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# WHO WE ARE

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In a word



Founded in 1971, ASO H&P is an **industrial reality specialized in the production of semi-finished steel components: bars and tubes.**

A partner with production plants located throughout Europe and the only real player on the market with the production of a wide dimensional range of items consisting of chromed steel bars and tubes, skived and roller burnished tubes and precision linear shafts.

ASO H&P is considered the biggest manufacturer in Europe and one of the biggest ones in the world with a worldwide sales network.

## Our Milestones



1971

ASO is founded by Aldo Artioli  
(**A**cciai **S**peciali **O**spitaletto Company)

### **SPS, the player of the chromed bar, joins Aso Group**

Aso Group takes over the Sider Plating Scaligera Company in Verona, which had been in the chrome plating market since 1991.

2011



### **Cromsteel, leader of the chromed bar market, becomes ASO**

After purchasing Cromsteel Targoviste (RO), founded in 1990, ASO Group becomes leader on the market.

2014



2018

### **ASO H&P is created**

This is a new entity with the purpose to use synergies, co-marketing activities and activities aimed at extending the extension of the Group brand.

### **STELMI joins as part of Aso Group**

Stelmi's know-how and quality satisfy ASO H&P and raise the company standards.

2019









## Group Organization



**FDF**

Production Plant for Chromium Plating

 Italy



**ASO Cromsteel**

Production Plant for Chromium Plating

Production Plant for Skiving and Roller Burnishing

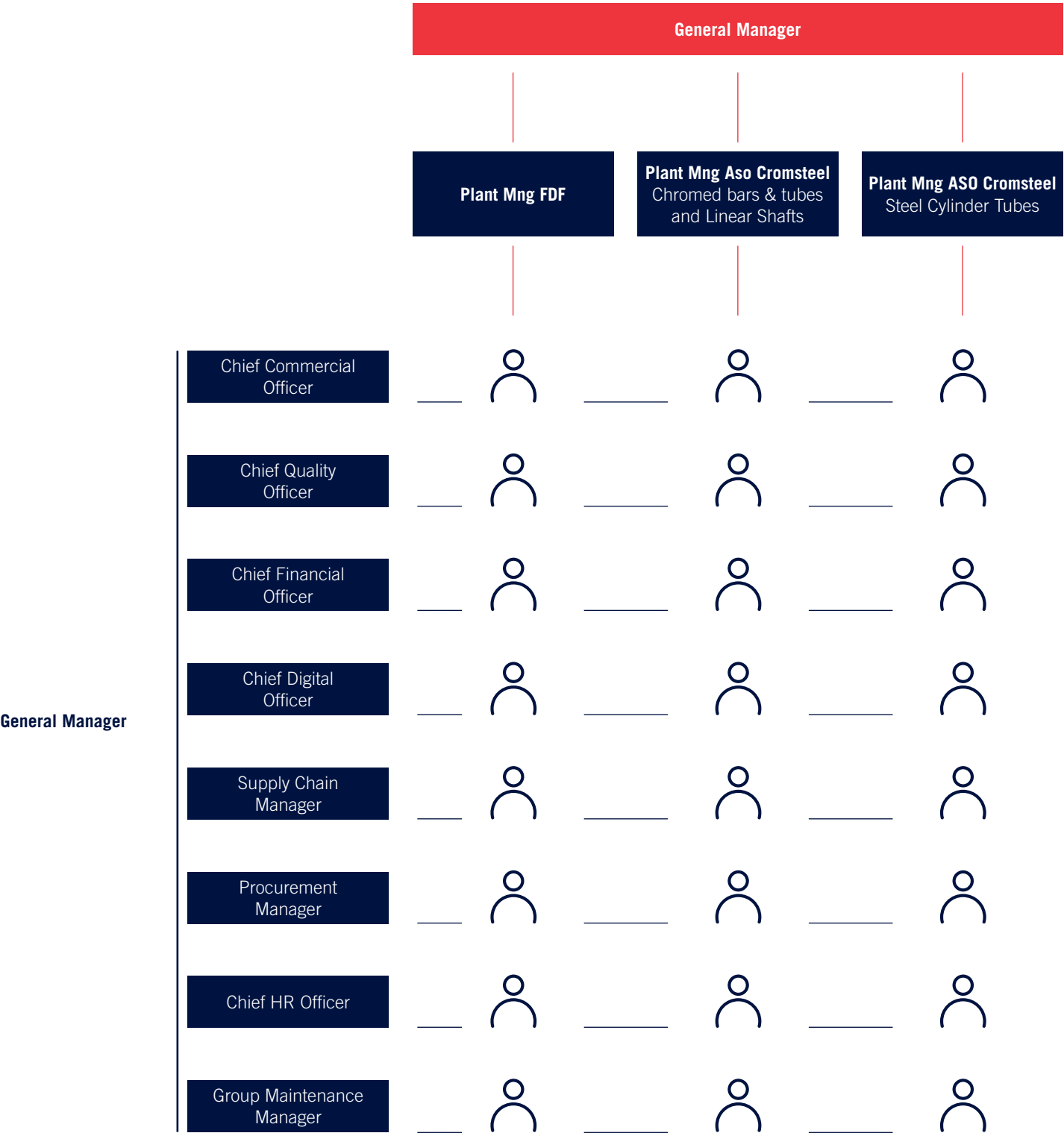
 Romania



**Aslantech**

Engineering Company, Continuous Chromium Plating Machines manufacturer

 Italy



# WE ARE A STEEL PARTNER.

We offer the **widest range of products on the market** with excellent quality and service and we are the only one company able to do it with **owned plating technologies**, which minimizes the environmental footprint; all this thanks to competent people focused on listening to the needs of others.

