



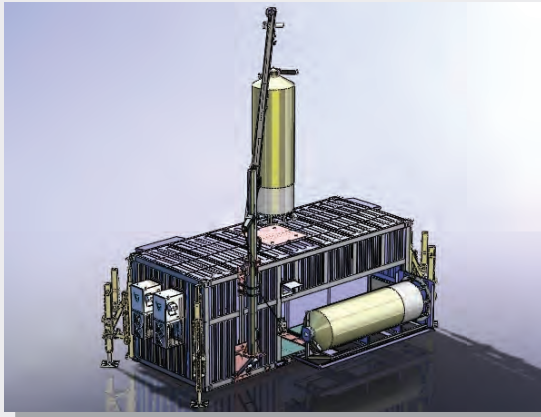
SHELTER, MINISHELTER & CABINET OUTDOOR

HIGH TECH
CUSTOMIZED SHELTERS

SOLUZIONI
ILLCA
MECCANICHE
S.M.I.
INTEGRATE



Long term major experience in engineering and technology of advanced mechanical and electric design



Production units structured with advanced machines and equipment able to ensure product quality and effectiveness of the service



Certification Process and Product:

ISO 9001-2008

ISO 3834

ISO 1090-1

IP55 IP66 IK10 (TUV)

NEMA 4, 12 (UL508)



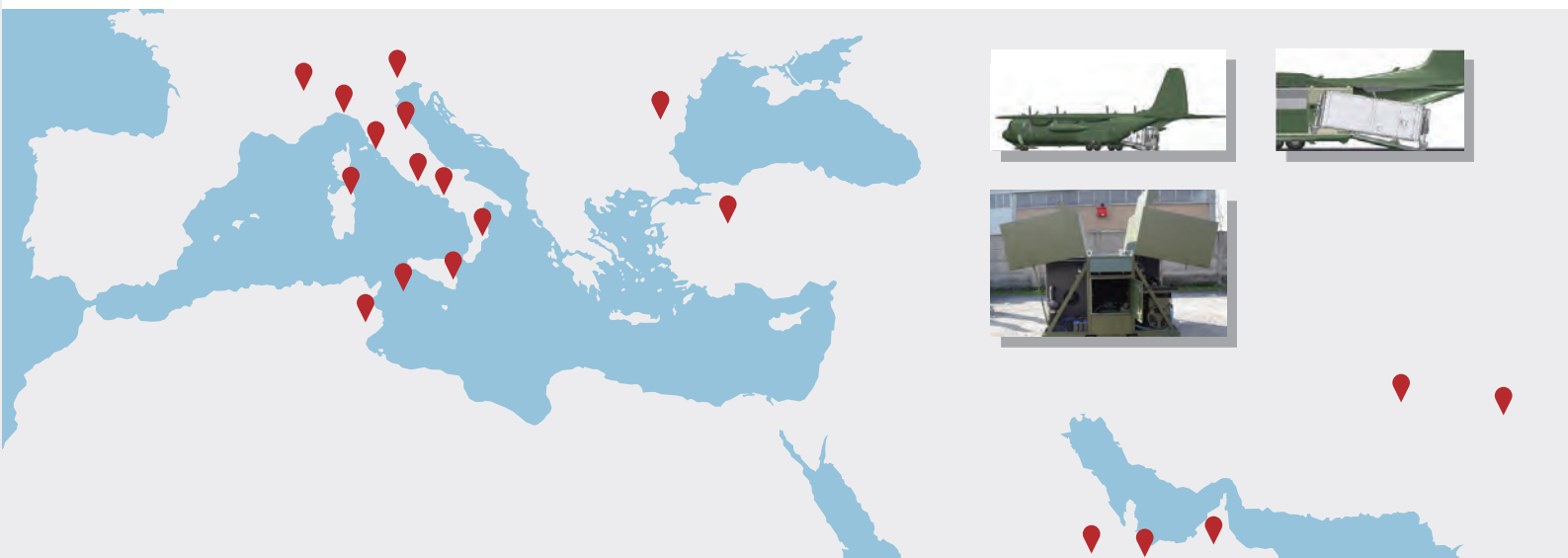
BAUART
GEPRÜFT
TYPE
APPROVED



TÜV UL year 2010

ISO EN 3834 year 2014

ISO EN 1090-1 year 2014



Shelter ILLCA: installed all around the world

Abu Dhabi	Milan	Palermo
Afghanistan	Rome	Forli
Pakistan	Turin	Lamezia
Qatar	Bologna	Latina
Romania	Bergamo	Naples
Saudi Arabia	Genova	Grottaglie
Tunisia	Grosseto	Olbia
Turkey	Aosta	Crotone
	Padua	Lamezia Terme
	Pantelleria	Comiso
	Pisa	Cagliari
	Frosinone	Udine

