-art technology components and, this time, it has added two VOLVO engines to its genset models: TWD1644GE and TWD1645GE, providing major benefits to INMESOL generator sets.

## Powerful and compact GENSETS

These genset models, AV/IV-730 (50Hz), AV/IV-760 (60Hz), AV/IV-770 (50Hz), AV/IV-800 (60Hz), with state-of-the-art engines stand out due to its large power density. The same service conditions as with 18 / 20 litres engines can be achieved with 16-litre engines. For this, both devices have the latest technological developments in Diesel engines used for power generation. High pressure electronic unit injectors, optimised electronic control system, special steel pistons, twin tube or dual cooling circuit are a few examples. The gensets' size is significantly reduced thanks to this, making its transport and installation easier.

Hz	MODEL	MODEL	R.P.M. POWER		ENGINE	DIMENSIONS (mm) OPEN	DIMENSIONS (mm) SOUNDPROOF
			kVA PRP	kVA LTP			
50 Hz	AV-730	IV-730	660	730	VOLVO PENTA · TWD 1644 GE	3500x1330x2816	4860x2060x2585
60 Hz	AV-760	IV-760	690	760			
50 Hz	AV-770	IV-770	700	770	VOLVO PENTA · TWD 1645 GE	3620x1330x2816	4860x2060x2585
60 Hz	AV-800	IV-800	740	810			

## GENSETS with very low fuel consumption

The improvements described impact also on the gensets' efficiency. Their low fuel consumption turns them into the most efficient gensets in the market within their power range. We are talking about a consumption of approximately 190 gr/kWh, impressive results for this range.

## More environmentally friendly GENSETS

Regarding gas emissions, the new models comply with the European Stage II level and the American Tier 2 regulations. In other manufacturers this represents an expensive option for this power range.

All this contributes to making these models more environmentally friendly as their manufacturing consumes much less resources, and the transport and

daily operation of the equipment generate savings in both fuel consumption and CO2 emissions.

## More versatile GENSETS thanks to their dual frequency

The new models also offer the advantage of easily switching between 50/60 Hz without manipulating the generator set in any way, something that is very interesting for machinery rental companies as well as clients and distributors in countries where equipment from different origins are very common.

It has always been INMESOL's belief that its generator sets must be equipped with the best components available in the market. This significantly contributes to defining the equipment by their strength, reliability, and commitment to the environment.

# THE NEW DSE 73XX CONTROL UNITS, NOW MORE ADVANCED IN THEIR MKII VERSION



**ALL INMESOL GENSETS EQUIPPED WITH DSE73XX DEVICES NOW FEATURE THE NEW VERSION**

DSE73XX control module equipped with a screen to be customised.

**All gensets carrying the standard DSE7310 or DSE7320 control modules have changed to their most advanced version, DSE 7310 MKII and DSE7320 MKII respectively.**

This new MKII version includes additional features that enhance the control potential for the gensets equipped with them.

The advantages over the previous version are highlighted below:

### Customised home screen

Customised logos with an address and a contact number may be added. (This option is potentially interesting for the rental sector in particular).

### Enhanced PLC functionality.

The need for applications where the generator set is part of complex systems within the same facility has led to the development of a PLC with advanced functionality, significantly expanding its configurable features. Those features may be easily created and configured through the DSE Configuration Suite software.

### Configurable front panel Editor

Now, more **parameters** may be **configured** from the module's display or you may only choose those parameters useful for the application, without using the computer, which greatly simplifies the equipment operation.

Different front panel editor access levels may be created through the DSE Configuration Suite software. The company that configures the control module may group the functionality into three different categories. These categories are set to ensure the different system users only have access to certain module parameters using the front panel.

Each parameter would be assigned free access, PIN 1 protection or PIN 2 protection. PIN 2 protection would normally give access to all the parameters. PIN 1 protection would give limited access and the free



INMESOL genset with DSE 7320 MKII

access would only display menu options that might not have an impact on the generator's operation.

### Data logging function

The DSE Configuration Suite software enables users to **log** up to 10 different parameters at the same time. Each parameter is kept in a rolling temporary memory **database**. In case an alarm occurs or a configurable parameter pushes the limits, the parameter information is stored in the complete data log. The data log contains information on what was happening before and after the configured parameter value.

The analysis of stored data will help us understand the generator's operation at all times.

### Battery charger status Information

The battery charger information may now be displayed on the front panel of 73XX MKII. This is feature is available with all the DSE smart battery chargers.

The screen of the 73XX MKII provides the user with clear information on the battery charger, and malfunctions or failures and their status may be easily supervised, as well as the **battery lifetime**.

### Other important advantages included in the SDE73XX MKII

- › Both models, DSE 7310 MKII and DSE720 MKII, include the operation **time control** feature for each genset within a **'Dual Mutual Standby'** system or **spare generator set**. This means that it counts the operating hours of each generator set from its start up, and it may be programmed to give start priority to the generator with less operation hours.
- › Ethernet communication and **simultaneous use of RS232 and RS 485 ports**, which gives countless possibilities for remote control.
- › The **programmable inputs and outputs for analogue signals of 0 to 10V and 4 to 20mA have been enhanced**.
- › 3 additional expansion module types have been added: 2130, 3131, 2152, offering a wide set of analogue inputs and outputs.
- › The **fuel consumption** may be monitored on the screen and SMS messages with alarms and reports may be sent.



