

The logo for CABEL SYSTEM. The word "CABEL" is written in a bold, black, sans-serif font. A red triangle is positioned under the letter 'A'. Below "CABEL", the word "SYSTEM" is written in a smaller, red, sans-serif font, with each letter spaced out.

CABEL
S Y S T E M

Cabel System S.r.l.
www.cabelsystem.com



TRUE DEDICATION

Since **1991**, Cabel System has engineered unique electrical switchboards - turning clients' needs into reality.

THE COMPANY

Cabel System engineers and constructs a vast array of low tension electric switchboards and cabinets, using materials supplied by the principal component manufacturers, in conformity with applicable regulations.



Unique technology...

- a** Our electric switchboards are **unique** to each client, **custom design** and engineering are the true philosophy of Cabel System
- b** Our production is tethered to a process of continual research for improvement of **quality and value**, our power centers are a representation of the best products the market can offer
- c** In compliance with regulatory standards, every prototype undergoes extensive testing through certified examination and inspection laboratories. Our innovative products are endorsed with certifications of conformity, guaranteeing to our clients and users the validity of our processes in respect of the norms established under **ISO 9001:2015**
- d** Our aftersales support is one-of-a-kind, thanks in part to our mobile technical office, capable of immediate on-site repairs and modifications. Our thorough visual documentation of the electro-mechanical details of each build predisposes our equipment to maximum performance, **lowering costs of installation** and downtime for servicing

OUR STORY

In **1991**, an electrical system technician followed his instincts and founded a new company, Cabel System. He sought to create a versatile, customizable electrical panel, one which could be designed and built to relieve problems encountered at industrial sites.

For more than **25 years**, we've offered efficient, custom solutions, and strived to exceed our clients' expectations

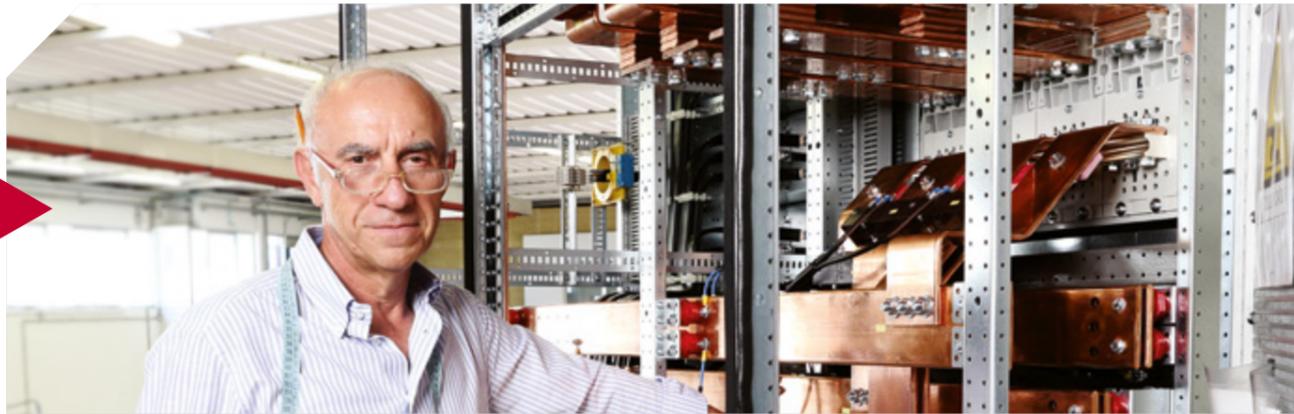


Our technical office designs solutions following our view that innovation is paramount. Our marching orders include: **full accessibility**, optimal **heat dissipation** and **optimized installation and connection times**. Research and development has engendered our company's rapid growth, which has in turn resulted in ambitious projects and marked verification testing of new products.

In **1997** we launched the patented Hergo omnibus busbar system, which today still stands as the unmistakable testament to our innovation and capacity. Hergo was the first scalable busbar system, certified by **CESI** to 6300A 150 kA. **Hergo**, today, as then, represents a new concept of power system.

