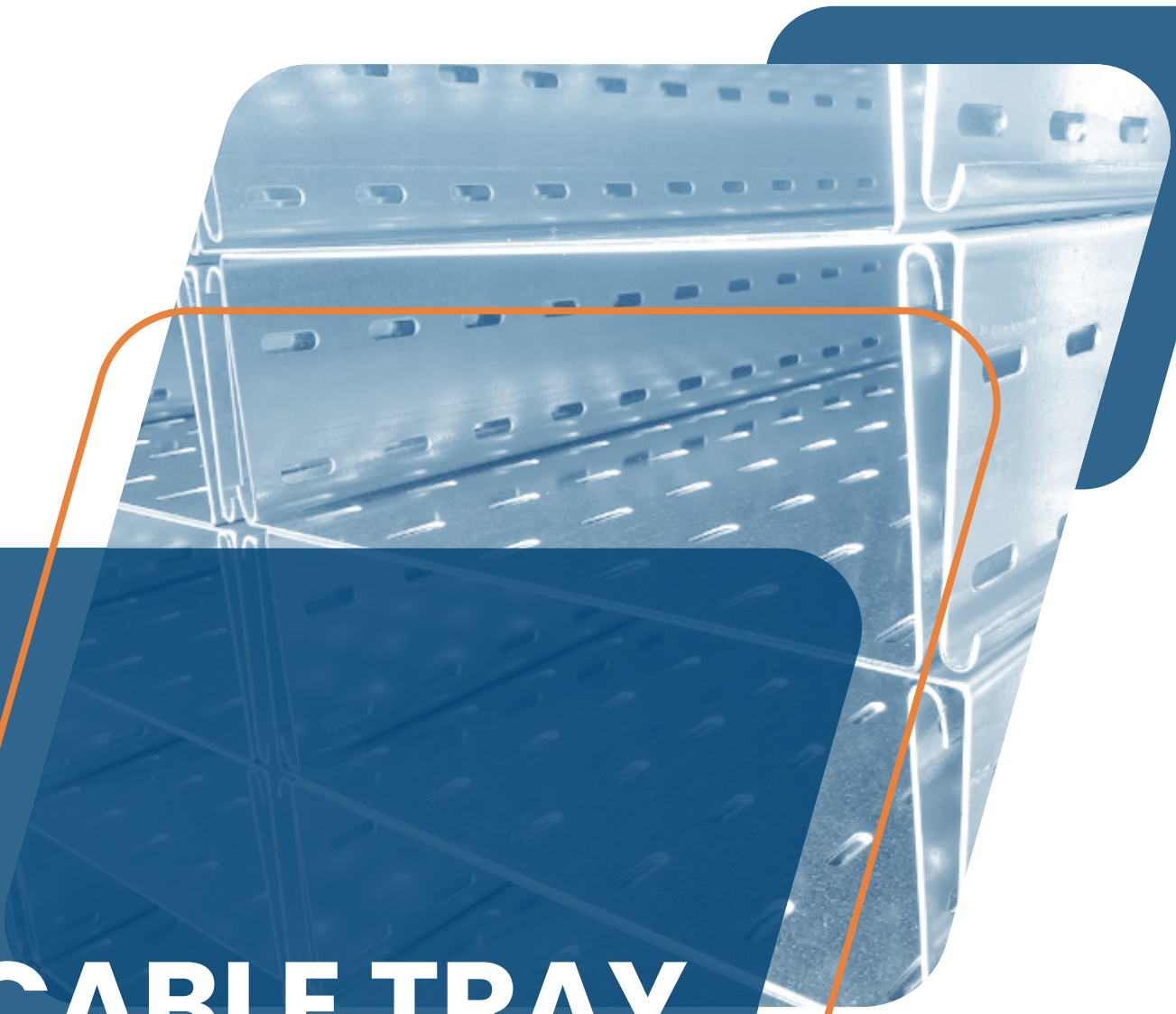




# CABLE TRAY SYSTEMS

v 1.3

# INDUSTRIAL CABLE TRAYS

Cable ladders/trays serve the dual purpose of housing and distributing electrical cables in various environments, while also protecting them from aggressive and corrosive agents found in many industrial settings, especially in the Oil and Gas sector.

