



**Advanced conductor accessories**

**Green line series**



**sicame**  
GROUP



# About us

**sicame**  
GROUP

Sicame Group is one of the key players in the electrical equipment business worldwide. It has been able to adapt and develop to support the continuous evolution of electricity infrastructure in France and around the world, and become the largest independent entity in its sector.

A true player in the energy transition, it offers its customers new products and services to improve energy efficiency, deal with environmental risks and support the development of electric vehicle and solar power plant markets.

**+65**

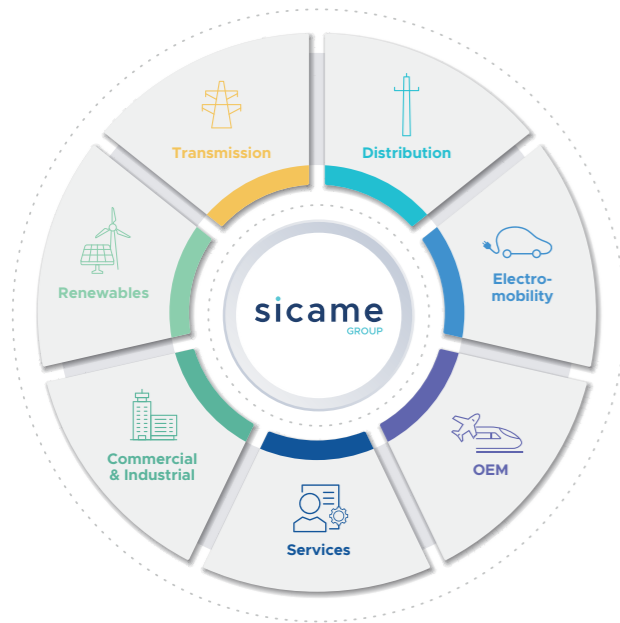
years of worldwide success

**567 M€**

2023 turnover

**3,600**

employees



## Our fields of activity

Sicame Group is specialised in **products and services** related to transmission and distribution of **electrical energy**, renewables, electro-mobility, safety equipment and industrial applications.

With decades of history and recognized expertise, the Transmission business unit is specialized in designing, manufacturing and producing comprehensive ranges of transmission lines and systems connectors, damping systems, hardware and most advanced substation fitting solutions, adapted to the most technical configurations such as 8-bundle spacer dampers, UHV HVDC connectors and innovative high temperature conductor's accessories.