DEDICATION

As a result, every Cabel System switchboard is an **innovation** – customized to meet each client's requests and specifications, engineered for reduced commissioning and diagnostic **times**, and predisposed to quick and efficient **maintenance** and modification, performed using the best materials the market offers.



To accomplish all of this, our engineering and **technical division** stands ready at the full disposal of our clients and their technical staff. Through technology and innovation, we strive to optimize **quality** and reduced installation and maintenance **times** - we devote particular attention to the position and orientation of **active components**, which are easily accessed by technicians and operators. We've considered everything and our CE certified product is delivered with full documentation, including **AS-BUILT** electrical diagrams both in hardcopy and electronic format, installation manuals, operation and maintenance instructions and guides, the testing certificate and the conformity declaration. Turnkeys delivery! Cabel System's mantra: Quality which endures.

For this reason, once the design and manufacturing stages have been completed, every switchboard undergoes validation testing. Thanks to our **video capture system**, every detail of the plant is recorded and catalogued - in turn ensuring that efficient and immediate customer service - when we conduct periodic checks or online support.

Cabel System designs and manufacture specific, **customized** electric switchboards in accordance with the requirements of our clientele. Our products are engineered for seamless integration with our clients' target electric systems. At the core of our production is dedication to our craft, we strive to engineer products which today are the **only** of their kind in the marketplace.

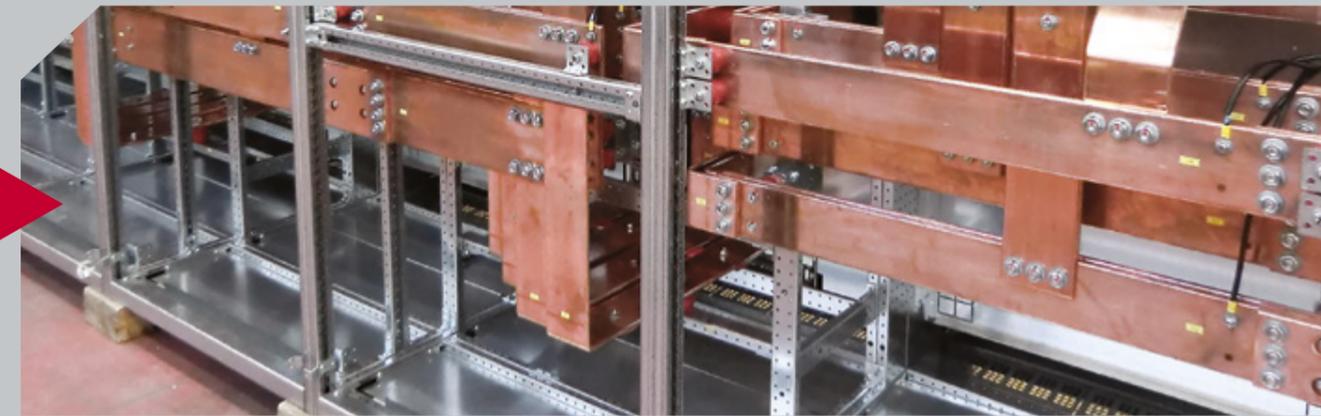
IN PRACTICE

Customization is our key word. Beyond unique, tailored designs, we strive to ensure **longevity** and **quality undiminished over time**. We maintain close contact with our clients, lending support and assistance at all stages for any necessary intervention, ultimately helping them to realize their goals. Our team of specialized and qualified technical engineers is available to provide guidance and consultation under any circumstance: at the commissioning stage, during periodic inspection, through to the necessary changes and updates for certifications of conformity for switchboards already installed. As a result, we focus on **innovative**

materials and design solutions which lend themselves to **easy upgrade**, improvement and modification after install. We embrace the industry philosophy: **"A site is never really finished"**.

PHILOSOPHY

Our company has gained distinction through the development of unique products and services. **Unique**, like our product improvements and innovations which are gauged to boost the **quality** and **value** of our products when viewed against the development and offerings of the market.



Our products are designed and manufactured in accordance with the requirements of Iso 9001:2015. In addition to this, we carry out a number of tests to provide a **customized product**, offering a **unique after-sales service**: we take photographs and record mechanical and electrical details that allow us to make any modifications to switchboards; we can also check that equipment is working properly, making modifications to achieve maximum efficiency in terms of time and cost.