SITIE cable trays, thanks to the high quality of materials used, the wide range of available components, and easy assembly, fully fulfill both functions while ensuring quick installation times.



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# WHO WE ARE

*Operating in Italy and worldwide since 1945, we specialize in the Oil & Gas, Energy, HVAC, MEP, and Infrastructure sectors.*

We are a team of experienced, flexible professionals, dedicated to safety and the highest quality standards in every project. Leveraging our deep industry expertise, we provide technical solutions that ensure our Partners and Clients benefit from effective, secure, and cost-efficient project designs.



# MISSION

We implement projects across all industrial and energy sectors with a sustainable approach that respects the environment and our workforce's health and safety. Committed to avoiding disadvantages to Third Parties and refraining from unlawful or unethical practices, we pursue fair profit while promoting individual growth, with a focus on empowering younger generations.



# VALUES

Ethics 

Life Quality 

Shared Goals 

Transparency 

Diversity, Equity 

Collaborative Spirit 

Comfortable Work Environment 

Respect for Clients and Companies 

# VISION

To promote a new approach to sustainable development focused on environmental respect, integrity in business relations, advanced technologies, and a strong sense of social responsibility.

# COMPANY HISTORY

## 1975–2000

Riding the wave of business success, the company expands its reach and goes international. By the early 2000s, SITIE employs several hundred skilled technicians and workers, operating across four continents and collaborating with some of the world's most renowned Contractors, especially in the Oil and Gas sector.

## 1945

SITIE was founded in 1945 by two entrepreneurs from Ferrara, who established the company as a provider of industrial assembly services and light carpentry works, laying the foundation for a future of innovation and growth.



## 2000–2020

From 2000 to 2020, SITIE expands its expertise to the energy sector, infrastructure, MEP, and HVAC, transitioning from an entrepreneurial model to a matrix organizational structure.



## 2020–TODAY

Amid the challenging years of the pandemic, global economic crisis, and new conflicts, SITIE reorganizes by streamlining its structure and focusing its scope. Today, it stands as a lean, dynamic company, able to respond swiftly and effectively to the demands of its most discerning Clients.



Left: Cable laying activities in preparation for the construction of a power plant.

Right: SITIE technicians at the project's completion (Oct. 1966).

# QUALITY & HSE

Aware of the great importance of operating in a context that combines quality, health, safety, and environmental protection, we have adopted an integrated management system since the early 2000s, complying with ISO 9001, ISO 45001, and ISO 14001 standards. Our product certification under CEI EN 61537 demonstrates our constant adherence to regulations and contractual requirements.

Worker safety is an absolute priority: we have established specific operational procedures and implemented preventive

measures to ensure healthy and safe working environments every day.

In this perspective, we are proud to have obtained the VCA/SCC certification, a prestigious international recognition that certifies our commitment to risk management, particularly in high-risk industries such as Oil & Gas.

We support our Clients by analyzing their needs and providing effective and efficient solutions, integrating the best technologies, and promoting the continuous upgrading of systems and equipment. Collaboration with suppliers who share high-quality standards further strengthens our system.

Active employee involvement, supported by ongoing training and awareness programs on culture, organizational techniques, health, and safety, drives our continuous improvement and the sustainable growth of our activities.

This perspective boosts our competitive edge and innovation.

Our vision, guided by innovation and passion, continues to turn every challenge into real and unique opportunities.



# ESG

The principles of environmental, social, and governance (ESG) sustainability are the foundation of our daily operations.

The values of loyalty, integrity, competence, and transparency outlined in our Code of Ethics are essential to generating value in the short, medium and long term, both within SITIE and in our relationships with trusted partners.

We are committed to integrating sustainability policies into every aspect of our work, from business practices to products and stakeholder interactions.

