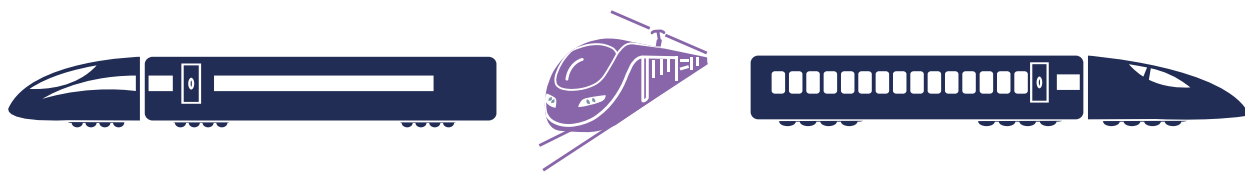
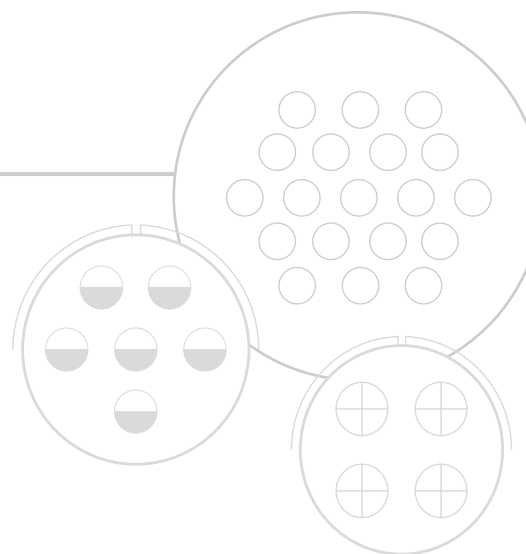