**5** continents

**26** countries

**50** companies  
around the world

Products distributed  
in **157** countries

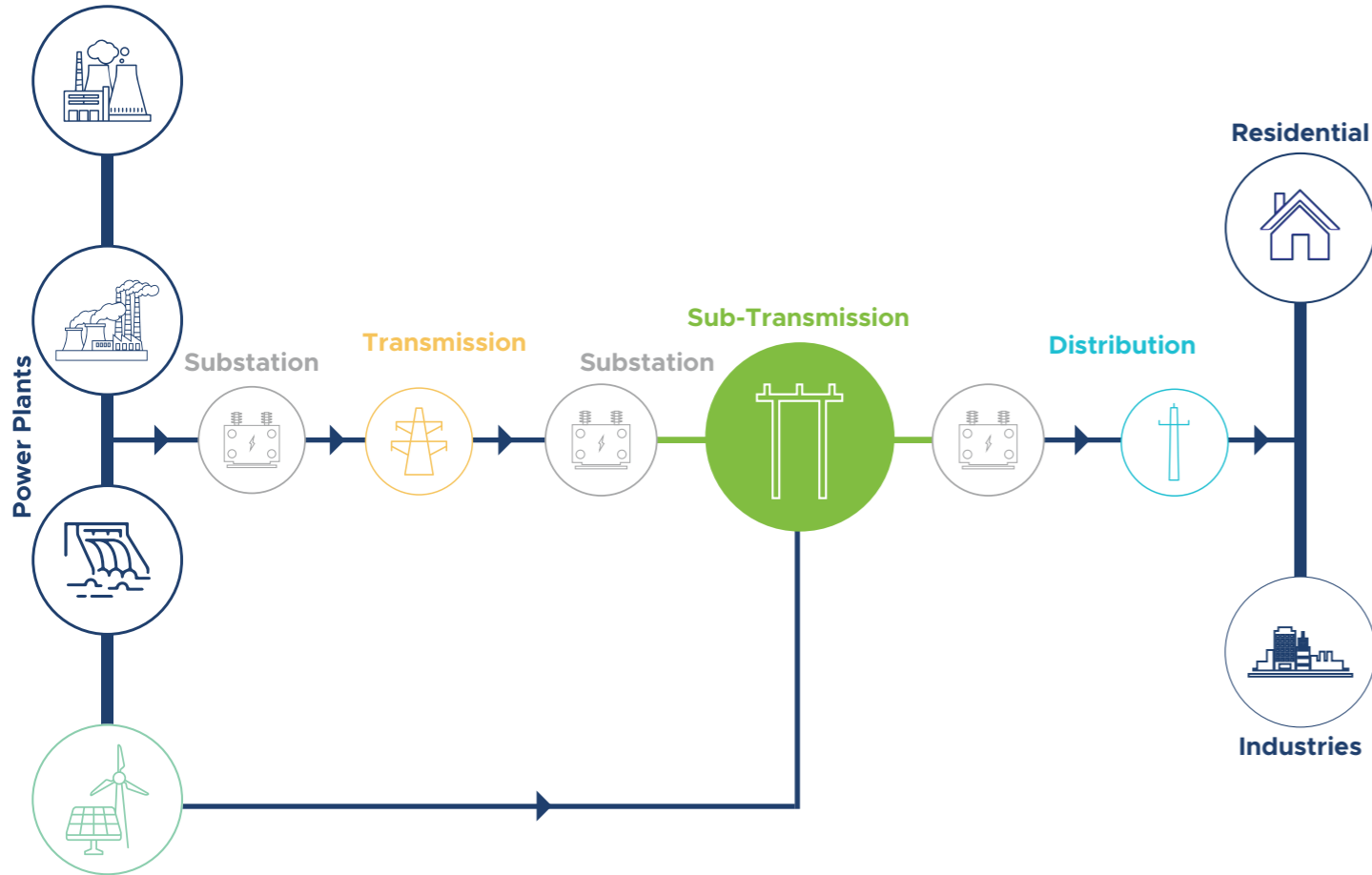


# Evolution of grid

Energy transition brings new challenges for the utilities in managing the grid.

- Managing capacity congestion
- Clean energy integration
- Reduce losses & down time

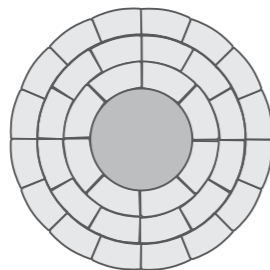
Strengthening the Sub-Transmission network is a necessity for future.



# Advanced conductor

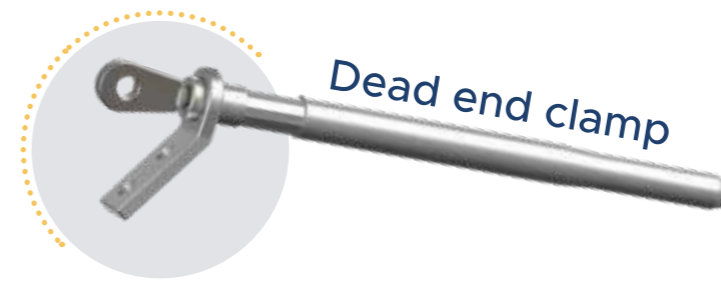
Advanced Conductor shall substantially contribute to global decarbonisation objectives in energy network which includes but not limited to:

- Fastest and most cost-effective way to increase line capacity
- Achieve sustainability goals
- Improve reliability & resilience



# Advanced end fittings

with Swage Drawing Technology (SDT)