We promote a responsible, innovative,

and future-oriented approach, making continuous efforts to foster lasting synergies and strengthen strong mutual trust and collaboration.



## QUALITY

*"Tailored to customer needs and fit for purpose, our quality translates into customized solutions and products that meet the highest standards."*



## HEALTH & SAFETY

*"Safety is the foundation of our work: strict procedures and preventive measures ensure protected and healthy work environments."*



## ENVIRONMENT

*"Environmental protection drives every choice we make, promoting sustainable practices and responsible resource management for a better planet."*



## SUSTAINABILITY

*"Our ESG commitment translates into responsible choices. We turn challenges into opportunities, strengthening synergies and shaping a sustainable future."*

# TAILORED PRODUCTION



Our simple yet well-organized structure allows us to be extremely flexible, enabling us to customize even small batches, effectively meeting the client's needs in cases where there are strict and non-negotiable specifications, such as in the oil & gas, chemical, pharmaceutical, or food industries.

Our production area was established between the late 1960s and early 1970s to support electro-instrumental installations. The specific requirements of these activities immediately shaped our artisanal production approach, which has been carefully optimized over the years to be-

come a real strength.

For us, customization isn't just about deviating from standard catalog materials, thicknesses, and dimensions—it's about creating entirely unique, high-quality products.

We manufacture a wide variety of metalworks: frames for electrical panels, frames for junction boxes, instrument columns, light poles, shel-

**quality  
made in Italy  
with the perfect  
balance of artisa-  
nal and industrial**





ter canopies, protective covers for inverters/instruments/control panels, welded or mechanically attached supports.

Over the years, we have successfully taken on ambitious projects, at times shifting from artisanal to industrial production when needed.

We are the ideal partner for both small in-

stallers needing practical "field solutions" and large contractors who must meet specific project requirements, such as challenging environmental conditions, load capacities, and finishes.

Additionally, we are highly skilled in managing specific requests not only during the design and manufacturing phases but also throughout the entire supply process, with certifications, documentation, and both internal and external testing, as well as comprehensive calculation reports.



# CABLE LADDERS

PTR

*Our flagship product offers exceptional strength, ensuring a high load capacity even with reduced thickness. This design advantage leads to significant cost benefits and easier handling and installation.*

This type of cable tray, providing excellent load capacity and necessary ventilation, is particularly well-suited for medium and large-sized cables.

Our PTR is carefully assembled with robotic MAG welding between the side rail and cross bar, followed by a hot-dip gal-

vanizing process in full compliance with ISO 1461 standards.

This meticulous process ensures high standards of quality and reliability, a fundamental requirement in the most demanding sectors, such as construction and oil & gas.



**lightweight**



**sturdy**



**affordable**



**HEIGHT**  
***100 ÷ 200 mm***



**THICKNESS**  
***1.2 ÷ 3.0 mm***



**WIDTH**  
***100 ÷ 1000 mm***



**LENGTH**  
***0.5 ÷ 6.0 mt***



**BENDING RADIUS**  
***300 ÷ 1500 mm***



**RUNGS INTERAXIS**  
***≥150 mm***





## Technical Notes

The PTR cable trays are expertly designed and manufactured in full compliance with CEI EN 61537 Class 23-76 standards, and can be produced in various materials and finishes.

The bending radii of the special pieces strictly adhere to CEI 11-17 standards, which define a minimum bend radius based on cable diameter; upon request, different radii from the standard (600mm) are also available.

Covers are typically flat with a standard thickness of 1.00mm; however, other thicknesses and geometries (such as sloped, reinforced ribbing, ventilation slots, drainage holes, etc.) can be provided upon request.



### Materials

- Carbon steel\*
- Stainless steel AISI 304
- Stainless steel AISI 316L
- Aluminum



### Finishes and treatments

- Hot dip galvanization
- Chemical cleaning
- Powder coating
- Anodizing
- Passivation

\* including special steels, like silicon-enriched ones, that can be galvanized to class 3 and those suitable for low temperatures.

