



Engineering
the energy saving



Company Profile

We study, design and manufacture TLC housings infrastructures and relevant systems and fittings to provide optimized fully package answers.



The result of our activity has been provided worldwide in various markets from the Oil & Gas, Telecommunications, Highways and Railways to Defense and Public Administration.

CELANTEL HISTORY

“A peculiar interest for the scientific research in chemistry, physics, engineering, and the idea drawn on the conversations with businessmen and researchers from different countries, have led me, since the seventies, to find suitable and innovative formulations of Shelter for telecommunication equipment and for the most different needs.”

Celantel S.r.l. was born in 2000 as a dream of Enzo Celant but, especially, as a bet started over forty years ago, focusing on the energy saving applied to telecommunications equipment housings and infrastructures.

This continuous path enabled Celantel to face the most various problems introducing innovative and completely new solutions, as the passive cooling, in order to complete the most challenging projects arising in the market, starting from BAM project USSR (arctic shelter) and Ford Project Morocco (desert shelter).



Celantel have developed a broad range of housing devices from small cabinets to big shelter .

These infrastructures, used to house any kind of equipment, represent Celantel's Core Business which includes:

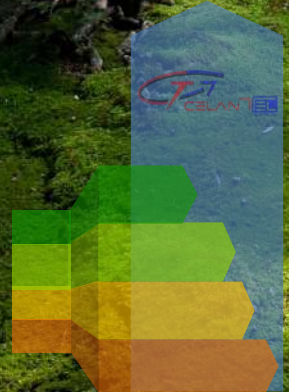
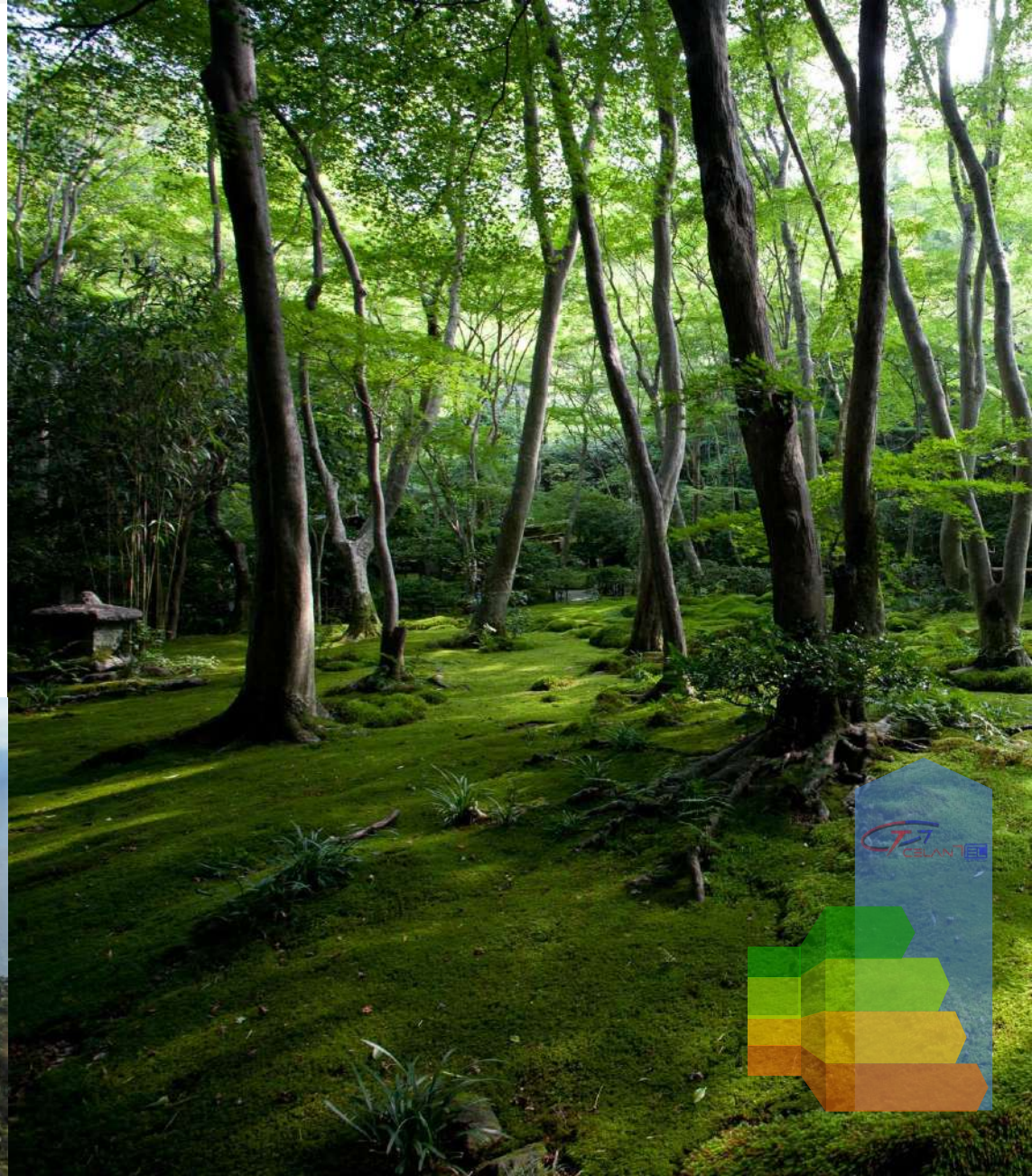
- Passive Shelters
- Active Shelters
- Hybrid Shelters
- Underground Shelters
- Passive Cabinets
- Active Cabinets
- Underground Cabinets
- Modular Shelters
- Containerized Buildings
- Frangible Shelters