## Key features

**Reliability**

Dedicated advanced fittings

**Time**

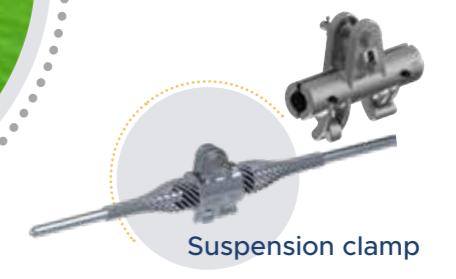
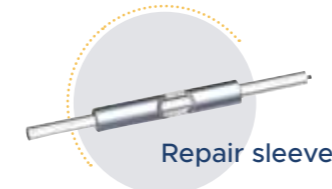
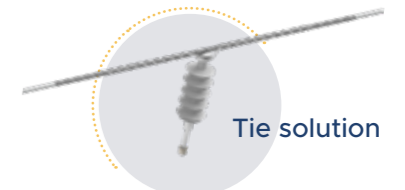
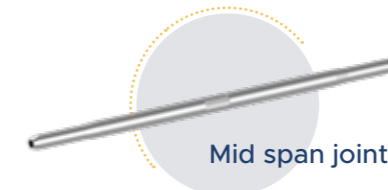
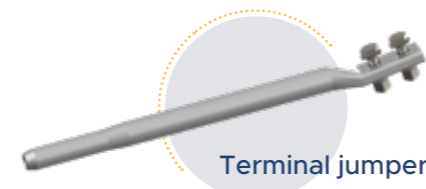
Quick and easy installation