RAILWAY

ELECTRICAL INTERCONNECTION
SOLUTIONS



CAPACITIES

More than
40 years
of experience



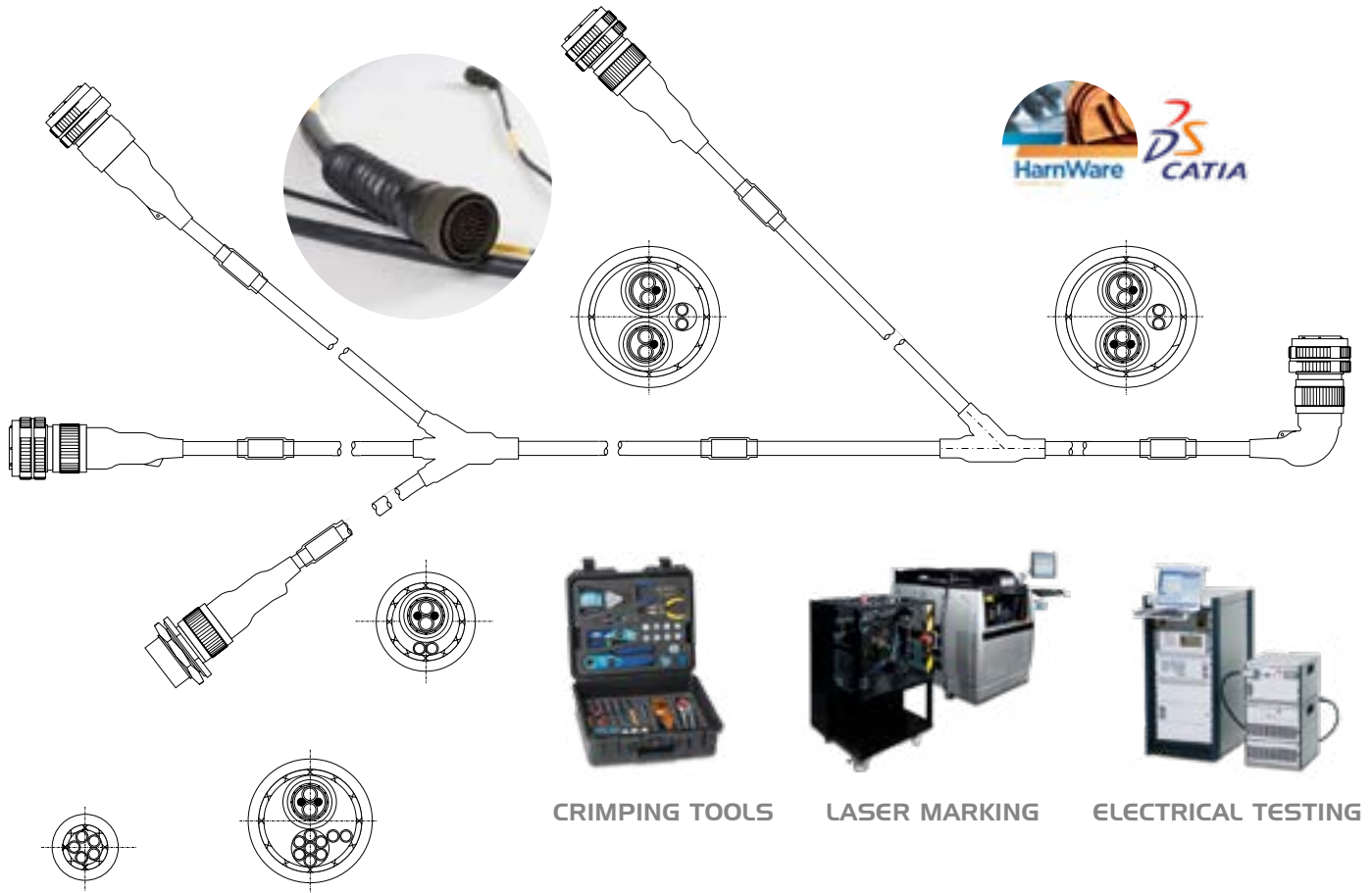
14.500 m²
manufacturing facilities



More than
500
employees



ENGINEERING | DESIGN AND DEVELOPMENT | MANUFACTURING | ON BOARD ASSEMBLY



CRIMPING TOOLS

LASER MARKING

ELECTRICAL TESTING



- ▶ DESIGN AND DEVELOPMENT OF **ELECTRICAL INTERCONNECTION SOLUTIONS.**
- ▶ MANUFACTURE OF **ELECTROMECHANICAL WIRING AND SUB-ASSEMBLIES.**
- ▶ **OVERHAUL, MODERNIZATION AND RAILWAY MAINTENANCE.**

MAIN CUSTOMERS

ALSTOM

BOMBARDIER

CAF

CS

HITACHI

renfe

SIEMENS

STADLER

Talgo



COMPONENTS



MAIN ACTIVITIES

DESIGN and MANUFACTURING of electrical / electronic systems and components
for **PROFESSIONAL RAILWAY INTERCONNECTIONS.**

SOME PROJECTS



TALGO

AVE RENFE 070
L.A. Metro - USA
High-Speed Train Medina - Mecca
Hybrid train
AVE 350 Series I and II



SIEMENS RAIL AUTOMATION

New ASFA Digital Balise
LAV Ankara-Konya.
Signaling systems in the Bosforos - Marmaray tunnel
High-Speed Train Medina - Mecca
Railway signalling and control systems



RENFE

Refrigerated container convoy
Madrid mountain train modernization
Retrofit, modernization, and repair of rolling equipment



STADLER RAIL

Eurodual Locomotive
U.K. LIGHT Locomotive
EURO 4000 Locomotive
Sali Locomotive
FGV Tram



CAF / ACTREN

Waterproofing of ATPRD/AVGL/AVR Bogies
Retrofit of S120-Bogie power hose
Modernization of S598 diesel engine control harnesses



ALSTOM

On-board scanner equipment
High-Speed Madrid - Paris
AVE Madrid - Seville
AVE Euromed



