The group grows together with its values

At the heart of an industrial group in constant growth, STEEL WORKS Division has seen its **business volume double in the last few years**. Behind these record figures there is a high level of satisfaction of our customers, who over time have grown their knowledge and trust of the PMP Industries brand. PMP Industries is today synonym of **total quality products** in a critical sector such as Metallurgy.
Specialization and integration of departments for an unique result

A fully integrated manufacturing process between the plants of PMP Industries guarantees quality of execution in the manufacturing phase and reduction of transit times during the production.

Steel Works Division is organized in the following departments:
- Steel works
- Machining
- Heat treatments
- Gears processing
- Final assembly & testing area

Each area of competence is equipped with specific equipment for optimized performances, as well as a high capacity lifting tools for the handling of the parts.
Around the World, wherever a transmission is needed

PMP Industries is a world-class manufacturer of **innovative transmissions** for Multi-purpose Metallurgy needs.

The mission of PMP Industries is to design, develop, manufacture and deliver the most **efficient, reliable and quiet** transmission for each specific application - our main concern is the **reduction of noise and vibrations**, in order to guarantee a longer life time.

PMP Industries Engineering Department can supply many different solutions and support:

- Feasibility studies
- Surveys and analysis on site
- Basic engineering
- Detailed engineering
- FEM analysis
- Advanced tooth and contact calculations (according to DIN and AGMA standards)
- Maintenance programs and suggested spare part
- On site inspections and preventive maintenance
Quality strategies of prevention, control and testing

The production is controlled step-by-step using the latest generation of measurement and verification systems. This, alongside a management completely dedicated to the specific project, allows creating product identity card. Such a document is useful for the complete traceability of every work phase, even the selection of the materials, and it is now an integral part of the PMP Industries commitment. In the FTR (Final Test Report) are listed all the materials certificates (chemical & mechanical characteristics) the manufacturing details, the NdT, and all the testing session reports as a confirmation of the efficiency of the processes and the effectiveness of the results.

A wide range of modern tools, instruments and machines ensure the highest level of quality for every single component. PMP Industries is equipped for:

- Ultrasonic tests
- Magnetoscopic test
- Dye penetrant tests
- Heat treatment tests
- 3D measuring machines and wide range of measuring tools
- 3D laser machine
- Functional test bench

Our company is UNI EN ISO 9001-2008 and UNI EN ISO 3834 certified by TÜV Nord.

PMP Industries is powered with Zeiss MMZ.
Maximum customer satisfaction through quality and on time delivery

Being close to customers and to its supply base: this is the global strategy of PMP Industries, a manufacturer of systems and components for the metallurgic sector.

The gearbox production is divided into these product lines:

- Hot rolling mills for long products
- Cold rolling mill & strip processing lines
- Continuous casting
- Overhead travelling cranes & lifting devices
- Heavy industrial applications
PMP Industries has an extensive experience in the design and manufacturing of gearboxes and pinion stands for the steel industry, specifically for Hot and Cold Rolling Mills. PMF gearboxes can be applied in every area of rolling mills:

- Roughing
- Intermediate
- Finishing and Sizing mills

<table>
<thead>
<tr>
<th>Application</th>
<th>Output torque, kNm</th>
<th>Weight, ton</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roughing</td>
<td>100 - 2000</td>
<td>5 - 40</td>
</tr>
<tr>
<td>Intermediate</td>
<td>20 - 100</td>
<td>1 - 20</td>
</tr>
<tr>
<td>Finishing and sizing mills</td>
<td>5 - 20</td>
<td>0,5 - 10</td>
</tr>
</tbody>
</table>

PMP Industries has an extensive experience in the design and manufacturing of gearboxes and pinion stands for the steel industry, specifically for Hot and Cold Rolling Mills. PMF gearboxes can be applied in every area of rolling mills:

- Gearboxes for vertical and horizontal stands
- Pinion stands
- Flying shears
- Scrap shears
- Rolling mills cylinders height adjusting systems
PMP Industries offers a wide range of pinch rolls for rolling mills. These machines are designed and manufactured according to the customers’ specific needs, in order to deliver complete solutions for feeding, handling and pulling of long and flat products.