**Cost**

Design optimization

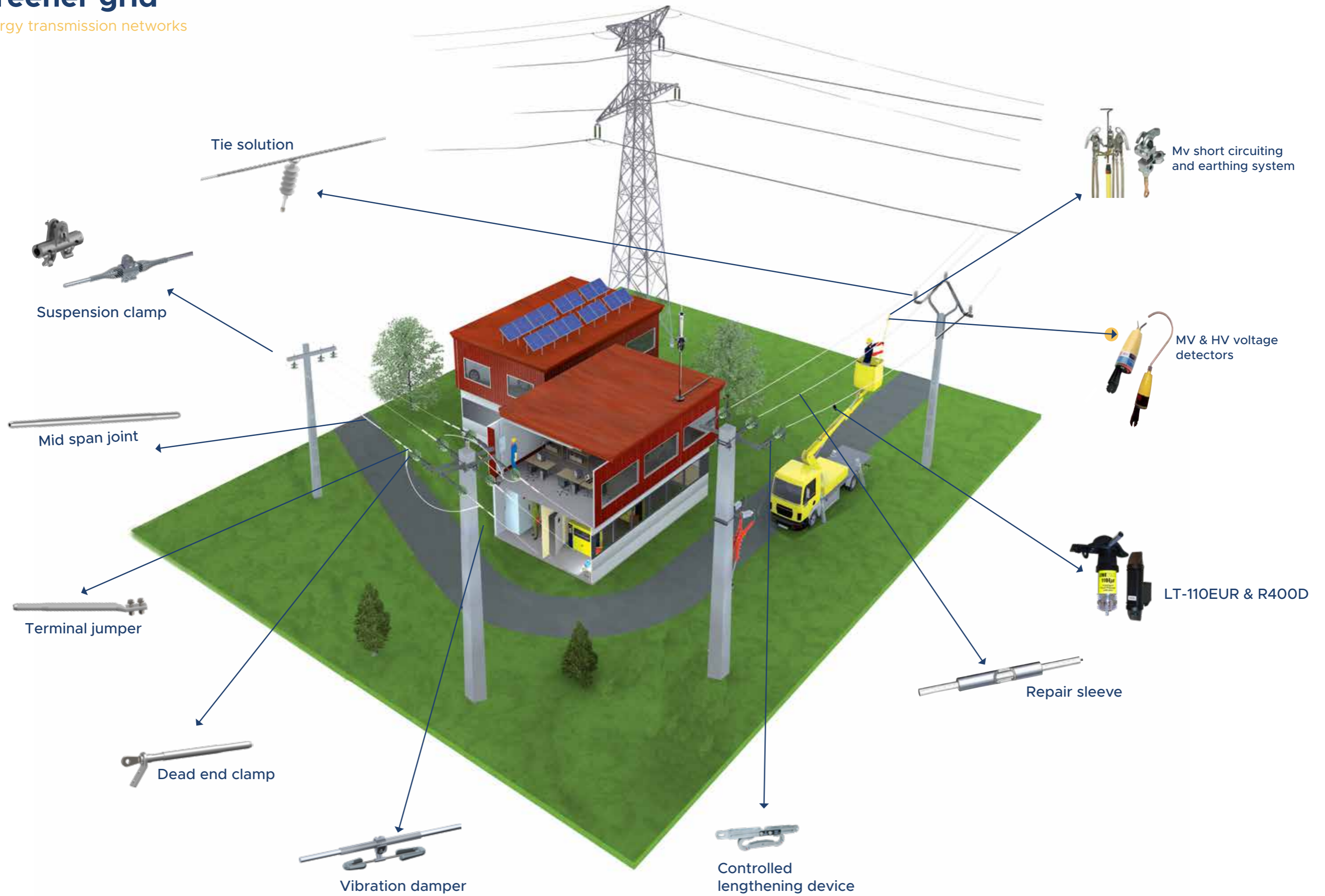
# Conductor accessories

Key network products



# Greener grid

Energy transmission networks

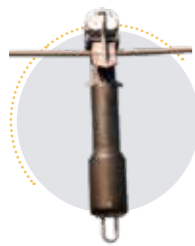


# Mechanical protection devices



## Controlled Lengthening Device **DAC Omega**:

- Protect lines against mechanical impact overloading such as storm related fallen trees, tree limbs and ice by smoothly providing extra slack prevent from pole breaking.



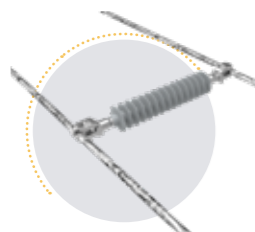
## Anti-gyrational counterweight **MAG**:

- Increased reliability of overhead lines in case of wet snow by raising torsional rigidity of conductors
- Decrease formation of wet snow sleeves that might cause overloads on conductors



## Insulating ring against conductor contact **Dervaspire**:

- Avoids mid-span phase conductor contact from wind effect or mechanical load changes such as ice, drop or birds fly off
- Live line hot stickable



## DSIL Insulating spacer:

- Maintains rigid spacing between phases in a rigid way to avoid conductor contact

# Smart solutions

## Operating process

All our IoT devices are configured to detect fault locations, reduce on-site repair times, avoid maintenance and alert any abnormality. They communicate in real time the mechanical status of your device.



Data acquisition



Low frequency communication system LoRaWan, SigFox & GSM



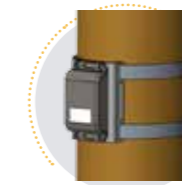
Data transmission to the cloud



Data reception and transcribing on online platform

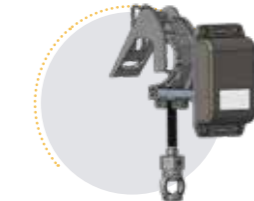
Several configurations are available that will report alerts

**iDAC**  
Combined with the DAC, it will communicate and alert in real time the mechanical status of your DAC.



**iPole**  
Pole tilting device that detects any pole inclination movement.

**iLine**  
Line monitoring device that detect any unusual movement on the line such as overload, broken, fallen or oscillating lines.