We want to be the global partner of our customers through **presence, service, quality and innovation**, with full respect for people and the environment for a sustainable future.

# WE ARE A GLOBAL PARTNER.

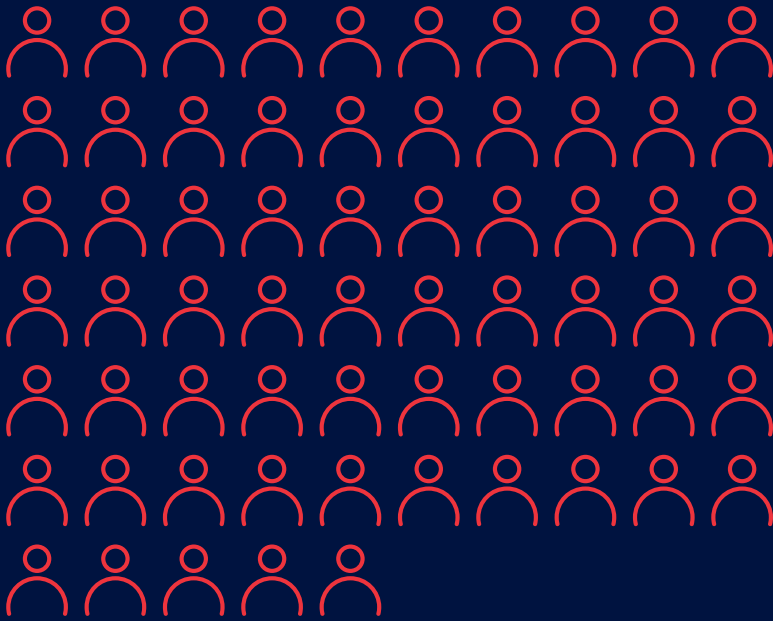




The main strengths of ASO H&P are built on the positive evolution of the best practice connected to the improvement of the range of products and services.

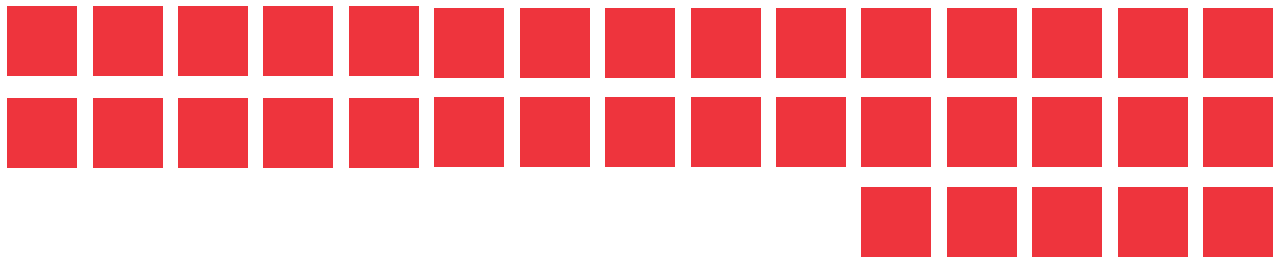
This openness to dialogue and continuous redefinition of its goals has led to a consolidation of stakeholder relations based on respect and trust.