The gained experience allows Celantels to completely satisfy the Client requirements tailoring the products with reliability and improvements.



Celantel is completely dedicated to one of the most important themes that man is now called to face through its commitment to smoothe or **reduce** the effects of **energy consumption** on our planet.



Celantel's approach, in accordance with the spirit involved in its works, provides to Customer different equipment-housing integrated structures, ready to be put into operation when placed on site, with limited installation activity required.



Celantel's presence around the world is worked out by agents and brokers network maintaining contacts with the local customers and providing updated information concerning the local requests.



To date, Celantel has manufactured and supplied thousands of equipment housings and integrated packages for the Middle East, Africa, Europe and Australia geographical areas

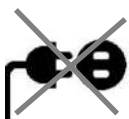


Devices able to control the temperature without any energy consumption and maintenance

The idea for this invention arose, during the 70's, from the staff of Mr. Celant in Telettra, to face the necessity to provide the remote telecommunication stations of air conditioning systems that did not need any extra electrical power in addition to the one assigned to the equipment.

This brought to the development and the realization of devices, integrated to the shelter, able to transfer outside the heat generated inside the equipment housing, without energy consumption and maintenance, granting and increasing of the whole reliability.

Following this trail, Celantel has developed and implemented projects that allowed to increase their performances and their ease use, with a consequent impact on the costs and the application fields range



No energy consumption, necessary for the air conditioning, (or highly reduced).



Considerable increase of the global reliability due to the absence of mechanical moving parts and fluids under pressure. No maintenance required thanks to the sealed and "elastic" hydraulic circuit, refills free.



The devices are housed in a room without direct air entrance and with a temperature control without thermal shocks.



ZERO EMISSIONS



Passive cooled cabinet



Passive cooled Shelter

THE NEW TRADITIONAL ACTIVE SHELTER

When the air conditioning uses electrically activated systems and/or devices allowing the air inlet / outlet. It is characterized by:

- Temperature control fully managed by an air conditioning.
- Ventilation with direct air input.
- It allows split units installation, integrated or roof type.



GRP Active Shelter

Manufactured with unframed composite panels shelter body (Fiberglass - GRP or Aluminum) or with framed container type steel structures.