**MX-482**  
Surge arrester monitoring device for lightning strike detection. Available in 50 and 60 MHz.

**LT-110EUR & R400D**  
Fault detection and localization.



# HTLS | Credentials

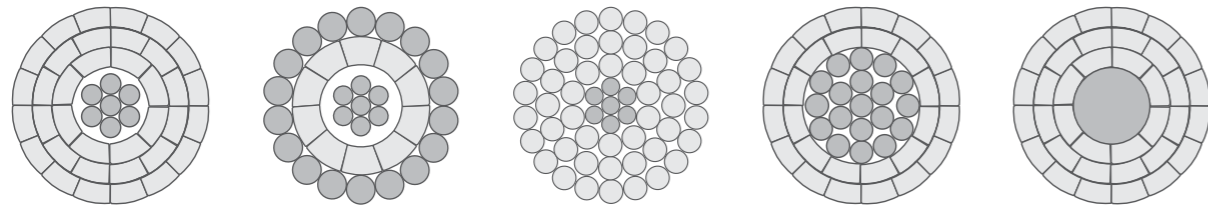
## High temperature low sag cable line hardware

Since 2001, Sicame Group has been working closely with the French electricity grid (RTE: Réseaux de Transport d'Electricité) and other major Utilities, to successfully qualify HTLS conductor sets and accessories.

Sicame Group has confirmed for many years now, its strong technical capacity to design line hardware suitable to the HTLS conductors characteristics requirements:

- Maximum operating temperature (up to 250°C)
- Fully annealed aluminium for conductor strands
- Gauges according to the required outputs

These specific Conductor characteristics require the study and qualification of line hardware that result in safe, durable installations, whether new or existing lines.