## Load Capacities

The PTR cable tray system has undergone rigorous testing to define the maximum applicable loads in compliance with CEI EN 61537 standards.

In our catalog, you'll find diagrams that, based on the distance between supports, define both the maximum uniformly distributed load and the maximum allowable load when a concentrated load is applied: for this purpose, a concentrated load of 900 N positioned midway between supports was considered.

The CEI EN 61537 standard specifies a maximum allowable longitudinal deflection of  $1/100$  of the support distance and a maximum allowable transverse deflection of  $1/20$  of the tray width. The deflection of the PTR cable tray system remains well within these defined parameters.



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the catalogues area



# CABLE TRAYS

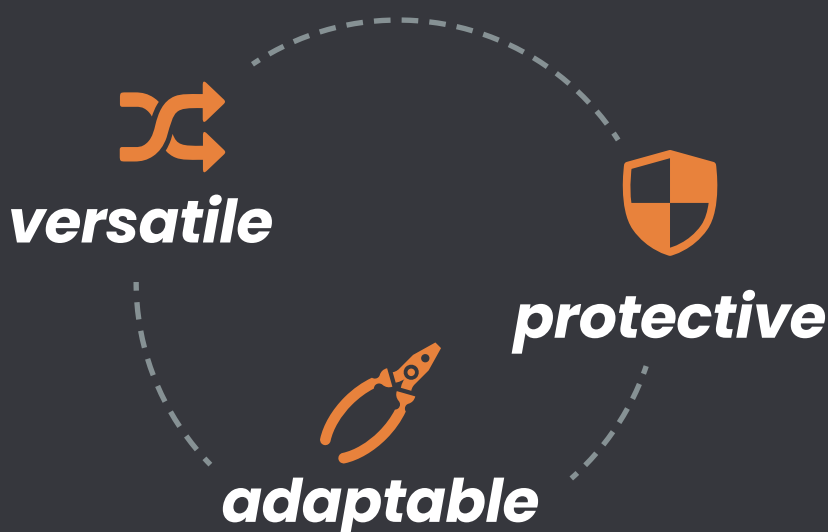
PF

*Trays with continuous bases protect cables from external conditions and are particularly valued for their versatility and adaptability on-site, ensuring maximum flexibility during installation.*

This type of cable tray is carefully designed to shield cables from external environments and is typically used for medium-to-small sized cables.

Depending on specific installation needs, the trays may feature perforated bases to provide better ventilation, or be fully en-

closed where there's a need for maximum protection from liquids and dust. The flange can be either standard (PFL) or reinforced (PFLR) with a rolled edge, greatly enhancing durability and load capacity, and allowing high cable fill ratios while meeting stringent industry requirements.





**HEIGHT**  
***50 ÷ 150 mm***



**THICKNESS**  
***1 ÷ 2.0 mm***



**WIDTH**  
***50 ÷ 1000 mm***



**LENGTH**  
***0.5 ÷ 5.0 mt***



**BENDING RADIUS**  
***150 ÷ 600 mm***



**PROTECTION**  
***IP20 ÷ IP62***





## Technical Notes

PFLR and PFL trays are thoughtfully designed and manufactured in full compliance with CEI EN 61537, Class 23-76, and can be produced in a variety of materials and finishes.

The bending radii of special pieces follow CEI 11-17 standards, specifying a minimum bending radius based on cable diameter: other radii than the standard (150mm for PFL and 200mm for PFLR) are available upon request. Covers are typically flat with a 1.00mm thickness; if needed, different thicknesses and geometries (such as sloped profiles, reinforced ribs, air vents, drainage holes, etc.) can also be provided.



### Materials

- Carbon steel\*
- Sendzimir pre-galvanized steel
- Stainless steel AISI 304
- Stainless steel AISI 316L
- Aluminum



### Finishes and treatments

- Hot dip galvanization
- Chemical cleaning
- Powder coating
- Anodizing
- Passivation

\* including special steels, like silicon-enriched ones, that can be galvanized to class 3 and those suitable for low temperatures.