650

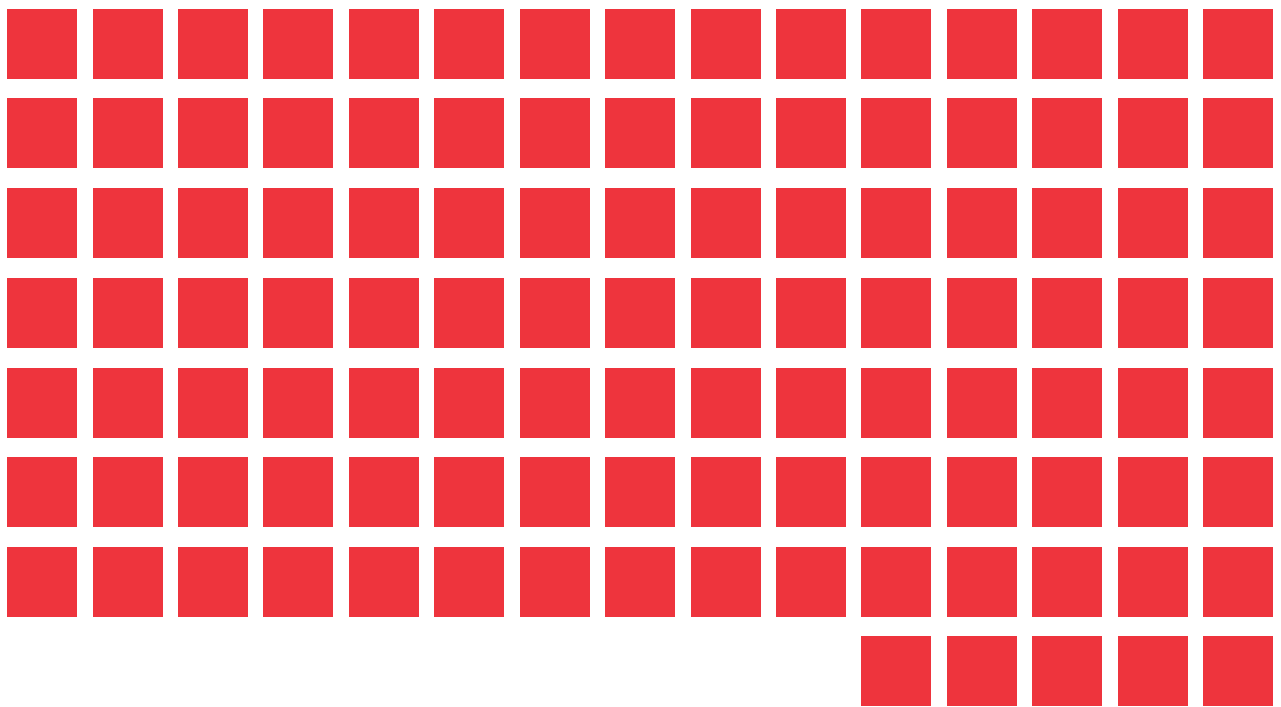
people



**Italy, Verona** headquarter and production



**Romania, Targoviste** tube production



**Romania, Targoviste** offices and production



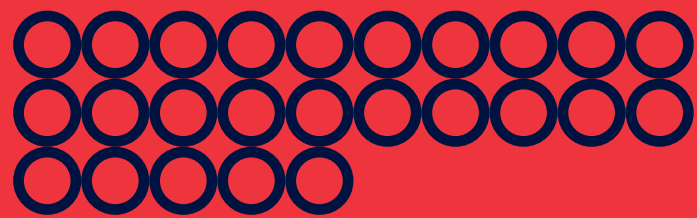
**Italy, Rho** warehouse

3

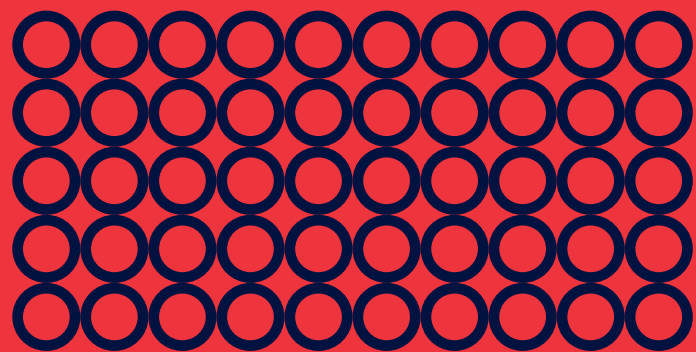