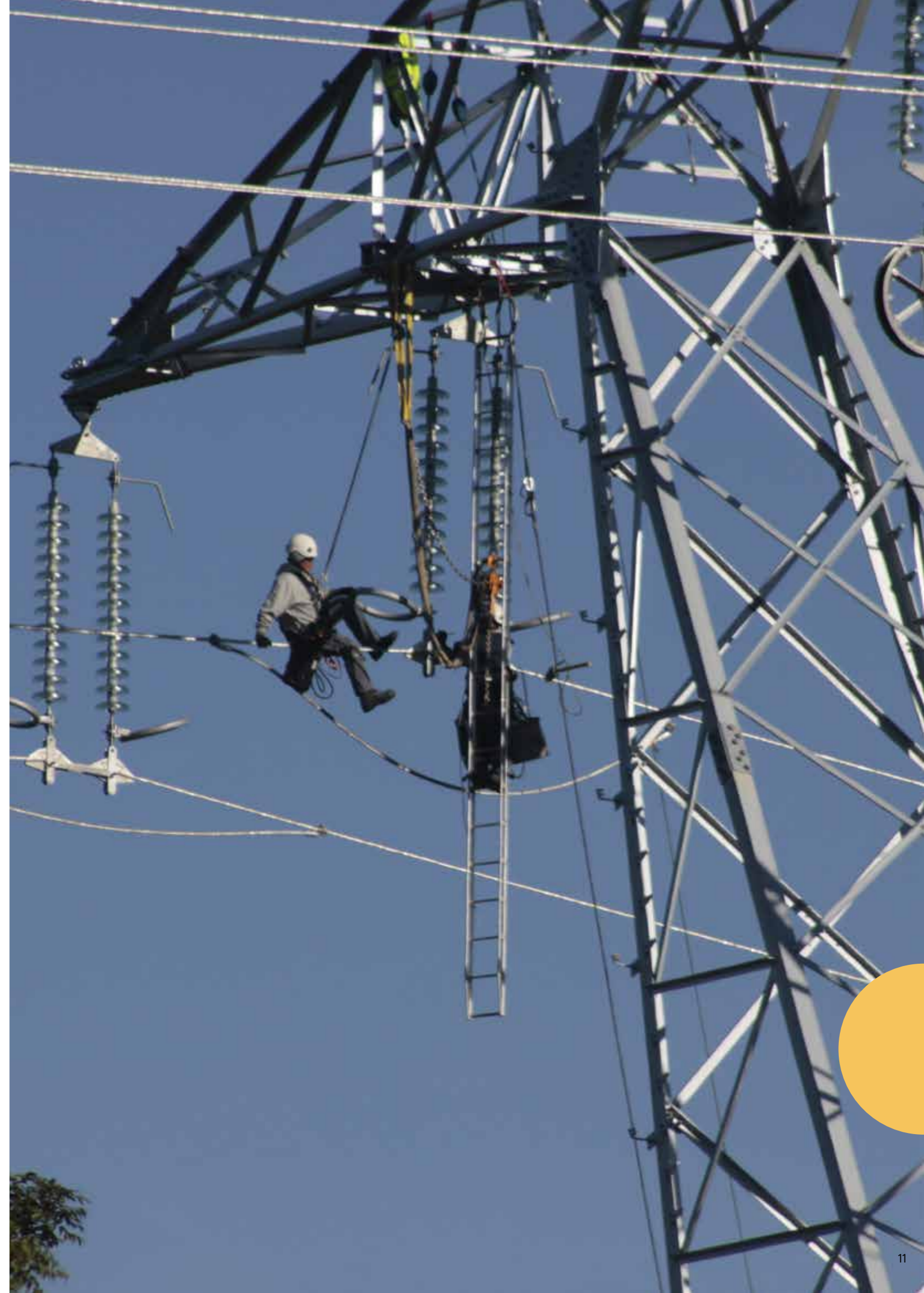
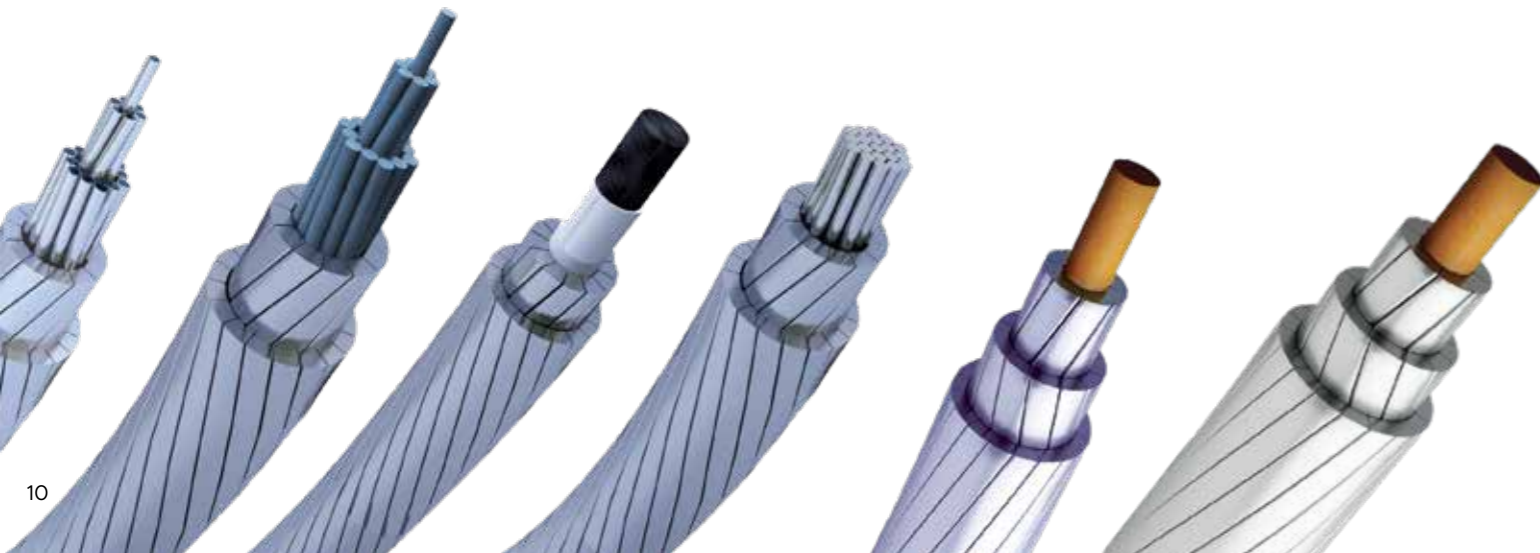


## A testing laboratory able to characterize and qualify HTLS conductors & accessories

Our Transmission has test resources among the best, which means that low sag / high ampacity conductors and accessories can be fine-tuned and qualified. These studies and trials are performed according to the power, environmental, and configuration parameters of the line to be fitted.

