Kopiowanie, powielanie, wykorzystywanie materiału wyłącznie w całości i tylko w celach edukacyjnych. Publikowanie w części lub całości na innych stronach internetowych, w wersji elektronicznej lub drukowanej oraz użycie w celach komercyjnych bez zgody autorów niedozwolone!

Organizatorzy nie ingerowali w formę, treść merytoryczną i graficzną prezentacji!

Organizatorzy V SDS
RAILTECH and PANDROL companies are the RAILWAY BRANCH of the DELACHAUX Group which represents 55% of the total turnover of the group.

RAILTECH INTERNATIONAL S.A
is a major provider of solutions for the welding, the fastening and the maintenance of your track.

PANDROL HOLDING Ltd
stays the world leader in rail fastening systems and ballast-less tracks. PANDROL is proud to hold 60 % of the world market.

**3 BUSINESS UNITS & MAIN RAILWAY ACTIVITIES**

**WELDING & TRACK EQUIPMENT :**
- Aluminothermic and Flash-butt Welding for all types of rails and turnouts, in workshop or on HSL type tracks, for heavy haul and metros
- Track Equipment designed for track laying, welding and maintenance
- Contracting & Technical Assistance

**RAIL FASTENING SYSTEMS :**
- All types of rail fastening (screwed type designs and self tensioned clips)
- Anchoring devices with ARS Department
- Noise and vibration reduction fastening system (booted STEDEF VSB® - DFF)

**ELECTRIFICATION SYSTEMS :**
- Third rail & aluminium conductor rail
- Rigid catenary
- Trolley bus mounted equipment
- People mover electrification systems

RAILTECH has a worldwide presence through its 24 subsidiaries
RAILTECH complies with ISO 9001 V 2000 QUALITY Standard
RAILTECH provides all types of solutions to weld rails, crossings and turnouts for high-speed tracks, heavy haul tracks and light train, tramway and crane rails.

Using its long experience, RAILTECH has been a leader in innovation for many years. Numerous recognized innovations were designed in our R&D Department such as:

- the ONE SHOT CRUCIBLE
- the “SELF SEALING” Mould
- the “HYBRID” Mould
- the STARTWEL® Thermic starter

ALUMINOTHERMIC WELDING

With more than 500 different types of rails existing,
FLASH BUTT WELDING

In track flash butt welding:
- **SUPRA-RAILFLEX** (Rail version)
- **SUPRA-MULTIFLEX** (Container version)
- **SUPRA-ROADFLEX** (Rail-road version)

Welding plants – turnkey projects for LWR:
Stationary welding machines - Welding of crossings & turnouts rails

TRACK EQUIPMENT

A complete range of machines and devices for track laying and track maintenance:
- Equipment for Aluminothermic welding
- Track machinery
- Controlling devices
- Lifting and handling equipment
- Lighting and safety equipment
- Track tools
A complete range of track equipment:

- All working with 5 or 10 Gallons flow
- Low vibration level
- Low noise level

WELDING TRAINING and TRACK WORKS

- Approval of welding teams
- Turnkey project & Technical assistance
- Training
- Welding school
- NDT control
ANCHORING & FASTENING SYSTEMS

Various kind of fastening:
- Flat spring blades (NABLA)
- Threaded clips (SKL)

Fastening systems for all track applications:
- High speed
- Heavy haul
- Mass transit
- Turnouts

Various anchoring systems: Coach screws, screwspikes, bolts, and insulated anchorages such as plastic dowels

Ballastless track systems

Various low vibrations designs, particularly for rapid transit systems

FASTENING SYSTEMS

BRAND NAMES

PANDROL Rail Fastenings Group has been producing resilient fail fastenings since 1937
PANDROL rail fasteners are used on over 350 railways in excess of 95 countries for every type of track and traffic conditions.

- Fastclip: fully automated track laying – high speed line/heavy haul line
- VIPA: for slab track – bridge
- VANGUARD: for noise and vibration reduction

ALL SYSTEM COMPLY WITH CEN STANDARDS
A FULL RANGE OF TOOLS FOR TRACK LAYING:

- Clip machine – capacity up to 30 sleepers/min
- Sleeper Laying – from 4 sleepers up to 8 sleepers
- Sleeper replacement

Turnkey Projects:

ELECTRIFICATION SYSTEMS for URBAN TRANSPORTATION

- Design of complete systems
- Manufacturing
- Testing
- Training and maintenance
OVERHEAD RIGID CATENARY

- Rigid catenary for all tension or current application
- Movable catenary for depot

TRAMWAYS & TROLLEY BUS:

- Overhead lines
- On-board equipment
- Electrical components

RESEARCH & DEVELOPMENT

Behind a strong innovation policy managed by its RESEARCH and DEVELOPMENT Departments, RAILTECH pursues its researches:

- to improve SAFETY
- to provide VIBRATION control systems
- to reduce NOISE on tracks
- to SIMPLIFY processes
- to REDUCE hardware
- to make the track ENVIRONMENTALLY friendly

and Simply, to comply with a new age of rail technology
In the field of aluminothermic welding, for example:
- Recycling of debris
- Eco-filter cover for one shot crucible
- Metallurgical evolution of rail hardness (bainitic and hypereutectoid)

In the field of fastening systems, for example:
- Direct Fastening Fixations (DFF):
  - bounded
  - for special turnouts
  - for special bridge decks
  - for tunnels
  - for unballasted and slab tracks
- Reduction of stress
- Reduction of components weights
- Stress management Software on track and bridges

Stress management:
Calculation Software for tracks and bridges

Some key figures:
- 30,000,000 welding kits sold in 60 countries
- 500 molds for different rail profiles
- 150 flash butt welding machines in service
- 15,000 machines in service for track maintenance
- 700,000,000 fastening blades sold
- 1,000 km ballast less tracks
- 1,800 km third rail system installed
- 850,000 insulators supplied over the world
- 1,000 km rigid overhead catenaries supplied
Thank you for your kind attention