

INSIDE
FUTURE
INSIDE

STEEL INDUSTRY 5.0

COMPANY OVERVIEW

Pioneering automation and robotics in critical industrial processes for over three decades

Polytec is an Italian company that has been developing **automation** systems and **robotics** for critical industrial processes for over 30 years.

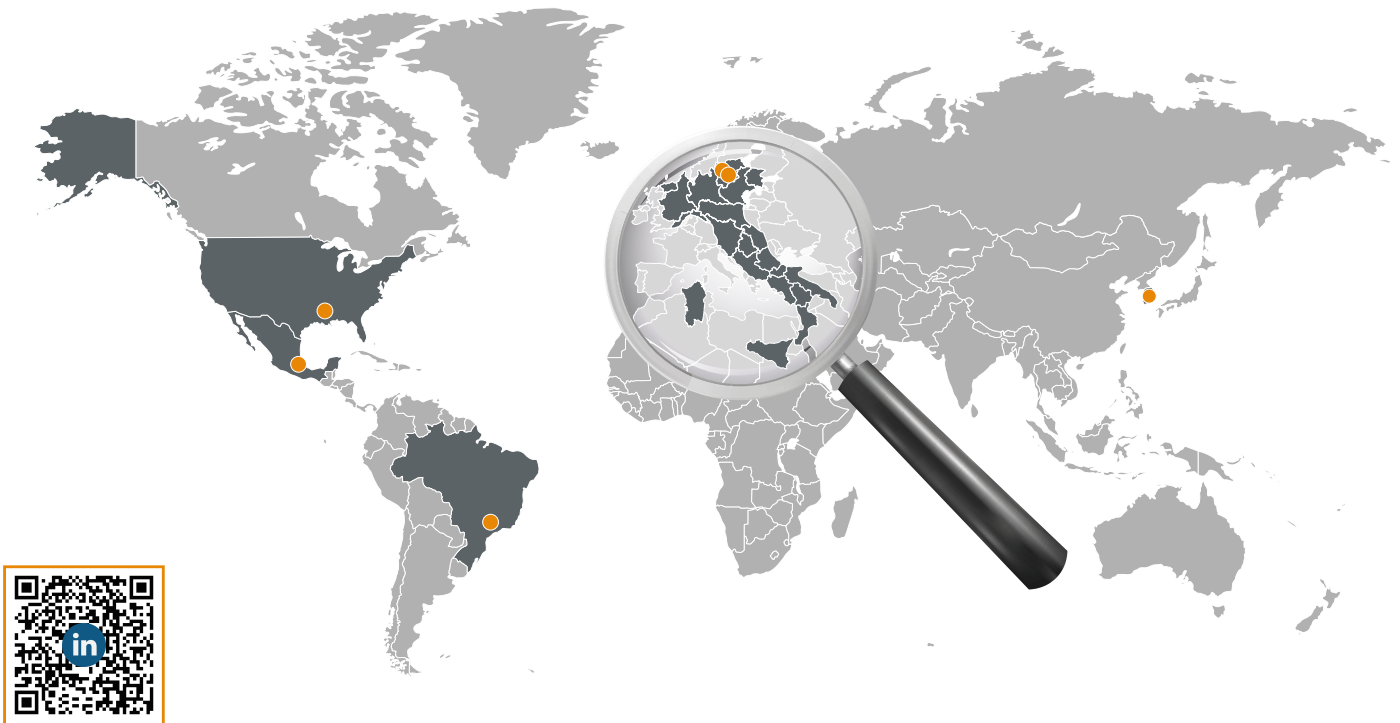
The synergy between Polytec and the other companies of **BM Group**, an industrial group with over 350 direct employees, has enabled Polytec to establish itself as a leading international **integrator of systems** to pursue the digital and energy transition of industry.

Polytec intralogistics: specialised in the development of tailor-made intralogistics solutions.

Hydroalp: EPC contractor for green hydrogen production and hydropower plants.

Nyox: supplies industrial photovoltaic plants also through on-site and off-site PPA, thanks to its collaboration with Edison Next.

