



## THE COMPANY

**Delta Technology** is a leading company in the electro-mechanical field designing, manufacturing and supplying:

- Prefabricated reinforced concrete boxes for electrical substations and various technical rooms;
- Prefabricated reinforced concrete electrical substations for MV/LV, fully equipped;
- Indoors MV/LV transformers substations, fully equipped;
- Medium-voltage switchboards;
- Low-voltage switchboards;
- MV/LV transformers;
- Retrofit of existing plants to CEI 0-16.

The company's know-how, acquired over twenty years of highly specialized experience, provides the essential competences required to project and build electrical substations for transformation and their related installations. From as the preliminary planning stages, **Delta Technology**'s aim is full customer's satisfaction, and it all comes together in the company's willingness to reach the highest quality standards.

The production plant, located in the industrial area of Catania, in Sicily (Italy), occupies a surface of 15,000 m<sup>2</sup>, with a covered area of 2,000 m<sup>2</sup> in which the entire production cycle takes place.



## CERTIFICATIONS

Company quality system, involving all process activities, in accordance with ISO 9001:2008 (VISION 2000) certified by CSQ, a widely acknowledged institution in the electro-mechanics field.

- All documents related to the compliance to point 11.8.4 of the Technical Norms defined by Italian Law Decree dated 14 January 2008, (regarding production process and production control in premises for the production of prefabricated reinforced concrete products, for series CSS and ENEL DG 2061), are registered at the Central Technical Service of the Council of Public Works (Italian Ministry of Public Works).
- SGS inspection and testing certificate for ENEL boxes type DG 2061.
- ENEL approval certification for box DG 2061.



## PRODUCTS



### Reinforced concrete box substations

Our box substations are designed in full accordance with the main CEI regulations harmonized with the international regulations IEC EN 62271-202, and are fully manufactured, equipped and tested in our premises and supplied to our customer's ready for installation and start-up.

#### DG 2061 series

The ENEL DG 2061 electrical substation type consists of two prefabricated reinforced concrete elements (box and pre-casted basement) and is intended to be used as ENEL transformation cabin for the containment of ENEL-unified medium-voltage switchboards in all three types, medium-voltage/low-voltage transformer and low-voltage switchboard with two or more outputs. The box is equipped with trace lighting system with a small board for auxiliary services, an internal ground connection circuit, a door with two leaves and two windows, all approved by ENEL, a roof wind rotating ventilation and fiberglass trapdoor on floor for access to basement. The box can be supplied with different internal fittings, so as to better fulfill the most varied technical and commercial requirements.

#### CSS 2-6 series

These substations were designed to be used in the transformation and distribution of electric power and can be equipped with any medium-voltage and low-voltage equipment available in the market. Manufactured and tested in full accordance with the norms in force, these substations are in accordance with the prescriptions of regulation CEI 0-16, with structural characteristics and dimensions in compliance with ENEL DG 2092. The concrete monoblock dimensions in structure, are 2.5 m wide, 2.6 m high and can be as long as necessary, according to their configuration, and to the customer's needs.

The CSS substations may be equipped with ENEL-unified fiberglass or stainless steel fittings as well as our galvanized sheet fittings, sand-blasted and powder-painted, for outdoor use.

Length = L	CSS "2"	CSS "3"	CSS "4"	CSS "5"	CSS "6"
	> 2 m	> 3 m	> 4 m	> 5 m	> 6 m

#### CSS U series

CSS U substations, designed for installation underground and partly underground, are manufactured to be used in the transformation and distribution of electric power, for transformers of up to 1,250 kVA and equipped with medium-voltage switchboards type RMU or with mixed insulation, and low-voltage boards for TRAFO protection.

CSS U substations are suitable for installation in areas with architectural or landscape limitations; they can also be further disguised by applying small flower beds or gardens to the visible part, to complete its full integration with the surrounding environment.

## MEDIUM- AND LOW-VOLTAGE BOARDS

**Delta Technology** is particularly careful when selecting its equipment, in line with the company's willingness to take its quality standards up towards the highest indexes of versatility and reliability. This is achieved thanks to a synergy developed through the years as a consolidated partnership with SCHNEIDER ELECTRIC.

This is the solution that **Delta Technology** applies to the development of its own projects: the results obtained in the installation of systems for shopping malls, hospitals, industries, photovoltaic and wind-power parks etc, in which reliability and quality are absolutely necessary, are constant confirmations that we have chosen well.

All substations are designed to receive the SM6 system, consisting in a series of compact modular units, equipped with the following SF6-insulated switching and isolating devices:

- SF1 or SF6 switch.
- Air-break switch-isolator.
- Isolator.

