



No Break generators are equipped with a flywheel weighing several tons between the alternator and the engine. The purpose of this type of arrangement is to allow continuous rotation of the alternator driven by the flywheel without using the engine, and therefore no mechanical wear or fuel use, while having the assurance of emergency power supply in a very short time. The application presented below is a backup plant on a site dedicated to a German oil refining and processing company.

The specification of this application requires a complete adaptation of the start and stop sequence, of the paralleling operation and a new function for the clutch.

CRE TECHNOLOGY has proposed a specific adaptation of the **GENSYS 2.0** to meet the customer's request.

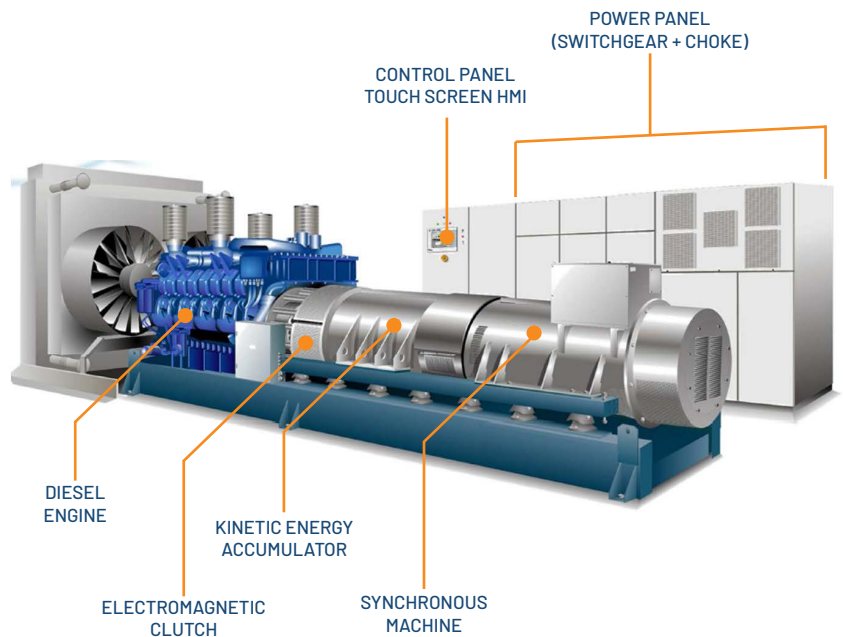
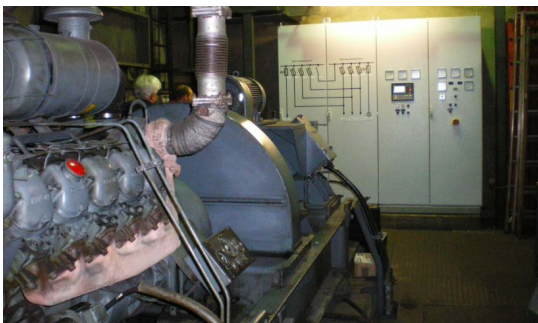
### The technical solution:

The **GENSYS 2.0** uses all its capacity in terms of internal automation to manage the complex sequence of starting and paralleling of the generator; unlike conventional generators, No-break is started for the first time in a very long sequence to launch flying inertia, the steering wheel is disengaged once the engine is at rated speed and is takes over by an electric motor which maintain the wheel speed, at this time the excitation is disabled on the alternator and the installation is ready to run.

When there is a mains failure detected, the role of **GENSYS 2.0** is to excite the generator and switch the power in a short period of time while the engine is started and engaged. Once the engine is supplied with fuel and clutched to the alternator, the generator recovers a conventional behavior.

Beyond the defined sequence for the power loss, the **GENSYS 2.0** also includes a test mode and a specific manual mode to this installation.

## APPLICATION



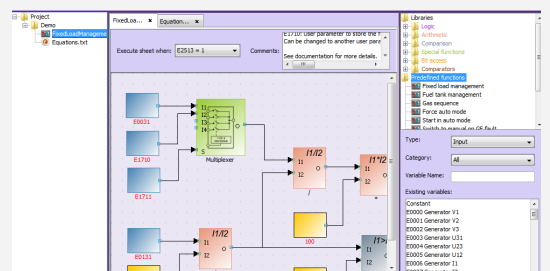
## PROGRAMMING

### EASY PLC

Program and customize your internal logical sequences

CRE TECHNOLOGY's Easy PLC is a logic editor which provides graphical interface to create PLC instructions for GENSYS2.0.

Easy PLC simplifies the process of proprietary writing instructions thanks to a user-friendly graphic environment. That includes many sheets in which the user create instructions through «operators».





EXPERT IN GENERATOR SOLUTION

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