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# ALUMINUM INDUSTRY

INDUSTRIA DELL'ALLUMINIO

# 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 company primarily focuses on the steel industry but also serves sectors such as aluminium, pulp & paper, and stone & tile.

Polytec's multidisciplinary expertise and continuous investments in research and technological development have enabled it to establish itself as a leading international **integrator of systems** that are the tools for pursuing the digital transformation of the industry.

Furthermore, Polytec is structured to act as a plant constructor within a new paradigm that places **quality of life** and **sustainability** at the heart of industrial processes.

## Pionieri nell'automazione e nella robotica dei processi industriali critici da oltre tre decenni

Polytec è un'azienda italiana che da oltre 30 anni sviluppa sistemi di **automazione** e **robotica** per processi industriali critici.

L'azienda si concentra principalmente sull'industria siderurgica, ma opera anche nel settore dell'alluminio, carta, ceramica e altri.

Le competenze multidisciplinari e i continui investimenti in ricerca e sviluppo tecnologico hanno permesso a Polytec di affermarsi come uno dei principali **integratori di sistemi** che costituiscono gli strumenti per la trasformazione digitale dell'industria.

Inoltre, Polytec è strutturata per agire come costruttore di impianti all'interno di un nuovo paradigma che pone la **qualità della vita** e la **sostenibilità** al centro dei processi industriali.

# BRANCH OFFICES



### Polytec

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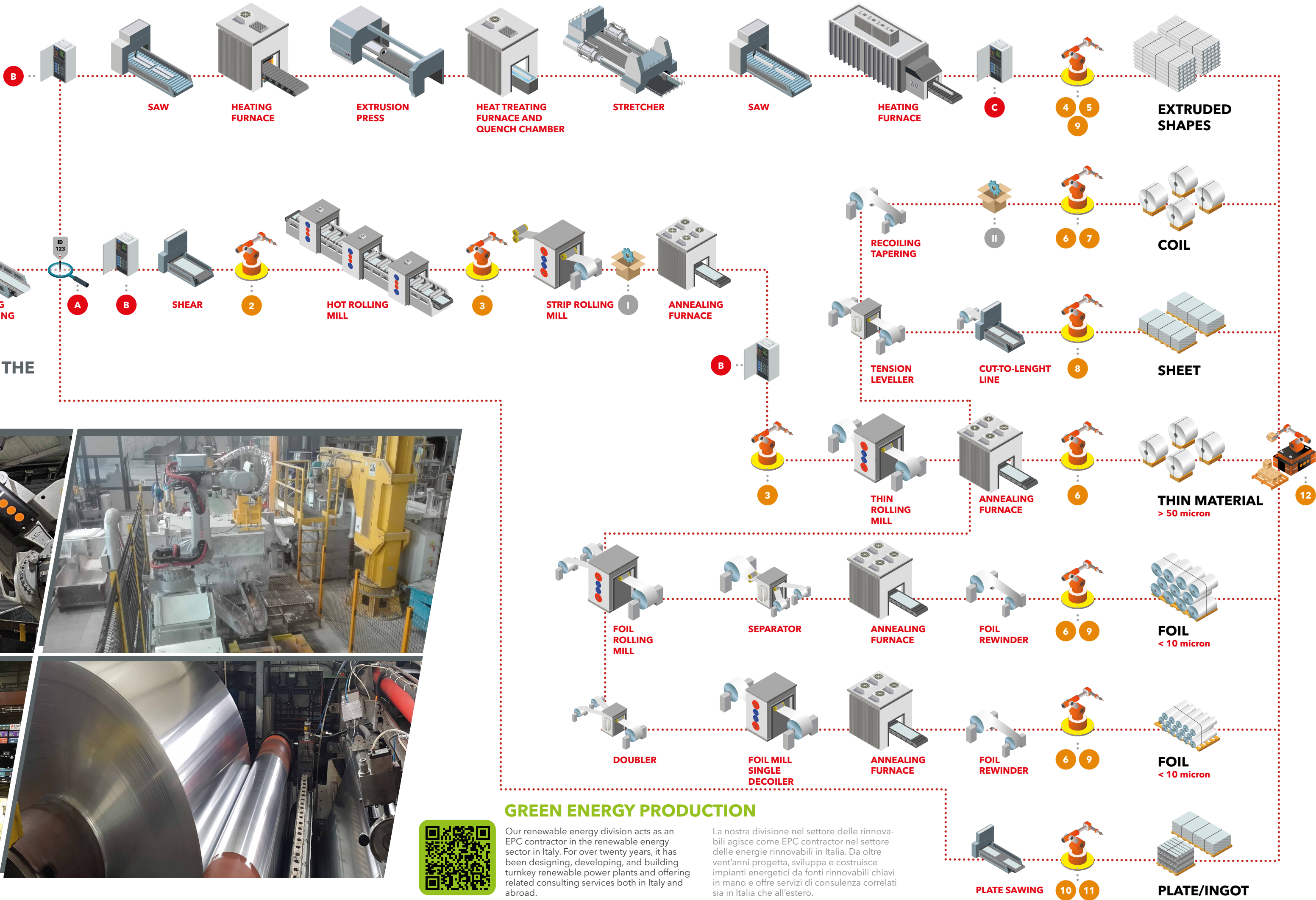
We make the **industry**  
attractive for  
future generations