production plants

160.000

square meters



tons per year  
chrome plated bars and tubes



50.000

tons per year  
chrome plated bars and tubes

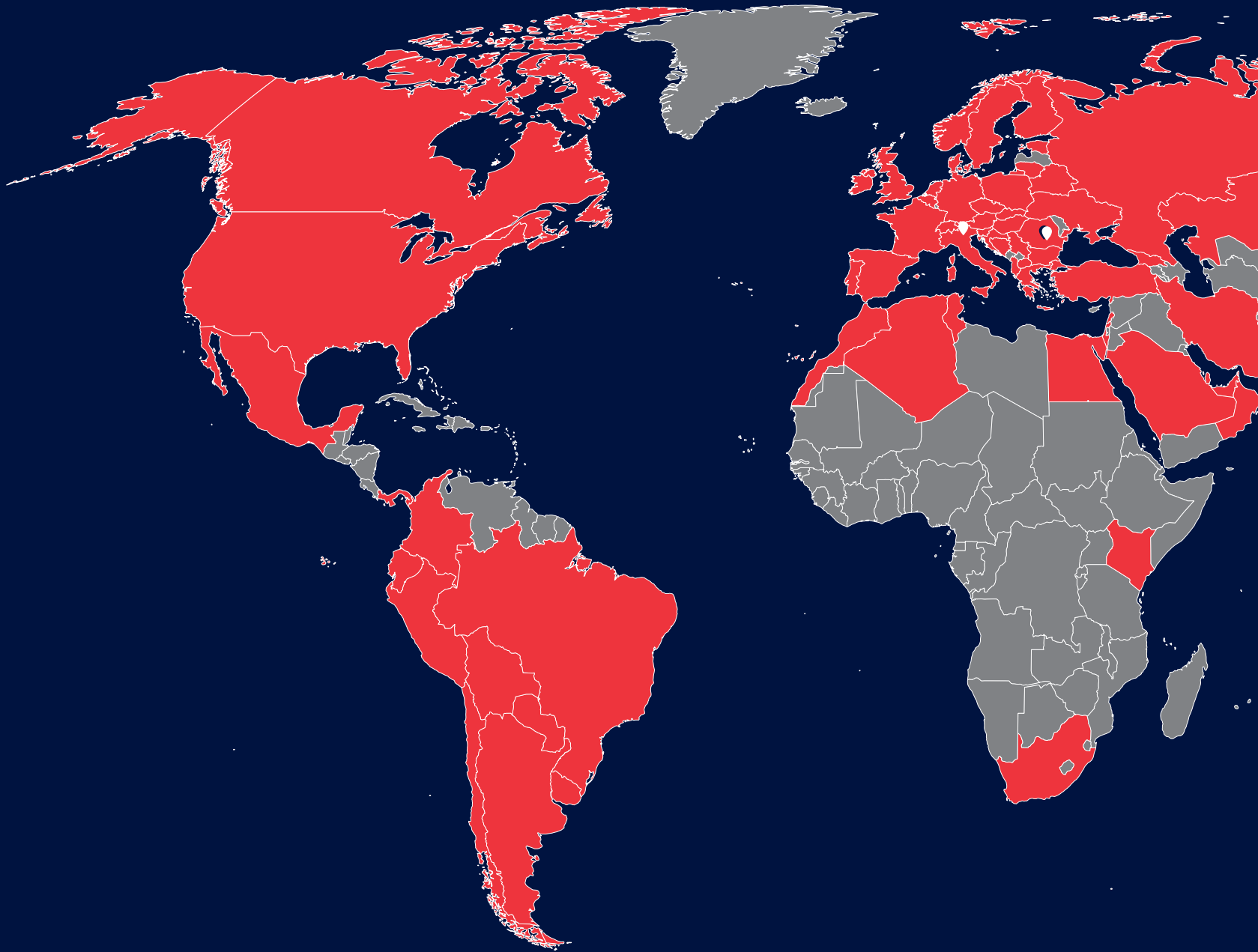
5.000

tons per year  
linear shafts



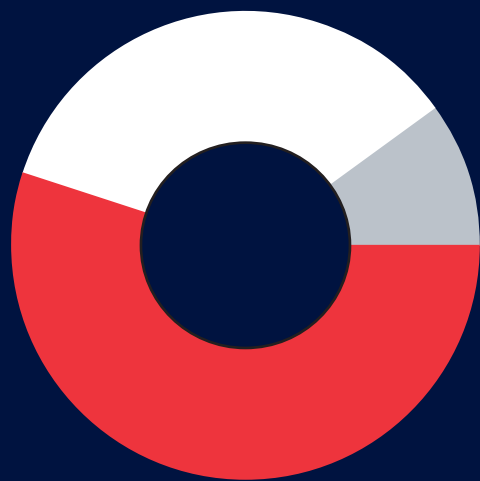
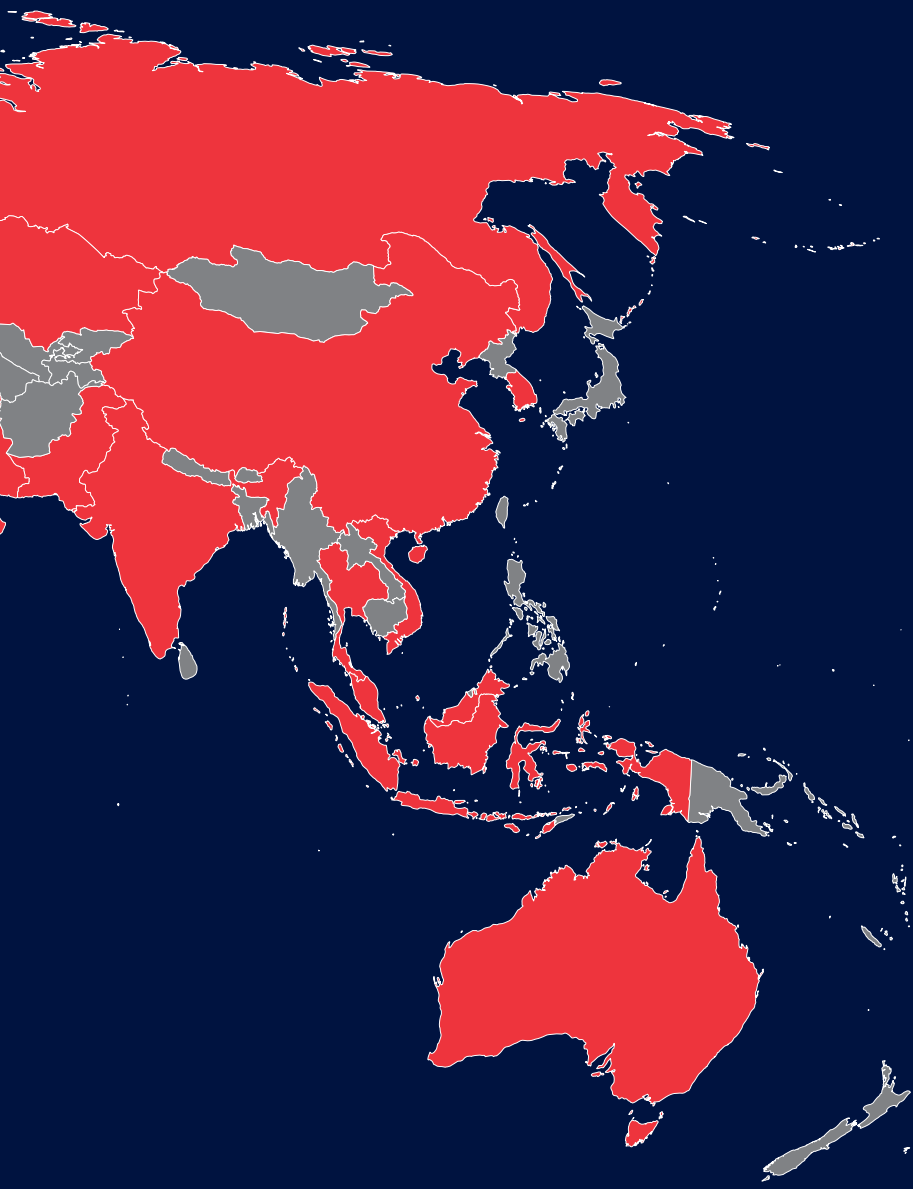
15.000