ILLCA SMI SRL company is the primary reference ILLCA Group, that is formed by a pool of firms headed by the Montini family and employing 200 people working in the fields of structural mechanics - industrial painting - production of cabinets for industrial automation and networking - wiring of electrical / electronic - welding - construction of cabinets for outdoor installation.

Born in 1965, the company is now a leader in the design and manufacture of Shelter and enclosures for outdoor installations, thanks to 49 years of a growth made of investments in human resources and plant technology.

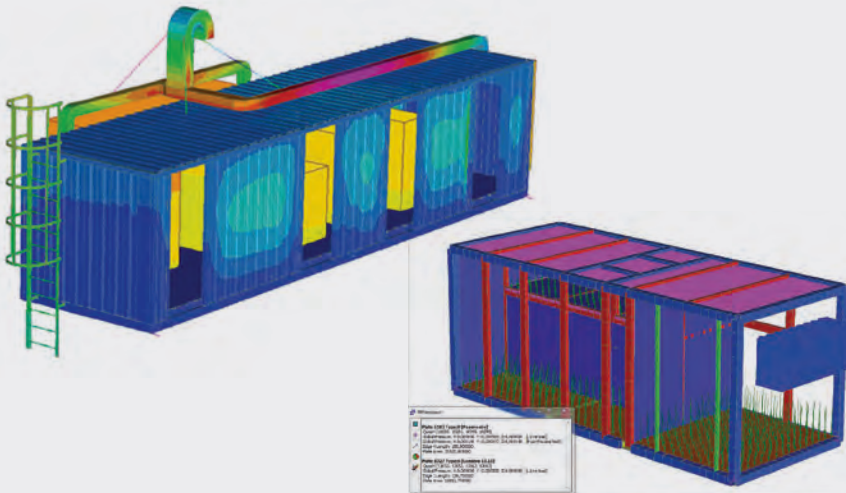
Our Mission

ILLCA consolidated its mission in providing turnkey catalog products and custom products tailored to each client. To ensure effectiveness and quality of service in the last decade ILLCA has:

- implemented the production sites (15,000 square meters + 15,000 open area)
- invested on human resources employing engineers, experienced technicians and skilled labors
- updated the production facilities with the installation of flexible manufacturing systems

The primary mission of our company is being at the forefront in the supply of customized high tech products.





Structural Calculations

The investment priority is on human resources specialized in industrial design.

The Project and Product Engineering support and guide the customer during all the steps of a new product development or of design reviews. The skill in design related to the flexibility in prototyping and construction, as well as the professionalism of our 4 manufacturing units they allow us to offer more comprehensive services, placing the partnership with customers as a primary objective.

The design structure is formed by:

- No. 2 experienced engineers in the field of structural analysis
- No. 3 technicians (mechanical and electrical) specialized in design and construction of Shelter intended scope Petrochemical, Telecommunications, Photovoltaic, Aeronautical and Generators

A highly professional team that ensures design capability of equipment and facilities and installations all around the world.