Let's dress together your aluminium mill

**SAFETY** **EFFICIENCY** **QUALITY**



**POLYTEC SOLUTIONS FOR THE  
ALUMINIUM INDUSTRY**



### GREEN ENERGY PRODUCTION

Our renewable energy division acts as an EPC contractor in the renewable energy sector in Italy. For over twenty years, it has been designing, developing, and building turnkey renewable power plants and offering related consulting services both in Italy and abroad.

La nostra divisione nel settore delle rinnovabili agisce come EPC contractor nel settore delle energie rinnovabili in Italia. Da oltre vent'anni progetta, sviluppa e costruisce impianti energetici da fonti rinnovabili chiavi in mano e offre servizi di consulenza correlati sia in Italia che all'estero.

## PolyFILTER .....1

Alloying furnace filter changing robot

Robot per cambio filtro su fornace per leghe

## PolyBASKET .....2

Robotic cell on the head and tail of the rolling mill, removes scraps and empties the scrap basket

Cella robotica in testa e coda del laminatoio, rimuove gli sfridi e svuota il cestello degli sfridi

## PolyTITAN .....3

Robotic cell for removing coil waste from the rolling mill unwinder

Robot per rimozione scarto bobina dallo svolgitore del laminatoio

## PolyLOAD .....4

Robotic cell for uploading bars into the calender

Robot per caricare barre nella calandra

## PolyTAG .....5

Robotic cell for tagging

Isola robotizzata per etichettatura

## PolyMARK C .....6

Robotic system for coil marking

Isola robotizzata per la marcatura di bobine

## PolyDESTRAPPING .....7

Automatic robot for strap debundling

Robot automatico per il taglio delle regge

## PolyMARK L .....8

Robotic system for flat products marking

Isola robotizzata per la marcatura di prodotti piani

## PolyBUNDLE .....9

Robotic cell for automatic bundling

Isola robotizzata per il confezionamento automatico

## PolyINGOT .....10

Ingots handling and palletizing robot