tons per year  
skived & roller burnished tubes



present in  
**80+**  
countries

with  
**3**  
customer divisions



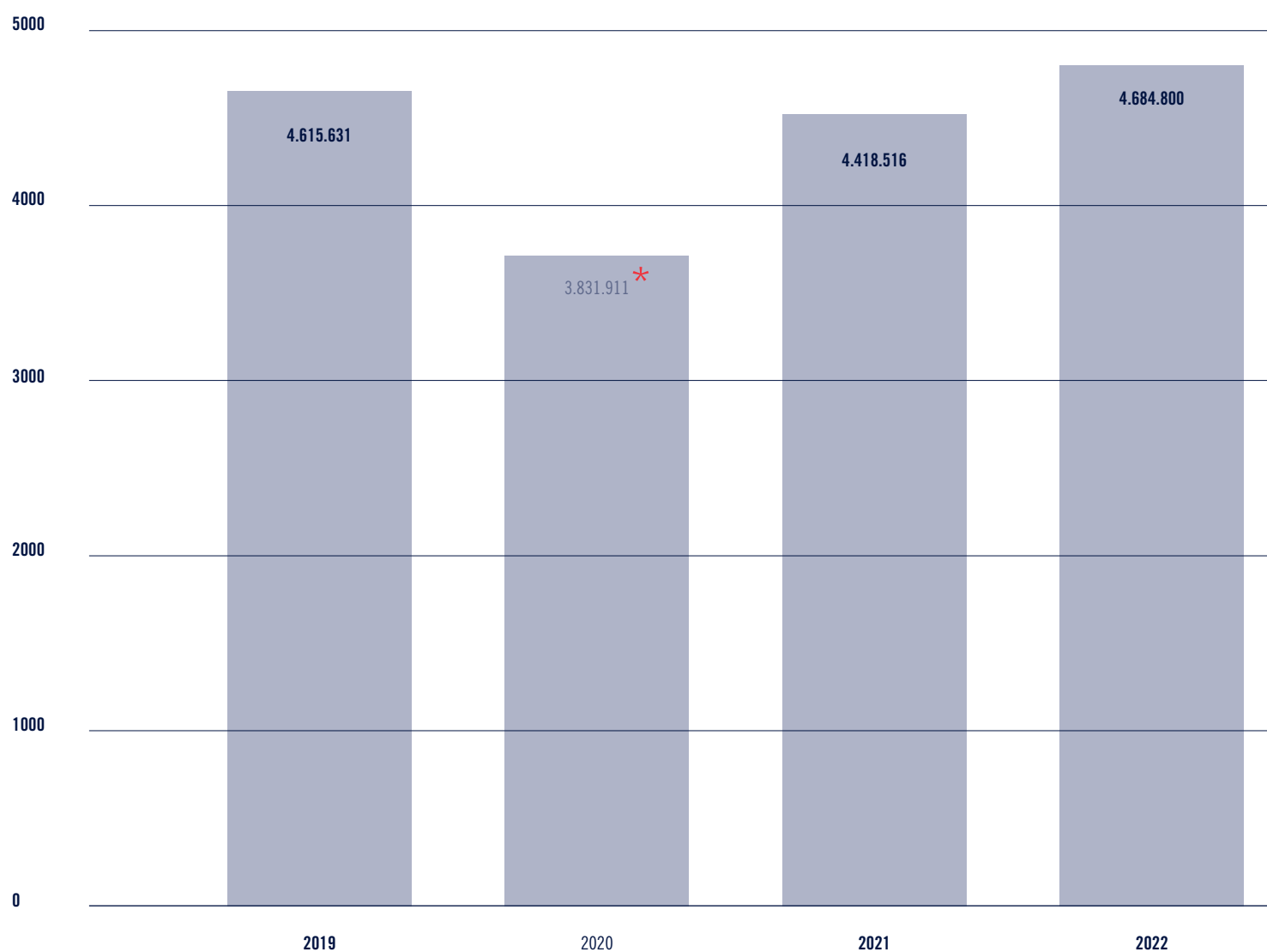
- cylinder manufacturers
- OEM
- distributors

## Turnover

CHROMED BARS SEGMENT	2019	2020 <sup>*</sup>	2021	FORECAST 2022
Turnover from sales	124.332.075	76.380.506	117.206.932	153.861.055
Total Production revenues	121.350.691	62.868.621	114.594.013	162.841.837
Total Variable costs	91.552.003	59.422.160	88.658.420	127.012.578
% of Total Production revenues	75,4%	94,5%	77,4%	78%
Contribution margin	29.798.688	3.446.461	25.935.593	35.829.259
% of Total Production revenues	24,6%	5,5%	22,6%	22%
Total Fixed costs	16.961.258	14.807.205	13.434.858	15.258.505
EBITDA	12.837.430	-11.360.744	12.500.736	20.465.222
% of Total Production revenues	10,6%	-18,1%	10,9%	13%
Depreciation and amortization	8.037.655	3.078.769	5.199.652	5.426.827
EBIT	4.799.775	-14.439.513	7.301.084	15.038.395
% of Total Production revenues	4,0%	-23,0%	6,4%	9%
Pre-tax profit	3.012.150	-15.719.188	5.612.192	13.515.311
% of Total Production revenues	2,5%	-25,0%	4,9%	8%
Net profit	2.072.726	-13.737.419	4.597.456	11.335.305
% of total production revenues	1,7%	-21,9%	4,0%	7%



## Investments



\*Pandemic year and extraordinary costs

In a word

h a r d

HUMBLE

AGILITY

RESPECT

DECISION MAKING

s k i n

STAY FOOLISH

KNOW HOW

INNOVATION

NEVER GIVE UP

## Hardskin

A way of being and collaborating which brings together courage and humility, firmness and open-mindedness, flexibility and resilience.