## Load Capacities

The PFLR/PFL tray system has undergone extensive testing to accurately determine the maximum applicable

loads, in full compliance with CEI EN 61537 standards. In our catalog, you'll find detailed diagrams specifying, based on the distance between supports, the maximum uniformly distributed load capacity as well as the load tolerance for concentrated weights. For concentrated load testing, a weight of 800 N (applicable to PFLR H100 only) was positioned precisely at the midpoint between supports. The CEI EN 61537 standard specifies a maximum allowable longitudinal deflection of 1/100 of the support span, and a maximum transverse deflection of 1/20 of the tray width. The PFLR/PFL tray system's deflection comfortably meets these requirements, confirming its reliability under load.



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# SUPPORTS & FASTENERS

SF

*Our extensive experience in installations has enabled us to focus on developing essential, high-quality accessories to effectively meet the most common installation needs.*

The range of standard accessories in our catalog is both essential and highly comprehensive, effectively meeting the most common installation needs with ease and reliability.

We offer the capability to customize any type of accessory, adapting it to specific

project or system requirements, or simply to overcome unique installation challenges.

Our technical office collaborates with clients to design and engineer tailored solutions that achieve the best balance between practicality and cost-effectiveness.





## Materials

- Carbon steel\*
- Stainless steel AISI 304
- Stainless steel AISI 316L
- Aluminum



## Finishes and treatments

- Hot dip galvanization
- Chemical cleaning
- Powder coating
- Anodizing
- Passivation

## Load Capacities

Our Supports and Fixings meet the most stringent requirements of the Oil & Gas industry, where strength is a fundamental and often over-dimensioned requirement. Our products, including customized solutions, are designed in compliance with the highest engineering standards and, upon request, can be certified through structural calculation reports.

All relevant data (load capacities, moments of inertia, class, and bolt torque values...) required for selecting and/or engineering the most suitable solution are available in our catalog, which can be accessed in the dedicated section below.

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\* including special steels, like silicon-enriched ones, that can be galvanized to class 3 and those suitable for low temperatures.

# POLES & SUPPORTS

PS

These materials—including lighting poles, instrument support columns, and control panel frames—are among our most highly customizable products, as each facility and installation presents unique requirements. For example, certain facilities or designated areas may contain explosive atmospheres, requiring specialized solutions like our explosion-proof lighting poles. In other cases, weather-proof or sealed materials are essential for

protection against harsh environmental conditions.

Our team collaborates closely with clients to determine the most optimal solutions, guiding them toward choices that balance technical requirements with cost efficiency.

A variety of pre-engineered solutions are available in our catalog, compliant with the stringent standards of leading Oil & Gas contractors.





## Materials

- Carbon steel\*
- Stainless steel AISI 304
- Stainless steel AISI 316L
- Aluminum



## Finishes and treatments

- Hot dip galvanization
- Chemical cleaning
- Powder coating
- Anodizing
- Passivation



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\* including special steels, like silicon-enriched ones, that can be galvanized to class 3 and those suitable for low temperatures.

# KEY PROJECTS

**ROTTERDAM C.G.****TUNNEL FREJUS****SINES REFINERY****P. SABRATHA****P. MABOQUEIRO**

**C.U. ENEFIT POWER****CORU REFINERY****AMURSKY GPP****PEAKERS ENIPOWER****FANO REVAMPING****MO.S.E VENEZIA**

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Enefit

enel



**ERSAI**

**ExxonMobil**



**LEONARDO**

**LOTOS**

lyondellbasell



**MOTOR OIL**

**NESTE**

**ORION**  
ENGINEERED  
CARBONS

**RENCO**

**ROSETTI  
MARINO**



**SAMSUNG**



**SARPOM**



**SIEMENS**



**STAHL**



**TAL**  
transalpine pipeline



TechnipFMC



**TEVA**



**wood.**



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