BRANCH OFFICES



Polytec

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OUR COMPETENCIES

ELECTRICAL AND AUTOMATION SYSTEMS

1. Electrical engineering
2. Automation panels
3. Distribution boards
4. Customized on-board machine
5. Industrial control software
6. Product and production tracking platforms
7. Technological packages
8. Service and After Sales

PLANT ENGINEERING

1. Conceptualization and feasibility study
2. Engineering design
3. Procurement and materials management
4. Construction and installation
5. Commissioning and startup
6. Operations and maintenance
7. Continuous improvement and optimization

INDUSTRIAL ROBOTICS

1. Feasibility studies with 3D acquisition of cloud of points
2. Engineering and 3D drawings
3. Robotic simulation
4. Electrical and software development
5. Electrical and mechanical manufacturing
6. Assembly and construction
7. Software development
8. Internal cold commissioning
9. Factory Acceptance Test
10. Installation and hot commissioning
11. Training
12. Service and After Sales

Some of our best seller robot applications:

Temperature and sampling | Quality control |
Skimming and cleaning | Marking and tagging
| Handling and palletizing | Bending | Welding
| Tailor made mechatronic projects

TECHNOLOGY
TRAINING
CENTER ●●●

OUR MOTTO

FROM
OPERATOR



TO
SUPERVISOR

MARKETS WE SERVE

Aluminum | Cement | Energy | Environment | Infrastructures | Intralogistics | Mining |
Marine & Naval | Oil & gas | Petrochemical | Pharmaceutical | Plastics & rubber | Pulp
& paper | Renewables | **Steel** | Stone & Tile | Textile

CERTIFICATIONS

ISO 9001/14001
ISO 50001 Energy
ISO 45001 Safety
UL 508A/CSA 22.2

PARTNERSHIPS

Rockwell Gold O&M Partner
Siemens solution partner Factory Automation
Siemens solution partner Drives and motion
ABB value provider



GOLD
OEM Partner
ROCKWELL AUTOMATION

ABB

—
VALUE
PROVIDER

Solution
Partner

Automation
Drives

SIEMENS

We make the **steel industry** attractive for **future generations**

Let's dress together your steel mill

SAFETY **EFFICIENCY** **QUALITY**

! GREEN ENERGY PRODUCTION

- Photovoltaic systems**
- Engineering, Procurement, Construction
 - Power Purchase Agreement on-site
 - Power Purchase Agreement off-site
- Green hydrogen**
- Turnkey plants
 - Plug & play solutions - H2ALP
 - Plant auxiliary systems

INTRALOGISTICS, AMR & SMART WAREHOUSES

- AGV/AMR platforms
- AGV forklifts
- Navigation systems
- Intralogistics customized solutions
- Platform interconnected with customer's ERP