It is the motto of those who see “possible” instead of “impossible” with facts: production, method, second to none, know-how. **Because ASO H&P people are second to none.**

## Steel improvement

Being a leader means taking on responsibilities beyond everyday logic. ASO H&P has a long-term vision: improving the way to transform, devoted to supply steel as a resource for everybody.

## Improving the world

A more sustainable world is also possible thanks to the virtuous use of steel and a responsible production. ASO H&P gives concrete proof of this and aims to become the global leader in chrome plating, at all levels. The main strengths of ASO H&P are built on the positive evolution of the best practice connected to the improvement of the range of products and services. This openness to dialogue and to the constant redefinition of our goals led to a consolidation of the relationships with the stakeholders, based on respect and trust.

# CUSTOMERS



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Application of our products  
Proud to be your partner

ASO H&P reinforces the ongoing commitment to understand priorities and needs of its customers and develops a long-term partnership with many of them, leading to significant opportunities for the supply chain. **The unity of purposes is paramount for an industry that knows how to talk about the future, prospects and goals.**

## Types of Application

### STANDARD

DUMP TRUCKS	INJECTION MOLDING MACHINES	SCRAP GRAPPLES
TRUCKS		SHOCK ABSORBERS
COMPACT LOADERS	STREET CLEANING VEHICLES	GAS SPRINGS
LOADERS	HYDRAULIC TIPPER TRAILER	PNEUMATIC CYLINDERS
SKIDDERS	LIFTS	FITNESS EQUIPMENTS
AGRICULTURAL MACHINERY	FORK LIFTS	HYDRAULIC PRESSES
TELEHANDLERS	HOOK LIFTS	DIRECTIONAL DRILLS
CRAWLER PLATFORMS	TAIL LIFTS	
MOBILE & STATIONARY CRANES	ASPHALT RECYCLERS	
	ORESTRY MULCHERS	

### DEMANDING

GARBAGE COMPACTORS	TRENCHERS	CRAWLER DOZERS
EXCAVATORS	ARTICULATED DUMP TRUCKS	CRAWLER LOADERS
SNOWPLOW	VACUUM TRUCKS	HIGH SPEED DOZERS
DRILLING EQUIPMENTS	CRUSHERS	WHEEL LOADERS
	WIND MILLS	FELLER BUNCHERS

### EXTREME

MINING EQUIPMENT	POWER GENERATION	MARINE ENVIRONMENT
OIL AND GAS	AEROSPACE	



# Main Fields of Application

## EARTH MOVING EQUIPMENT



## AGRICULTURE



## TRANSPORTATION



## ENERGY

## HANDLING



## INDUSTRY

ASO H&P is proud to be partner of:









# PRODUCTION

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Circular economy  
Production process  
Know-how  
Product lines

**ASO H&P has completely internalized its production process.** In this way, the phases that make it up can be better governed and managed, not only in terms of internal contract times, but also in relation to an increasingly wide-ranging sustainability project for the environment.

## Circular economy

- The circular economy enters into ASO H&P from the early stages of production: the semi-finished product (billet), rolled and transformed into the raw material becomes the product to be used in the circular production cycle.
- Eventually, the scrap is melted in order to be reborn within a virtuous circle that brings our raw material back into a green production cycle.
- Our commitment to reduce the environmental footprint:
  - reducing emissions with advanced treatment and suction systems;
  - reducing exposure to pollutants by improving working conditions\*;
  - acting on noise pollution thanks to the insulation systems;
  - training the team on the topics: safety, culture of work, sustainability;
- **applying certified internal procedures and standards: ASO H&P is certified ISO 45001, ISO 9001, ISO 14001.**

\* In compliance with EU directive 2017/2398 of the European Parliament and of the Council of 12/12/2017.

### RAW MATERIAL

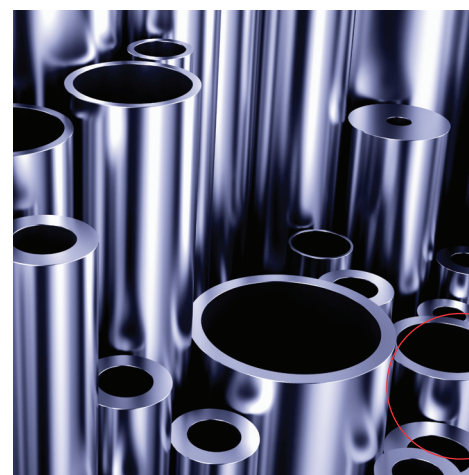
Steel bars and tubes



### ASO H&P PRODUCTION

### SEMI-FINISHED PRODUCTS

Chrome plated bars & tubes; SRB tubes:  
Linear Shafts



STEEL IS 100% RECYCLABLE.