As a result, each one of our low voltage switchboards is an innovative product, customized to meet the requirements of each site, capable of reducing connection problems and cutting commissioning times, pre-arranged for scheduled maintenance and made from the best materials available, in compliance with current regulations.

HERGO

The **Hergo busbar system** is our most compelling product: beyond exclusivity as a Cabel System owned European **patented design**, Hergo is unique in its benefits and capacity for customization. The system benefits include:



CESI Test 01/10/97

1

VISIBILITY - All copper segments and connections can be visually inspected since busbars are arranged both on a vertical and horizontal axis

INSULATION - The system is especially effective in humid and dusty environments, exposed to high dielectric strength and / or surface resistivity
(such as foundries, planing mills, cement factories, tanneries, and marine environments)

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2

ACCESSIBILITY - All busbars can be easily accessed and inspected for maintenance since the busbar systems are appropriately placed inside the switchboard

DISSIPATION - The heating effect across the busbars is greatly reduced as these are arranged on different levels, with full exposure between phases if compared to traditional parallel systems

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3

RESILIENCE - The system performs at high resilience: at a short circuit of 90kA, the busbar supports remain aligned with the upright mounts

EASY ACCESS FOR INSPECTION - Tightening is done using torque wrenches, and red paint indications on fastening elements indicate any loosening - as a result, all connections can be checked while the switchboard is powered

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4

STURDINESS - The Hergo system was TYPE tested at CESI after an $I_n=6300$ A busbar has undergone a stress of 150 kA - 330 pKA peak, the test was carried out without use of protection relays *(unconditional for all equipment / devices)*

COMPACTNESS - Hergo is the only system which can reach 5000-6000A ratings, while measuring a compact 30 cm in height and depth

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5

FLEXIBILITY - The Hergo system is provided with flexible supports, capable of absorbing and dissipating the vibrations generated by the current flow and installation environment

SPEED - Faster site work and modification as well as reduced downtime - all thanks to the Hergo system phase arrangement. Operators can add switches and modify plants all without the need to remove any busbars

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INTERNAL ARC

As the latest research has shown, there is an increasing need to provide a product that can withstand internal arc faults up to standard requirements. An ever-increasing number of environments require a switchboard that is **online** at all times, which means regular maintenance works to switchboard sections or continuously manned stations for daily operation as well.

Safety is a constant concern, as proved by investments in training for qualified personnel, in line with industrial safety regulations and the requirements specified in the **IEC 61641** standard for testing switchboards under conditions of arcing due to an **internal fault**.



CESI Test conducted in compliance with the standards, duration 0.3 seconds, up to 100kA.

What is the arc?

During maintenance, operator error or an external event can trigger a low impedance short circuit. A large amount of energy develops, producing an explosion, with possibly lethal effects: a short circuit rated at **20kA** is enough to unleash a shockwave with 22Kg of thrust, a toxic gas cloud with temperatures ranging between **7-8000°C**, a light flash, and a deafening sonic boom of **160dB**. Cabel System has developed and through **CESI**, an independent inspection organization, tested and certified, an electric panel which offers "passive" protection from the internal arc.

Through mechanical strength and resistance, protection is offered to the operator or mechanic, in any position relative to the panel, without the use of detection devices.



REFERENCES

Twentyfive plus years of dedication has resulted in significant professional achievements. We are proud to include the following companies and organizations in our list of satisfied customers: San Siro Stadium, Genoa Aquarium, Verona Arena, Bank of Italy, Telecom Italia, Calzedonia, Barilla, Fiat Mirafiori and Pirelli.



Year and location of work performed by Cabel System.

Certifications

Every new Cabel System product is tested systematically by **CESI**, until its function and performance is completely guaranteed. For example, circuit examination is performed through a series of brief tests without breakers, shorting directly the main busbars. The test is the most extreme required by law – the system is placed under stress of short circuit for 1 full second, without any breaker to protect it.



CONTACT

Cabel System is located in Bolzano Vicentino, just outside Vicenza. Our address is Via Guglielmo Marconi, 2. For more information please visit us online, send an email, or call by telephone, using the following addresses and numbers:



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