<table>
<thead>
<tr>
<th>Pinch roll size</th>
<th>Weight, ton</th>
<th>Torque, kNm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small</td>
<td>0 – 10</td>
<td></td>
</tr>
<tr>
<td>Medium</td>
<td>10 – 20</td>
<td>Up to 1,000</td>
</tr>
<tr>
<td>Big</td>
<td>20 – 40</td>
<td></td>
</tr>
</tbody>
</table>

PMP Industries offers a wide range of mechanical shears for rolling mills. These machines are designed and developed on the basis of each customer’s needs, in order to meet the specific production targets.

<table>
<thead>
<tr>
<th>Shear type</th>
<th>Weight, ton</th>
<th>Torque, kNm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cutting shear</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flying shear</td>
<td>2 – 40</td>
<td>Up to 1,000</td>
</tr>
<tr>
<td>Start stop shear</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
PMP Industries’ range is completed by combined systems for the coiling and uncoiling of flat products. Also for this type of machines, the design and development is done on the basis of each customer’s needs, in order to achieve the specific production targets.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Measurement unit</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coil diameter</td>
<td>mm</td>
<td>up to 2,400</td>
</tr>
<tr>
<td>Coil weight range</td>
<td>ton</td>
<td>up to 30</td>
</tr>
<tr>
<td>Coil speed</td>
<td>m/min</td>
<td>up to 1,000</td>
</tr>
<tr>
<td>Strip tension</td>
<td>kN</td>
<td>up to 500</td>
</tr>
<tr>
<td>Weight</td>
<td>ton</td>
<td>5 - 40</td>
</tr>
</tbody>
</table>
CONTINUOUS CASTING

- Extraction & straitening units
- Planetary drives for ladle turrets
- C.C. drivers

These machines have to operate non-stop in a very hostile environment:
- high temperature (80-150°C)
- presence of acids
- large amount of cooling water
- presence of metal powder
- vibrations

PMP overcomes these problems developing machines with special seals, dedicated cooling systems and special lubrication pumps in order to guarantee the desired life time of the reductor.
Double drive system in order to avoid any downtime during casting operations.

The machine is studied with special clutch, hydraulic motor and emergency brake in order to:

- withstand on inaccurate charging of the ladle on turret support
- guarantee the complete stop under emergency situations
- guarantee the complete rotation of the turret under emergency situations
• Lifting gearboxes (with single or double drive)
• Travelling unit for winch and bridge

These machines are designed to operate with double drive system (two motors) to guarantee the functionality even if one drive motor fails. Special applications with planetary reducing system and speed shift allow the reducer to operate with normal speed or low speed. The winch has to operate under stringent safety rules, so PMP can provide the reducer with all the required emergency braking systems.
PMP Industries is also expanding its range to gearboxes for winches and lifting devices on bridge cranes. These gearboxes are designed and developed on customer specifications, in order to meet the required performances and durability.

<table>
<thead>
<tr>
<th>Type</th>
<th>Crane capacity, ton</th>
<th>Reduction ratio, li</th>
<th>Weight, ton</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small</td>
<td>5 - 15</td>
<td>50-150</td>
<td>0.5÷5</td>
</tr>
<tr>
<td>Medium</td>
<td>15 - 70</td>
<td>50-150</td>
<td>1÷10</td>
</tr>
<tr>
<td>Big</td>
<td>70 - 150</td>
<td>50-150</td>
<td>5÷20</td>
</tr>
</tbody>
</table>

Travelling unit for winch and bridge

Lifting gearboxes
HEAVY INDUSTRIAL APPLICATIONS

- Cooling beds and roller ways
- Transport systems for slabs & billets
- Customized solutions
Flexibility & Customization is one of our key skills

All possible options:
• Dedicated lubrication system
• Pumps
• Filters
• Pressure gauges
• Flow meters
• Oil temperature gauges
• Oil cooling system
• Oil Pre-heating system
• Special application for heavy environments as powder / high temperature

Customized solutions

Transport systems for slabs & billets
Global Presence, worldwide growth

PMP Industries Spa is the holding company of an international group including 5 entities, 4 business divisions and 1000 employees worldwide. Through its four divisions, PMP Industries is capable of serving a wide range of businesses globally: from the Construction Equipment to the Steel industry, from AG & Forestry to Mining equipment manufacturers, from the Wind to the Marine industry.

PMP Industries HQ are located in Italy where the company was first established in 1991. Today PMP’s four manufacturing locations supply mechanical transmissions, hydraulic transmissions, heavy metal fabrications and dedusting systems worldwide.