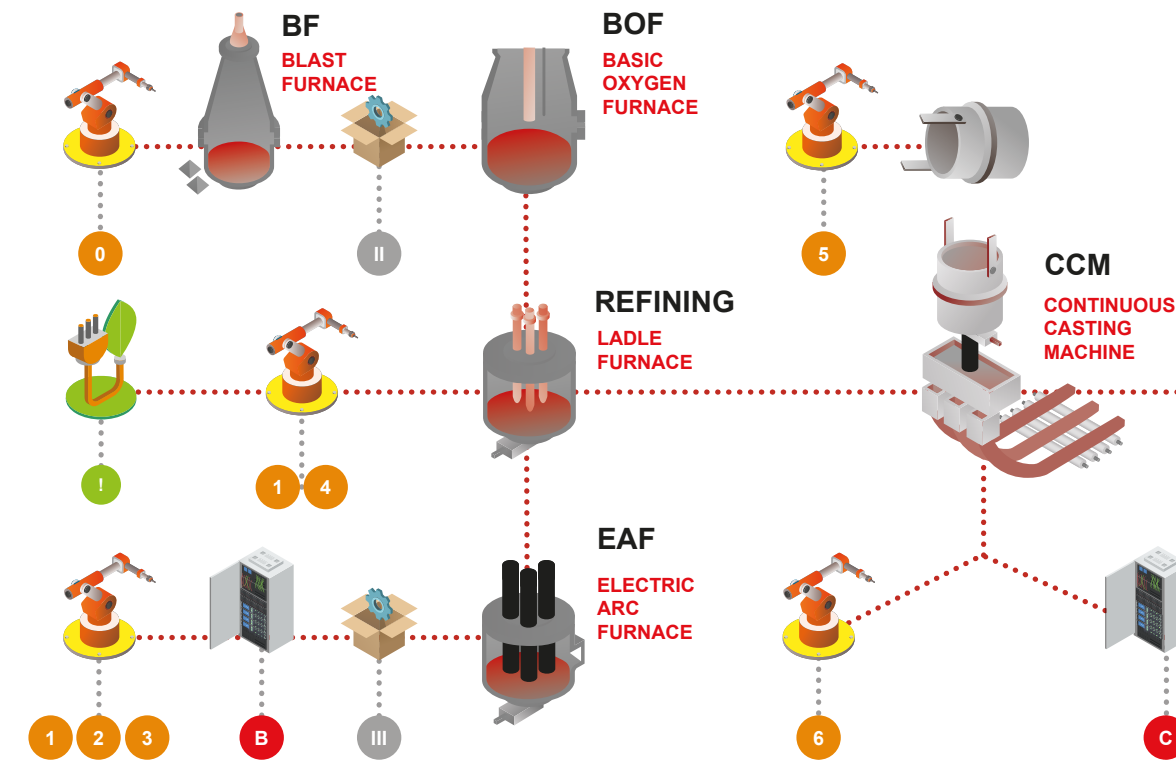
* ELECTRICAL AND AUTOMATION EQUIPMENT

- Electrical systems
- Process automation
- Machine retrofitting
- Plant revamping
- DCS-controlled systems

MELTSHOP

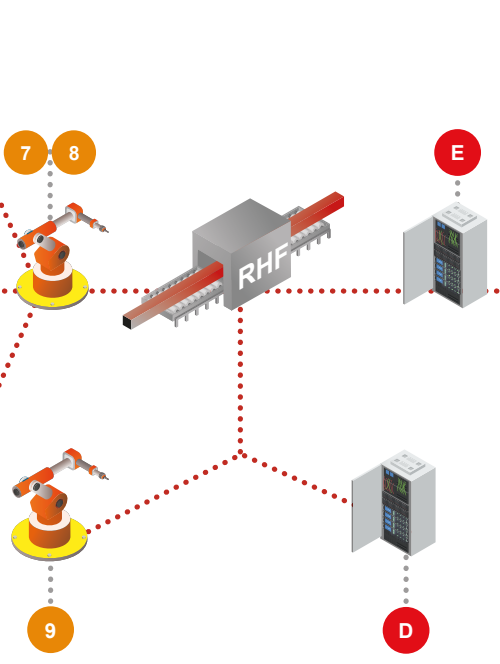


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B C II III IV ! #
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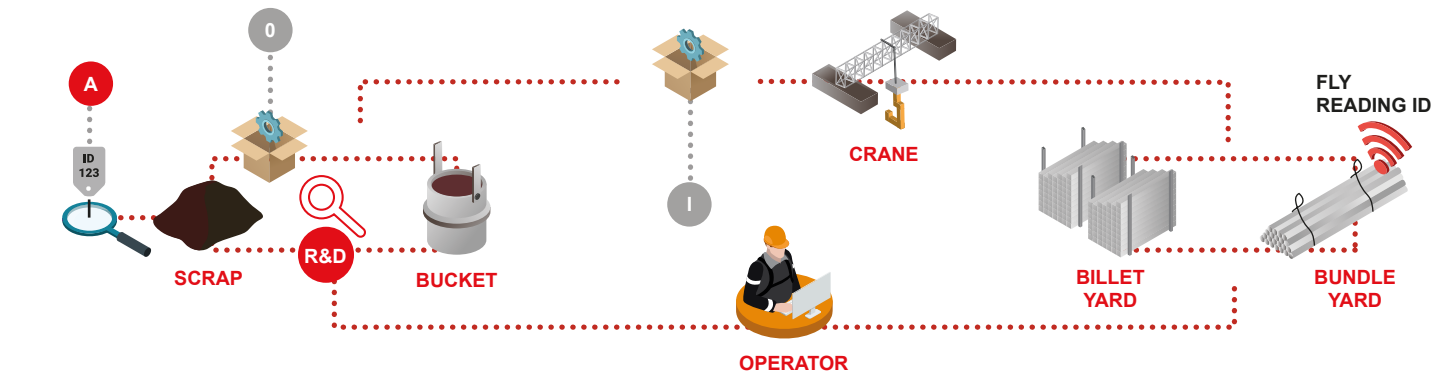
SEMI-FINISHED PRODUCTS