**STEEL MILL  
PRODUCTION**



**STEEL SCRAP**

**DIFFERENT KIND OF APPLICATION AND USE**

**FINISHED PRODUCTS**

Hydraulic & pneumatic cylinders;  
Linear motion guides



**OUR CUSTOMER  
PRODUCTION**

## Production process

The main components of hydraulic cylinders are the **cylinder tube**, made from **SRB tube** and **piston rod**, made from **chrome plated rod**. Both these components are manufactured by ASO H&P.

### PEELING

Mechanical process for the removal of a first layer of the raw material.



1

2



### GRINDING

Precision mechanical process for further layer removal and preparation of the material for the next phase.

### CHROMIUM PLATING

The chrome plating layer is deposited on the materials through an electrochemical reaction. The systems can be in-line or as chroming baths.



3

4

Finally, the material is packed in plastic or cardboard tube.

### PACKAGING



### POLISHING

Using abrasive belts, the material is brushed in order to eliminate imperfections and aesthetically enhance the surface.



5

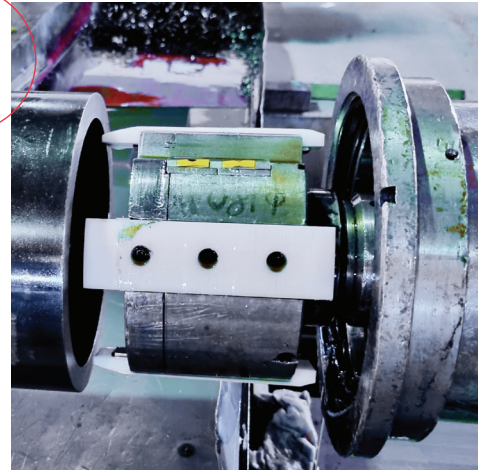




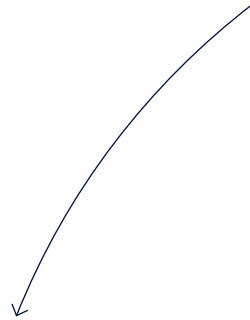


### SKIVING AND ROLLER BURNISHING

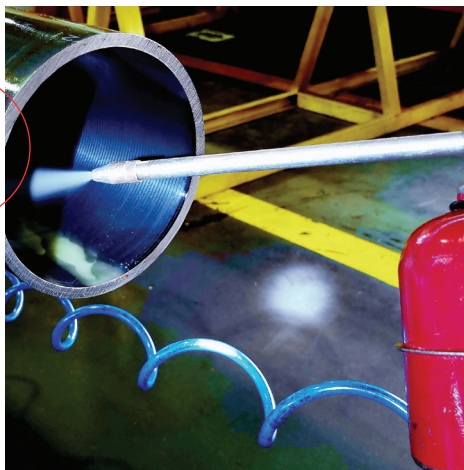
A special tool make the inside surface smooth and let inside diameter reach required tolerance.



1



2



### PRESERVATION

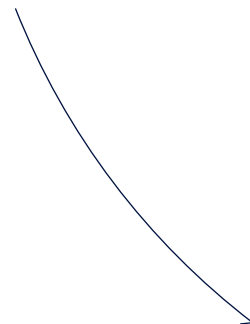
A special preservative liquid is put on the whole inside surface of the tube, in order to prevent corrosion.

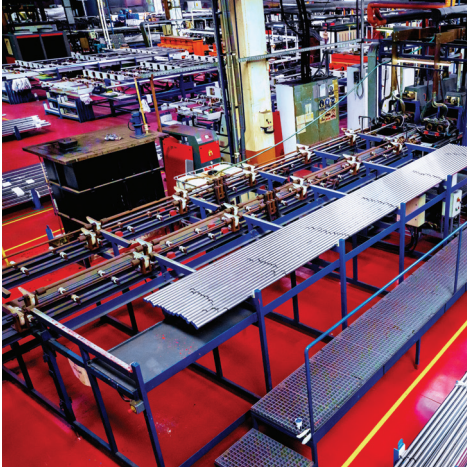
### PACKAGING

Tubes are than plugged with end caps and bound into bundles



3





The corrosion of the steel represents one of the most significant degradation effects on product reliability and durability.

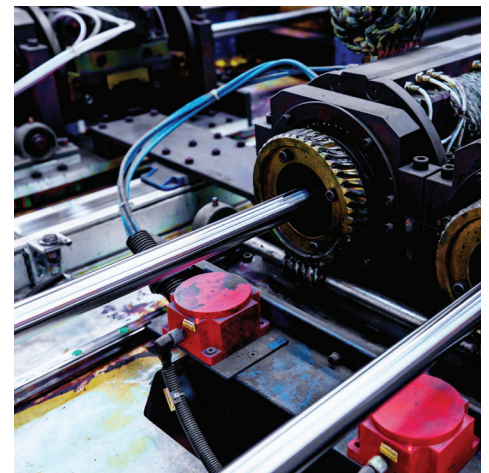
For this reason, ASO H&P has dedicated attention and strength to avoid it in order to offer to the market the excellence of the steel.

The only one player on the market to have, through its subsidiary Aslantech, the productive know how of continuous chrome plating machines – strong points of STELMI TECHNOLOGY.