DSE smart battery charger

To sum up, and in conclusion, the use of the **MKII** version improves the versatility of the use of gensets even more, that is, the application range becomes significantly wider (and at the same time, simpler).



Solar panel that powers the battery charger.

# SOLAR POWER TO ENSURE A GENSET'S START-UP

**AN ECONOMIC AND EFFECTIVE SOLUTION IN CASE OF FAILURE OF THE MAINS**

A genset must be prepared to start and work, no matter its application or use. With this in mind, the battery, among other factors, has a very important role, as it is responsible for starting the engine of the generator set to make it to work.

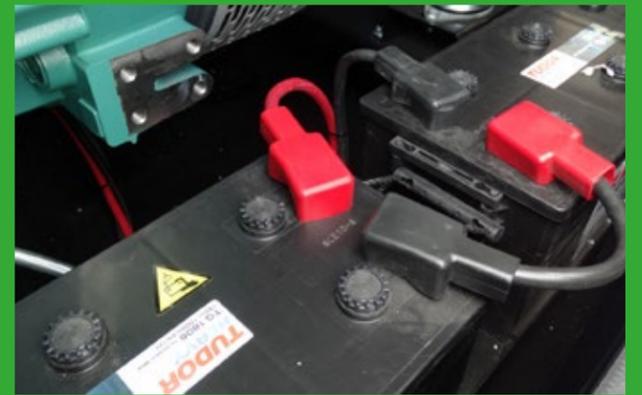
Who is responsible for keeping the gensets' batteries sufficiently **charged** to ensure the correct start-up of the engine? This task is performed by the **battery chargers**.

So that these devices can work as intended, they must be **connected to/powerd by a power source, usually the mains**.

When this option is not available, there is a very **economical and effective solution**: The use of **solar panels** to power the chargers that will keep the batteries with enough charge to ensure that there are no start-up failures.



Rental range of gensets with solar panels



Batteries that start the genset's engine

We find again an alternative that increases the operational versatility of generator sets from any range, although it is very useful in gensets that are specially intended for the **rental sector**, where the service may be required in the most unpredictable conditions: **Construction sites, mines, telecommunications**

**systems** normally located in remote places where there are no mains, etc.

Two generator sets of this type have just been tested and are ready to travel to Australia.



# ADAPTED

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ERLUX Power Group Business Team

# INMESOL PARTICIPATES AT THE 2017 EXPO ELÉCTRICA INTERNACIONAL FAIR

Inmesol has been present at the latest edition of the most important fair within the electricity industry in MEXICO, Expo Eléctrica Internacional, held in Mexico City on June 6, 7, and 8.

Our presence in the country is the result of the initiative of our local distributor in MEXICO, the company **ERLUX Power Group**.

This international meeting is organised by VANEXPO (Vanguardia en Exposiciones S.A de C.V) and, over the past 20 years, it has gathered the **leading technology, materials, and energy companies within the electricity sector** from all over the world to showcase



Product presentation.

the **most advanced solutions** developed for the industry to public and private organisations and foster representation agreements.

Expo Eléctrica Internacional also offers **technical conferences** and highly **specialised training programmes** that enable training and networking opportunities for visitors.

Visitors were able to see various **Inmesol genset models** showcased at the fair: The 60Hz IK-021 model with KOHLER engine **from the Stand-By Range**, and the 60 Hz IIR-125 model **from the Rental Range**.

The IIR 125 power generation system attracted all eyes at the fair. The first thing that stands out at first glance is, as usual, the robustness and quality of the canopy all power generation systems manufactured by INMESOL are fitted with, and, in particular, the Rental range.

Additionally, the **IIR-125** model taken to the fair included a **remote control system managed through a DSE 890 unit**, by which the equipment can be controlled or **supervised** through a computer, cellular phone, or tablet while being **thousands of kilometres away**. This option is very interesting to know the generator set's status without the need to be physically next to it, which translates into **time and money savings** in travels for maintenance or repair operations. Moreover, it reports the equipment's **geographical position**, an ideal option to **fight possible theft incidences**.



Visitors to the stand observing the details of the IK-021

Another feature in this IIR-125 model showcased at the **ERLUX Power Group booth** is that it includes a **smart control and protection unit, the DSE 8610MKII**, which enables the **synchronised and parallel on island** operation of the equipment with other power generation systems featuring the same control unit (up to 32 gensets), creating a power generation network that provides **more power** and adapts to the **energy needs of a facility with variable loads or consumption levels**.

Inmesol's participation at the exhibition was an opportunity to **increase our presence in Mexico**, thanks to the outstanding representation work carried out there by our local distributor, **ERLUX Power Group**.



**INMESOL, S.L.**

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Inmesol, S.L. company with ISO 9001 quality management system certificate and ISO 14001 Environmental Management System Certificate for the: "Design, manufacture, marketing and technical assistance of power generators, lighting towers, welding generators, tractor with PTO generator and hybrid generation systems."



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