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SCRAP YARD

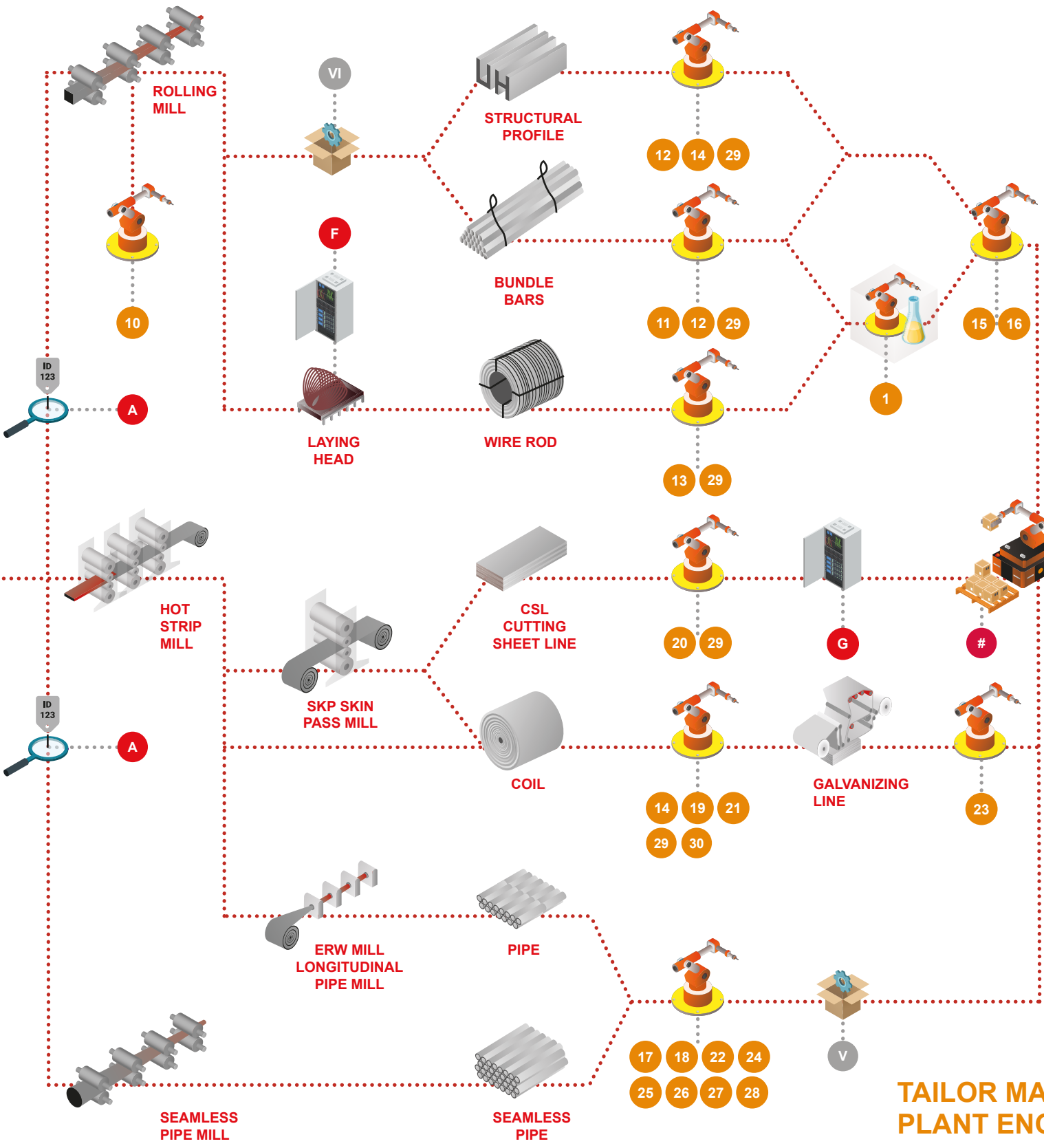
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LONG PRODUCTS