Robot per movimentazione e palletizzazione di lingotti

## PolyTAG I .....11

Robotic cell for ingots, blooms and bars tagging

Robot per etichettatura, lingotti, blumi, barre

## AMR FLEET .....12

Autonomous mobile robots for smart warehouses management

Veicoli a guida automatica per la gestione efficiente del magazzino

## ActiveTRACKING .....A

Global tracking system

Sistema di tracking globale

## Process Automation .....B

Revamping, electrical equipment, process control & software

Revamping, apparecchiature elettriche, controllo di processo e software

## Handling System .....C

Handling automation up to the finished product

Automazione della movimentazione fino al prodotto finito

## Defect Detection .....I

Surface defects detection system

Sistema di rilevamento dei difetti superficiali

## PolySCRAP .....II

Core cleaning cell

Isola robotizzata per la pulizia del nucleo

## LEGEND LEGENDA



**ROBOTIC CELL**  
ISOLA ROBOTIZZATA



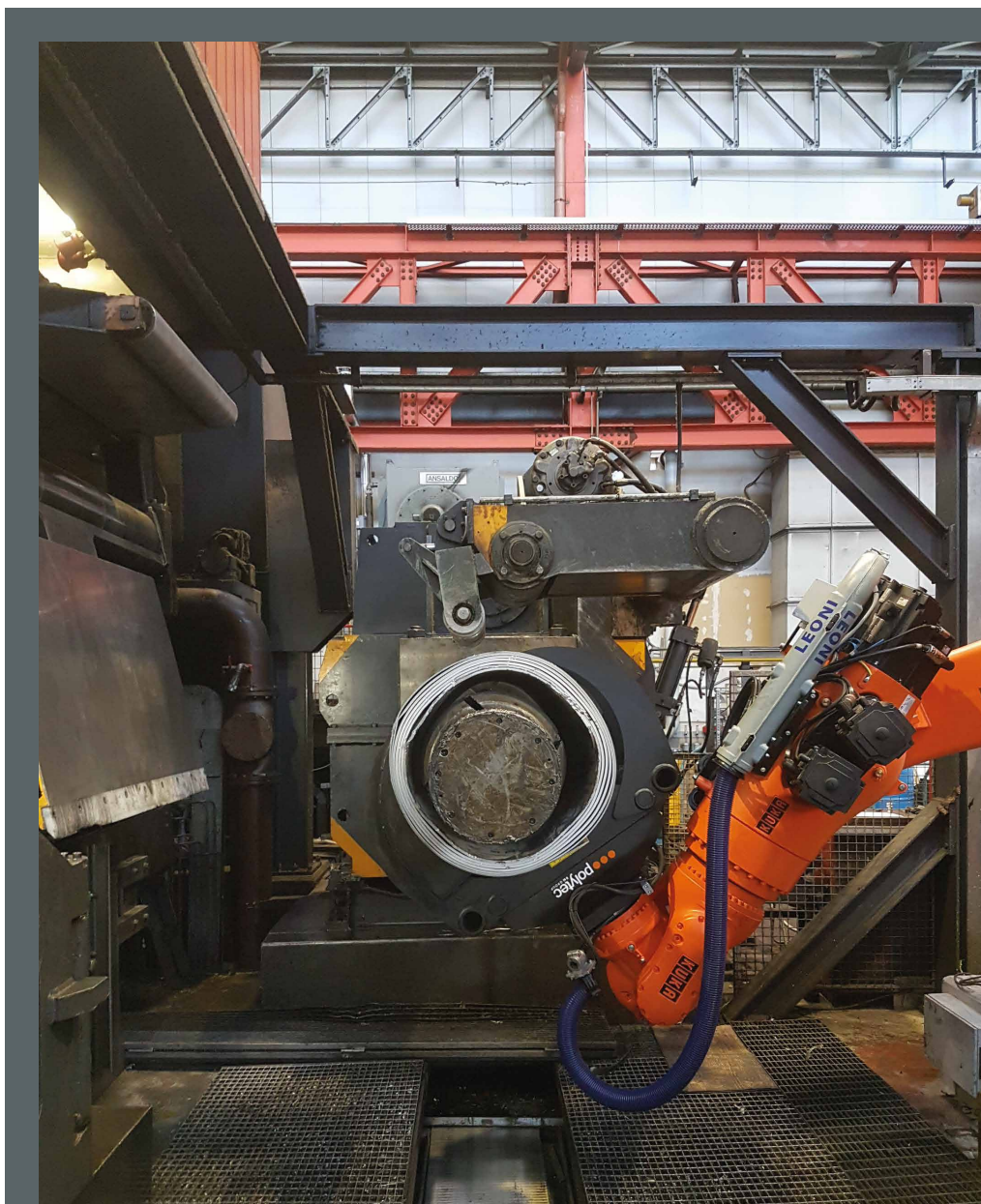
**AUTOMATION PLATFORM**  
PIATTAFORMA DI AUTOMAZIONE



**TECHNOLOGICAL PACKAGE**  
PACCHETTO TECNOLOGICO



**INTRALOGISTICS**  
INTRALOGISTICA



# OUR COMPETENCES

## 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

## INDUSTRIAL ROBOTICS

1. Feasibility studies with 3D cloud of points acquisition
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

## 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

### Some of our best seller robotics applications:

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

## OUR MOTTO

FROM  
OPERATOR



TO  
SUPERVISOR

## MARKETS WE SERVE

**Aluminium** | Cement | Energy | Environment | Infrastructures | Intralogistics | Mining |  
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



Solution  
Partner

Automation  
Drives



SIEMENS

FUTURE  
INSIDE FUTURE  
FUTURE



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