The tests comply with the requirements of standard IEC 61284\*:

\*Tests compliant with the specifications of each country can be performed by the Sicame Group Transmission Laboratories.



# Laboratory testing & Industrial manufacturing processes

High temperature low sag cable line hardware

## Laboratories capabilities worldwide

- Certified laboratories
- State of art equipment
- 3rd party services
- Expertise
- University partnership



## Tests and R&D

Our transmission laboratory is assisting both design activities and product verification. In the design stage it is supporting the technical department in its activity of research and development while in the product verification stage all quality control mechanical verifications and tests are carried out including batch acceptance tests.

### Components mechanical tests:

Are performed at our laboratories worldwide that are fully equipped for all kind of destructive and non-destructive tests.

### Full scale mechanical tests:

We are also capable to carry out full scale mechanical tests in independent and accredited laboratories so as to verify the real mechanical behavior of the full strings.

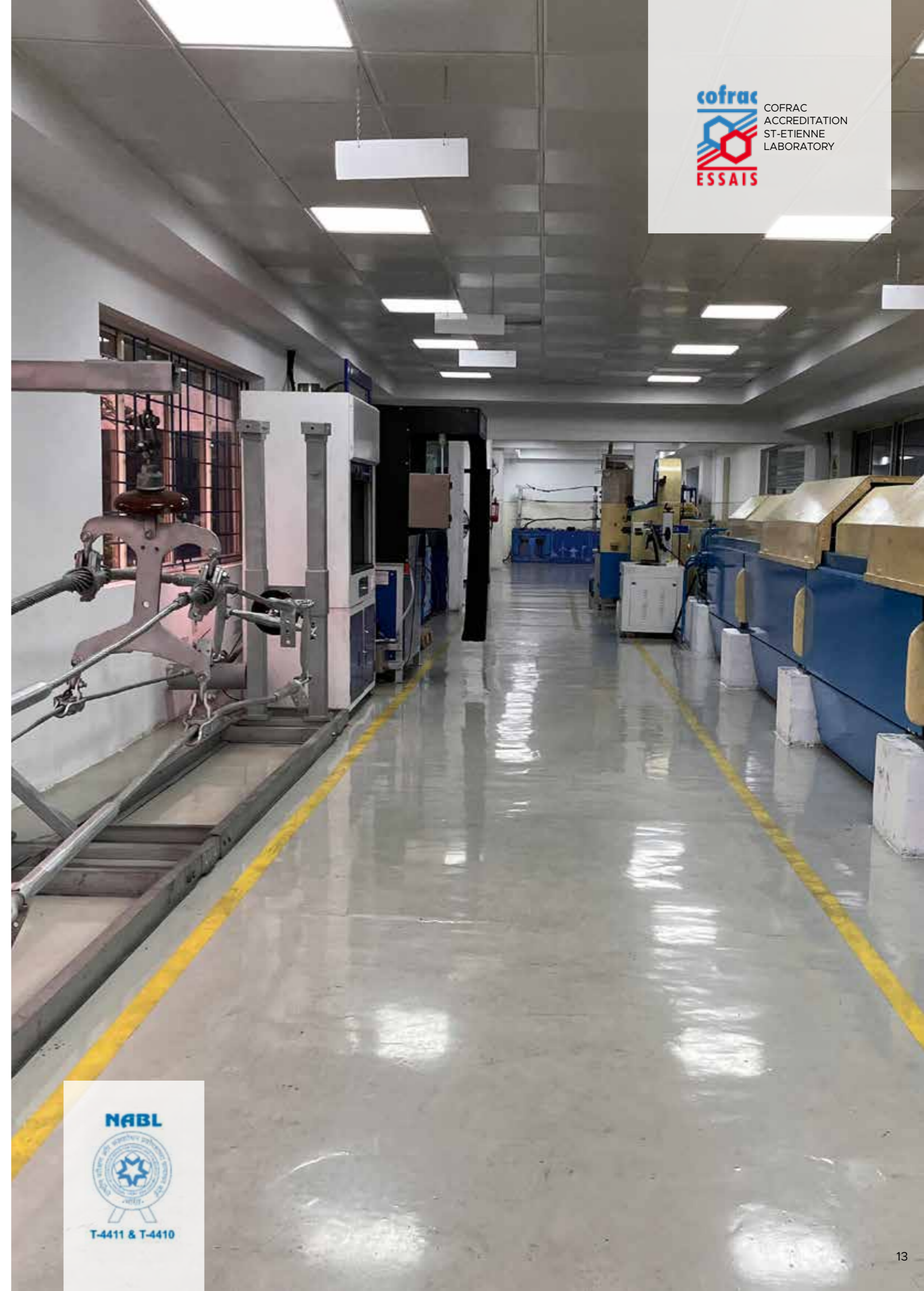
### Electrical tests on complete strings:

RIV and Corona, Power Arc and Short Circuit are carried out in independent laboratories according to international standards and prescriptions of project technical specifications.

## Manufacturing

Manufacturing activities are carried out in our factories directly or through our sub-suppliers and partners within Sicame Group.

- Manufacturing processes excellence centers
- Interconnected supply chain among business unit net work
- Complete manufacturing processes inside business unit



5400 J.A. Bombardier  
Saint-Hubert, Québec - J3Z 1G8, Canada  
Phone: +1 450 679 7778  
E-mail: info@sicamena.com  
Website: sicame-energie.com

**sicame**  
ENERGIE

**Dervaux**  
Sicame Group

Z.I. Le Bec - Allée Ampère - B.P. 49 - 42501 Le Chambon-Feugerolles, France  
Phone: +33 (0)4 77 40 17 40  
E-mail: info@dervaux.fr

Carrer Albert Einstein, 5-7 Pol. Ind. Sesrovires  
08635 Sant Esteve Sesrovires, Barcelona, Spain  
Phone: +34 937 715 844  
Website: sbiconnectors.com

**SBI Connectors**  
Sicame Group

Salvi Eletro Fittings - Rua Pureza Marques de Oliveira, 63  
Núcleo Micro Industrial Pres. Wilson - 06602-010 Jandira, Brazil  
Phone: +55 11 4789-9979  
E-mail: eletro@eletrofittings.com.br  
Website: salvibr.com.br

**SEF**  
Sicame Group

Rua Estrada da Rainha nº 340  
4410-030 Serzedo Vila Nova de Gaia, Portugal  
Phone: +351 22 730 0240  
E-mail: skelt@skelt.pt  
Website: skelt.pt

**skelt**  
Sicame Group

**SALVI**  
Sicame Group

Via G. Durando, 38 - 20158 Milano, Italia  
E-mail: salvi@salvi.eu  
Website: salvi.eu

**sicame**  
INDIA

S.No.473/1 - No.96, Sirkundram Road Village Chengalpet Taluk,  
Kancheepuram District - 603 108, India  
Phone: +91 44 37270300  
E-mail: info@sicame.in  
Website: sicame.in

**sicamindo**

CCM Industrial Estate Kav F-1 No.7  
Jl. Raya Serang KM 28,5 Balaraja,  
Tangerang 15610, Banten - Indonesia  
Phone: (+62-21) 595 4861-62  
E-mail: marketing@sicamindo.com  
Website: sicamindo.com







Sicame Group

+33 (0)5 55 73 89 00  
1 boulevard Marius Vivier Merle, 69003 Lyon, France

 [sicame-group.com](https://sicame-group.com)