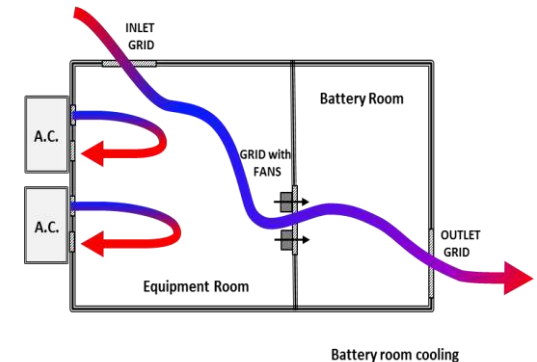


Containerized Buildings



*Skid mounted
GRP battery shelter*

Cooling Transfer Configuration

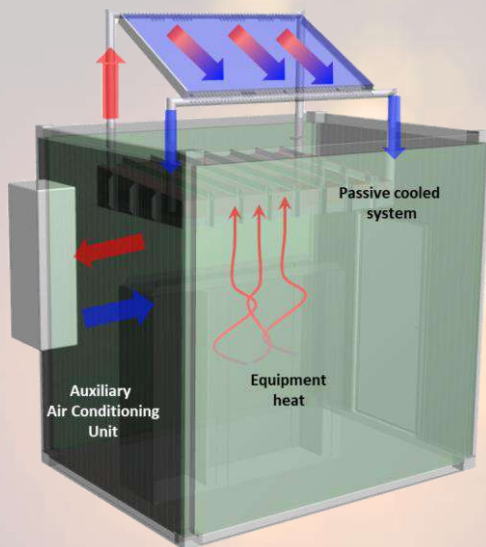


**ORIGINAL DESIGN FOR COST
AND ENERGY SAVING**



GRP EI120 Fire Resitant

Passive cooling system is supported by an auxiliary air conditioner or chiller, activated only during the warmer months of the year.



ADVANTAGES OF HYBRID COOLING:

- LOWER CO2 EMISSION THAN ACTIVE SHELTER
- LESS MAINTENANCE SERVICE WITH CONSEQUENT OPeX (Operational Expense) REDUCTION
- LONGER LIFE OF THE AC UNIT
- HIGHER RELIABILITY THAN ACTIVE SHELTER
- BACK-UP COOLING GRANTED IN CASE OF AC FAILURE
- PERFECT MATCHING WITH OFF-GRID PV GENERATION



ARAMCO HYBRID COOLED SHELTER

Nowadays, the no walk-in cabinets are the broadcasting equipment housings increasingly used thanks to their **reduced dimensions and energy consumption**. These infrastructures involve easy installation with reduced environmental impact and easy maintenance as well.



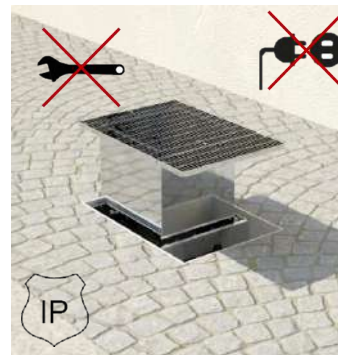
GRP Double-bay Passive cooled cabinet



ATEX Passive Cabinet



Active Cooled Cabinet



Passive Underground Cabinet (P.U.C.)
For Smart Road and Smart Cities Applications

Passive air conditioning offers significant advantages in terms of noise, maintenance and energy-saving.