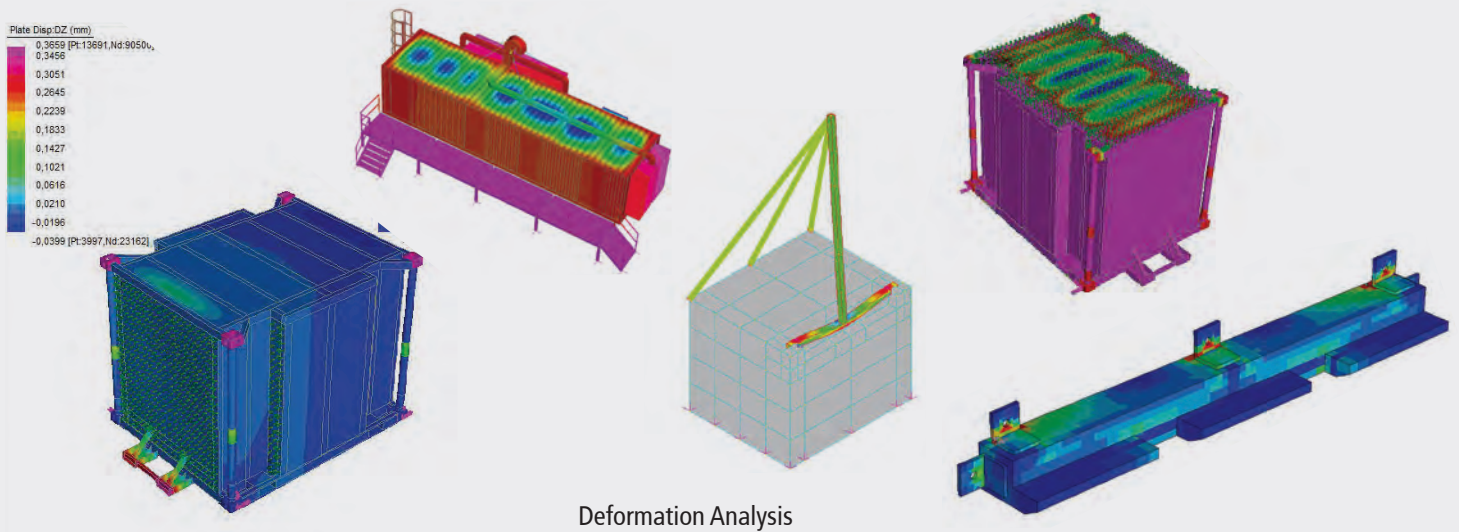
The software used:

- No. 2 'Strauss 7' stations for modeling complete structures intended for analysis with finite element code

(FEM). Draw the design, carried out according to the New Privacy NTC 2008, ASCE / SEI 7-10 American Society of Civil Engineers, ANSI / AISC 360-10 and STANAG RULES

- No. 3 'Pro Engineer' stations dedicated to completion of the Phase Analysis and Modeling of complete structures





STATIC & DYNAMIC ANALYSIS OF FRAMES

- Terms and load combinations according to STAN-AG RULES 22876, 2445, 3542 and directions of the Customer
- Sizing and verification flows and loads non-barycentric
- Sizing and verification of dynamic acceleration according to current law
- Verification of maximum displacements and stresses on "beam and plate" elements
- Verification of static and seismic loads in accordance with ASCE Statement / SEI/7-10 (American Standards)

STRUCTURAL STRENGTH & FRANGIBILITY ANALYSIS

- Verification of structural strength and frangibility facilities, according to current regulations
- Verification of joints and materials suitable for this purpose
- Simulation of impact with Wing Plane 50km / h to 140km / h

ELEVATION STRUCTURE ANALYSIS

- Structures Elevation sec . Ministerial Decree 14-01-2008 – Resistance analysis and evaluation

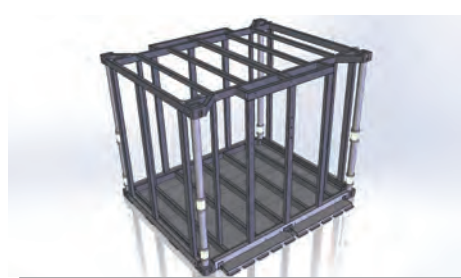
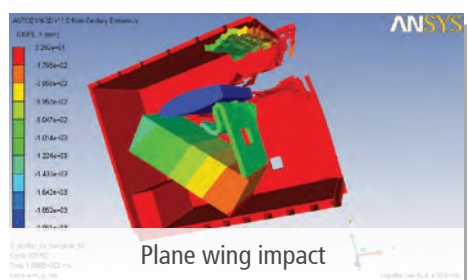
- Stress-strain of elements upon foundation plan and different types of fixing to the ground
- Handling and raising antennas / poles on shelters using manual and / or automated appliances
- Study and evaluation of wear
- Verification of stresses and deformations for lifting and running with Rigging

BUILDING STRUCTURES ANALYSIS

- Building structures sec . Ministerial Decree 14-01-2008, Study and evaluation wear
- Projects and Definitive of bedplates CLS for the anchoring of Shelters, trusses and antenna poles

HANDLING ANALYSIS

- Design of structure
- Check of handling on truck with mechanical lifters, ropes and forklift
- Check of maximum displacements and stresses on beams and plates:
 - Report of Final calculation
 - Certification of Eligibility for Installation and Use
 - Drafting Maintenance Plans



The manufacturing structure is the flagship of the company and technological innovation of the fittings, planning, computerized control of the activities and human resources are the strength of ILLCA.