For this reason ASO H&P is the only one able to offer to the market the chromed product with resistance NSS 1000h rating 10.



# PRODUCTION KNOW HOW OF THE CONTINUOUS CHROMING MACHINES



STELMI chrome plating is a **top performance continuous chromium plating technology**, totally engineered and developed “in-house”. Production is made of continuous chromium plating lines supplied and maintained by ASLANTECH (an ASO H&P company).

This technology **guarantees perfect homogeneity of chromium layer, full chrome plated rods and ultra-high corrosion resistance** (up to NSS 1000h / Rating 10)

The technology of Stelmi machines has been proud of the certification ENEA since 1983 (Italian National Agency for New Technologies, Energy and Sustainable Economic Development), which has defined the technology used by the company as “ground-breaking and clean” and the work environment supervisors classified it as “excellent”

The machines operate upon a closed circuit and the total emissions are 100 times lower than EU or USA limit.

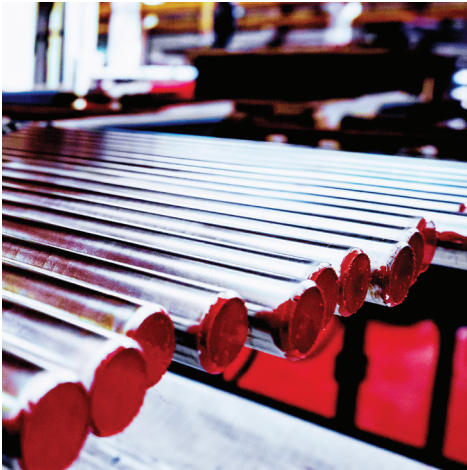
Stelmi machines are not only eco-friendly and safe, but also at the same time, energy-efficient, thanks to the continuous developments and innovations made to them: today with the 16th version we could describe them as the most efficient machines in containing energy waste.

The high industrial automation on Stelmi machines is a guarantee of them being user friendly and constantly producing only high-quality products both in terms of chromium plating, thanks to the rotation of the bars, and in terms of high corrosion resistance.





## Product lines



CHROME PLATED BARS AND TUBES



### A-CHROME BAR

CHROME PLATED BARS

### A-CHROME TUBE

CHROME PLATED TUBES

### A-CHROME I.D.

I.D. CHROME PLATED TUBES

### A-CHROME TELESCOPE

TELESCOPIC TUBES O.D CHROME PLATED & I.D  
SKIVED AND ROLLER BURNISHED / HONED TUBES



PREMIUM LINE CHROME PLATED BARS



### STELMI 150

CHROME PLATED BARS

### STELMI 250

CHROME PLATED BARS

### STELMI 500

CHROME PLATED BARS

### STELMI 1000

CHROME PLATED BARS



STEEL CYLINDER TUBES



### A-TUBE SCD

SEAMLESS COLD DRAWN SKIVED AND ROLLER  
BURNISHED TUBES

### A-TUBE DOM

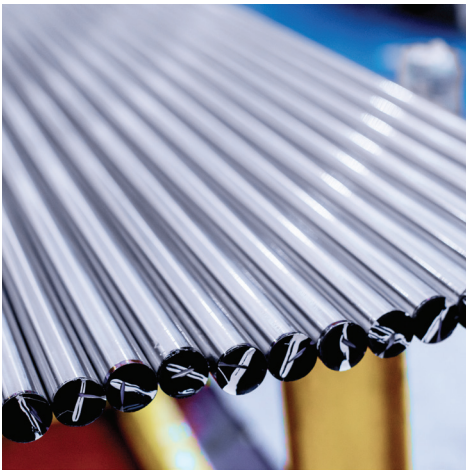
WELDED COLD DRAWN SKIVED AND ROLLER  
BURNISHED TUBES

### A-TUBE HRT

HOT ROLLED HONED TUBES

### A-TUBE RTU

SSID READY-TO-USE WELDED TUBES



INDUCTION HARDENED GROUND | GROUND  
AND CHROME PLATED LINEAR SHAFTS



**A-LINE**  
LINEAR SHAFTS

**A-LINE TUBE**  
HOLLOW LINEAR SHAFTS



CUT | CUT AND MACHINED PIECES



**A CUSTOM**  
CUT AND MACHINED PARTS



# INNOVATION





We believe that increasingly high-performance products are achieved through **constant innovation**, hence our focus on the system and the resulting quality.

This is why ASO H&P's investments have grown over time. The greatest award, in addition to customer satisfaction, is the confirmation, from official certifiers, that our product respects the quality standards during all the production stages.

## Excellence

The developed know-how and acquisitions of excellence make ASO H&P the most complete and complex model in the chroming world.

The value of the products, the rationality of the supply chain, the coverage of the service and the planned innovation revolutionizes the old processes in order to reduce the scrap, protect the environment, save energy and improve the performance.

ASO H&P monitors every aspect of production to ensure that the product specifications in compliance with customer needs. In this way it is possible to ensure continuity, traceability, customization and timing.

A tireless journey that develops technology and processes, from direct interaction between machines to advanced order management.

# FOR AN EVEN SMARTER FUTURE.

# Certifications

The constant commitment to improving processes and procedures through our integrated management system is aimed at obtaining the highest and most stringent quality, environment, health and safety certifications.



Since 2022 ASO H&P has been part of ELITE, a training program: the experience and growth of our managers is the key to transforming our vision into clear plans, actions and results.







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