OIL & GAS ON SHORE – Rabigh SAIPEM – World Biggest PCS



FRANGIBLE Active shelter for NAVIDS



TLC Helicopter Transportable



Offshore Passive Cabinet



CONTROL ROOMS - Modular GRP Active Shelter

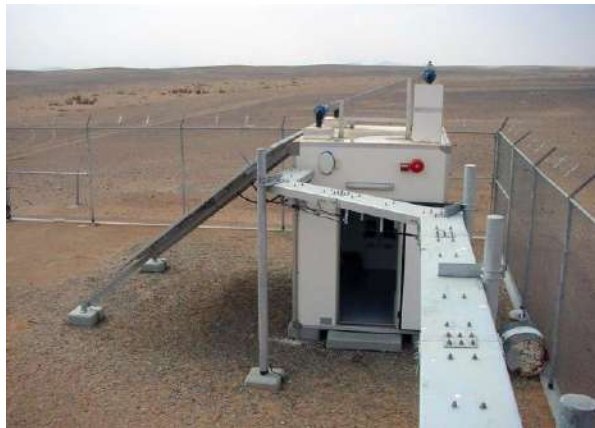
MARKETS & APPLICATION EXAMPLES - II



RAILWAYS PASSIVE SHELTER



HIGHWAYS PASSIVE SHELTER



BORDERS CONTROL PASSIVE SHELTER



ENERGY STORAGE PASSIVE SHELTER



UNDERGROUND SHELTER

Whether the need to solve a thermal problem related to equipment housings arises, Celantel deploys all its capacity and commitment to design a suitable and innovative formulation.

Celantel's tools are:

- a team of engineers with high experience in R&D
- 12 proprietary patents related to this field.
- a simulation software.
- two climatic chambers.



Committed to facing the new, Celantel devotes its maximum effort and part of its resources to research.

Celantel's research activity is essentially aimed at the study and analysis of everything that can optimize and improve the thermal management not only in shelters and cabinets.



**PASSIVE COOLED SHOWER
HUGHES ZPC**



PASSIVE COOLED POLE



**PASSIVE COOLING UPGRADE KIT
FOR EXISTING SHELTERS**



**PANELS
Manuf.**

**ASSEMBLY
LINE**

**FINISHING
LINE**

FACTORY FACILITY:

PRODUCTION FLOOR:

15.000 sqm indoor (30000 sqm total)

PRODUCTION CAPACITY:

YEARLY CAPACITY IN NUMBERS OF UNITS: 400 yearly

CAPACITY IN SQM:

more than 4000 sqm



**THERMAL TESTS in
CLIMATIC CHAMBER**



**COMPLETE
FAT IN HOUSE**

Since 2008 the CELANTEL's Quality Management system has met the requirements of the international standard UNI EN ISO 9001, the most famous quality improvement standard.





CERTIFICATO N. QI/419/20

Si certifica che il Sistema di Gestione per la Qualità di:

CELANT.TEL S.R.L.

Sede Legale: VIA VIGO PELLIZZARI, 28 - 20871 VIMERCATE (MB)
Sede Operativa: VIA VIGO PELLIZZARI, 28 - 20871 VIMERCATE (MB)

è conforme ai requisiti della normativa

UNI EN ISO 9001:2015

per il/i seguente/i campo/i di applicazione:

**Progettazione e realizzazione
di infrastrutture per l'alloggiamento
di apparati e dispositivi industriali.**

Settore IAF: 19

Riferirsi al Sistema Gestione Qualità dell'organizzazione certificata per ulteriori chiarimenti e dettagli circa le esclusioni ai requisiti della norma

La validità del presente certificato è subordinata alla presenza dei sigilli comprovanti l'esito positivo delle verifiche entro la data prevista.

Prima Emissione (*)	Scadenza Certificato			Spazio Sigillo Seconda Sorveglianza
12/11/2007	11/11/2022	23/11/2020	Entro 07/09/2020	Entro 07/09/2021

(*) Transiti di Trasferimento di Certificati da altro OIC. La data di Prima Emissione riporta la data indicata sul certificato emesso dall'OIC di provenienza



**BRIXIA FIDELIS
FIDEI ET JUSTITIAE**



Matteo Romeo
Direttore Tecnico

Per informazioni puntuali o aggiornate circa eventuali variazioni intervenute nello stato della certificazione di cui al presente certificato, si prega di contattare: **Q-AID INSPECTION S.r.l.**
Sede Operativa: Via Guelfoidi, 42 - 10122 Torino (TO) Tel. 011 19721276 - mail: info@q-aid.it - PEC: q-aidinspection@legalmail.it



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