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16 A E F VI ! #
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FLAT PRODUCTS, TUBE & PIPE



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23 24 25 26 27 28 29
A G V ! # *

TAILOR MADE MECHATRONICS & PLANT ENGINEERING

Thanks to our multidisciplinary expertise, we develop complex mechatronic projects and greenfield plants based on customer requirements.

PolySAMPLE BF/BOF.....0

Automatic temperature measurement and sampling robot for BF/BOF

PolyLAB1

Automatic cell for the preparation and analysis of steel samples

PolySAMPLE EAF.....2

Automatic temperature measurement and sampling robot for EAF

PolyEBT/SPOUT3

Automatic robot for EBT/SPOUT lancing and cleaning on EAF

PolySAMPLE4

Automatic temperature measurement and sampling robot for refining area

PolyLADLE5

Robotic cell for ladle sliding gate maintenance

PolyCAST6

Multi-tool robotic solution for continuous casting machines

PolyTAG BLE7

Robotic cell for automatic hot product tagging

PolyMARK B8

Automatic robot for slab and billet marking

PolyREAD9

Billet identification system before the entry into re-heating furnace

PolyGAP10

Robotic system for profile measurement between stands in a rolling mill process

PolyTEST11

Cooling bed sampling robot

PolyTAG FC12

Automatic robot for bundle bar tagging

PolyTAG V13

Automatic robot for wire rod tagging

PolyPROBE14

Robotic cell for hot/cold profile sample cutting

PolyARC15

Automatic cell for ARC and SPARK chemical analysis of steel bars

PolyMARK16

Downstream product marking system

PolyTAG T17

Automatic robot for tube bundle tagging

PolyMARK T18

Robotic cell for pipe marking

PolyMARK C19

Robotic cell for coil marking

PolyMARK L20

Robotic cell for flat product marking

PolyDESTRAPPING.....21

Robotic cell for destrapping

PolyBUNDLE22

Robotic cell for the automatic bundling of steel products

PolySKIM23

Automatic robot for skimming and dross removal for zinc bath

PolyGREASE.....24

Robotic cell for the application of grease on thread

PolyMAN25

Robot for application and pre-screwing of couplings on threaded seamless pipes

PolyPRO26

Robot for screwing protectors on threaded seamless pipes

PolyCAP27

Robotic cell for cap application on seamless pipes

PolyMARK M28

Robotic cell for seamless pipe coupling marking

PolyMOVE29

Robotic cell for product handling and palletizing or depalletizing

PolyDESLAGGING30

Robotic cell for deslagging cycle

ActiveTRACKINGA

Global tracking system

ActiveARCB

3-phase EAF/LF electrodes arc control system

ActiveCAST.....C

Continuous casting machine (CCM) control and automation system

ActiveRHFD

Process control and automation system for reheating furnace

ActiveROLLE

Rolling mill control and automation system

LEGEND



ROBOTIC CELL



AUTOMATION PLATFORM



TECHNOLOGICAL PACKAGE

ActiveHEADF

Wire-rod laying head bar synchronization

ActiveSHEARG

Shear control system

PolySCRAP0

System for scrap yard 3D volume mapping

PolyCRANEI

Automatic unmanned crane guidance system

ActiveCAST IRONII

System for cast iron temperature measurement in the blast furnace

PolySLAGIII

Slag detection system for remote tapping

PolyTRACKIV

Tracking and vision system for hot products

PolySCANV

System for automatic defect identification

PolyCHECKVI

Bar straightness control

FUTURE
INSIDE FUTURE
FUTURE