The switchboards can be equipped with a SEPAM protection relay, certified and in accordance with specification CEI 0-16, with keyboard and LCD display for the insertion, regulation and reading of parameters for intervention events visualization and recording, self-diagnostics and network monitoring functions. With SM6 units it is possible to carry out all typical system diagrams related to power distribution up to 24 kV. Low-voltage equipment, manufactured with the Prisma Plus functional system, allows for the installation of any kind of low-voltage distribution board, for all applications, from services to industry.

All Prisma Plus components, consisting of modular drawers or cabinets, are completely designed, tested and guaranteed by SCHNEIDER ELECTRIC and allow for the manufacturing of low-voltage boards in accordance with regulation CEI-EN 60439-1.



At customer's request or in case of particular technical requirements, Delta Technology can design medium-voltage systems personalized and adapted to the available space/room, or else to integrate them within a CSS series box substation. Whatever the case, **Delta Technology** has tuned its own knowledge in order to offer its customers the widest range of solutions, to fulfill any kind of demand.

The true added value that **Delta Technology** offers to its own customers, besides the twenty years of experience of its technical and operative personnel, is the ability to combine competence and professionalism in a field in which service duration and continuity are fundamental objectives.

**Delta Technology** designs and assembles low-voltage boards manufactured according to client specifications and standardized in conformity with national and international regulations in force, integrating them to the local containment technical rooms.

The company's wide range of product includes:

- Power Center (P.C.) boards;
- Motor Control Center (M.C.C.) boards;
- Boards for secondary distribution;
- Automation boards for photovoltaic systems;
- Power boards for industrial use;
- Power and distribution boards for use in the services sector;
- Special boards for hospitals.



## MV/LV POWER TRANSFORMERS

**Delta Technology** offers a wide range of resin or mineral oil transformers, produced by the main Italian manufacturers and accessorized with control and alarm devices.

The transformers may be installed in transformer cells or in substation rooms, designed to ensure access with maximum safety and the suitable, natural disposal of the heat produced.



## RETROFITTING TO CEI 0-16

In conformity with regulation CEI 0-16 and in accordance with AEEG, referring to the technical requirements of the system which is to be adapted and to the dispositions of the power distribution company, our company supplies and places:

- Power supply substation manufactured in accordance with regulation ENEL DG 2092;
- ENEL-approved fiberglass fittings;
- Protected medium-voltage boards for indoor use, type D.G., for general protection and transformer protection, complete with general protection in accordance with CEI 0-16;
- Retrofitting kit for the existing D.G. medium-volt geboard (if compatible), consisting of:
  - CEI 0-16-approved microprocessor electronic relay;
  - Transformers/current sensors;
  - UPS static continuity unit for the power supply of the protection relay (P.G.);
  - Unipolar medium-voltage cable, 95 mm<sup>2</sup> of section, complete with terminals, for the connection of the ENEL medium-voltage U-type board to the D.G. general protection medium-voltage board.

## ACCESSORIES FOR ELECTRICAL SUBSTATIONS

In order to provide our clients with a constant reference point for their own needs, Delta Technology offers, ready to deliver, an entire series of accessories for electrical substations:



- ENEL-approved fiberglass doors and windows;
- Special locks for electrical substations;
- Galvanized steel, powder-painted fittings;
- Fixed and automatic rephasings;
- Thermostatic controlled Heater;
- Medium-voltage fuses;
- Medium-voltage cable bundles, fitted and certified;
- Containment cells for transformers;
- Fire extinguishers;
- Insulated gloves;
- Insulated rugs and platforms;
- Warning signs for electrical substations according to the norms in force;
- Safety kit for electrical substations maintenance.

## WHY TO CHOOSE DELTA TECHNOLOGY

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**Delta Technology** has succeeded in putting together the added value of a dynamic, slim company and the experience of the team (more than twenty years in the field of MV/LV transformation systems). Other than its reliable products and its always available personnel, **Delta Technology** offers to its own customers the maximum professionalism, competence in the field, reliability and courtesy.

The use of sole first class quality materials and the deep care in every small detail confirms that **Delta Technology** supplies not only systems, but the serenity of having acquired a state-of-the-art product that will last over time.

As result of the proper choices of **Delta Technology** and thanks to the full satisfaction of its customers, the number of companies choosing back our services as supplier/partner is increasing year by year.





[www.deltatechnology.it](http://www.deltatechnology.it)



CABINE PREFABBRICATE E QUADRI ELETTRICI MT/BT  
MV/LV COMPACT SUBSTATIONS & SWITCHBOARDS

*An advanced choice  
that lasts over time*

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