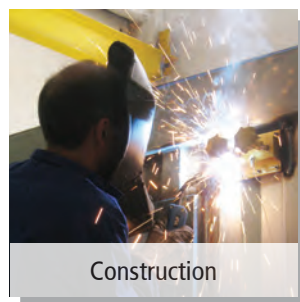
The company's production process takes place on 2 shifts per day in order to reduce the timing of production and to guarantee customer satisfaction too. The business organization moves in a context of certified quality process (ISO 9001 - ISO 3834 - ISO1090 -1). The certification process acquired ensures the repeatability of processes, the quality and the certification of the product and flexibility of the production capacity.

The Production Plants

- No. 1 Automated machining of sheet metal FMS (production line formed by Night Train warehouse - punching machines – paneling machines)
- No. 1 laser cutting system of last generation
- No. 1 automatic punching and cutting plant
- No. 1 bending robot
- No. 5 bending machines-CN
- CNC-machining centers for metal removal
- Plant and equipment of the latest generation for MIG TIG welding of steel and aluminum alloys and special alloys
- No. 1 plant with CNC for 3D mechanical control
- No. 1 plant for the control and testing system of electronic cards



Automated System



Construction



Test Facility

Human Resources

The know-how of ILLCA has grown in parallel with the growth of the company and currently it is the element that really makes ILLCA different from other competitors.

In order to be a leader in the market of turnkey Shelter and Outdoor Cabinet, over the past years ILLCA has been consistently increasing its labour force by entering skilled and specialized personnel and process certification:

- Refrigeration Technicians
- Punchdown electrical and electronic
- Mig Welders - Tig of steel and special alloys
- Operators for automatic punching and paneling

Casarile - MI

Design, manufacture of all the mechanical parts and sheet metal structures, mechanical assembly, electrical and electronic wiring, final testing and logistics management



Bastida Pancarana – PV

Surface treatment, powder and liquid coating, storage facilities for polyurethane seals, warehouse and logistics



The key to success in manufacturing and supplying of Shelter and Outdoor Cabinet is due to a technical-productive workers of 40 (10 in the technical and engineering - 30 production workers) and to a synergy of business network enterprise (the law n ° 33 of 09/04/2009), with leading companies in the provision of special processes (electronics, heat technology, certified special welding).



Typical Shelter STD

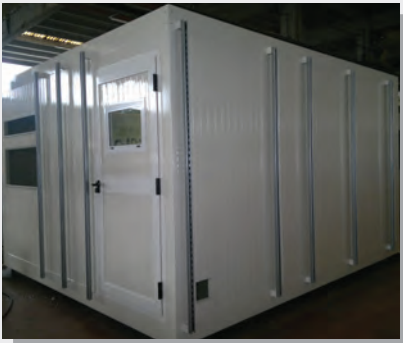


Treatment and coating

COMPACT OUTDOOR SHELTER



Oil and gas

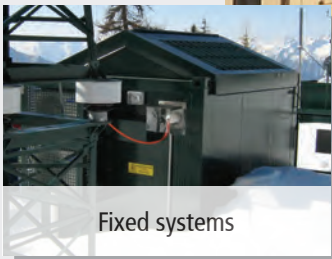


Military compact



Shelter compact telecommunications

TYPICAL INSTALLATIONS AND LOGISTICS



Fixed systems



Mobile systems



Transport and logistics



ILLCA MAIN CUSTOMERS

Thales

THALES

ERICSSON 

Ericsson Telecomunicazioni

Nidec - Ansaldo

HiRef


infracom

Sirti

SY.E.S.

Nidec


siae microelettronica

Infracom

Siae Microelettronica

Siemens I.C.N.

SYes

 Sirti

SOL

Sun System

Ecotech

SIEMENS

 ALCATEL

ILLCA S.M.I.

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