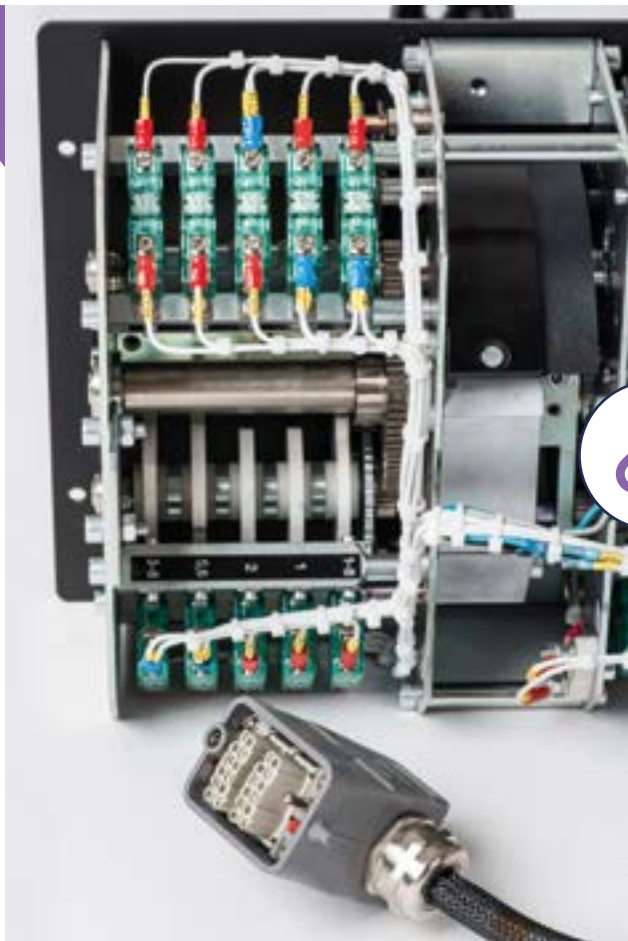
MANUFACTURING

- Power, control and communications electrical harnesses.
- Maintenance workshop power hoses.
- Traction, braking, and predetermined speed Master Controllers.
- Communication wiring for railway signalling and safety.
- Bonding leads.
- Repair and calibration of Crimping tools.



COMPONENTS

- High-reliability electrical connectors.
- Thermal and mechanical protection sleeves.
- Position LED headlamps.
- DC power contactors.
- Professional insertion, extraction and crimping tools.
- Identification and labelling systems.
- UIC (541-552-568) connectors.
- Zero halogens, low smoke, self-extinguishing cables.



INTEGRATION

- Completed driver desks.
- Illuminated indicator panels.
- Forward LED positioning lamps. .
- Driver's bench actioning tools.
- Bench lighting tools.
- Dead man safety device components.
- Electrical wiring modernization.
- Electrical testing.

QUALITY SYSTEM

UNE-EN ISO 9001 — Quality Management System

UNE-EN 9100 — Aerospace and Defence Requirements

AQAP/PECAL 2110 — Military Requirements

NATO CAGE — 267BB (SCP) / 1199B (Sintersa)

IPC — IPC/WHMA-A-620 / IPC-A-610



EUROPEAN REGIONAL DEVELOPMENT FUND



A WAY TO MAKE EUROPE



PARTNERSHIPS

Amphenol

cannon

SCHALTBAU

TE
connectivity

AirBorn

smiths
interconnect

molex

FCT
a molex company

fischer
CONNECTORS

cinch
connected more assuredly
in our group

RF
connectors

TENNECO

hummel

HIGH SPEED
INTERCONNECTS

ERICH JAEGER

ABB

Switchcraft
CONXALL

AEF
solutions

...ept
connectors

AlphaWire

Nexans

HUBBELL

BELDEN
BEYOND ALL THE WORLD BORDERS

encitech
DATA COMMUNICATION

PIC
WIRE & CABLE

HEADQUARTERS



MADRID
(+34) 91 361 00 41

PRODUCTION PLANTS



SEVILLE
(+34) 95 531 09 99



MILAN
(+39) 0331 170 7799

SALES OFFICE
LISBON
(+351) 211 319 832