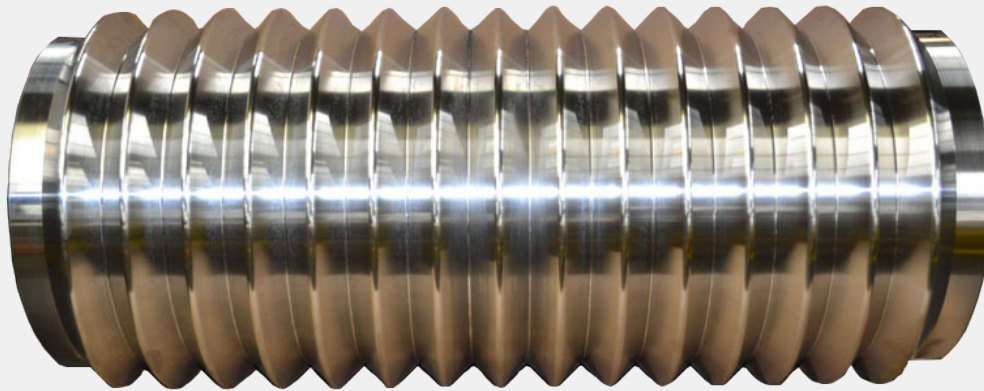


# STRAIGHTENER ROLLS

## For multi-strand straighteners for long products



**SR**  
>rolling mill roll series<



Various technical solutions are available for the multi-strand straightening rolls located after cooling bed, in relation to product type and material quality.

Appointed Technical office develop customized solutions to improve the performances of the rolls according to Customers' requests, starting from what is in use.

### Product Families:

- > Equal and Unequal Angles
- > Squares
- > Channels
- > Beams
- > Rails
- > Special Profiles/Dimensions



## STRAIGHTENER ROLLS

Quality materials to meet company standards to ensure superior finished products

### High Chromium Iron Rolls

High Chrome Iron Rolls as an alternative as the mechanical properties are like tool steel but at a lower cost, they have a surface layer of cast iron with a High chromium content and free from graphite.

This chromium addition together with controlled amounts of nickel and molybdenum results in a very high level of hardenability.

The properties of the surface layer are influenced both by the large content of chromium carbides and by the properties of the matrix.

Hi-Cr High Chrome Iron rolls are multi-stage, high temperature heat treated to produce discontinuous, extremely wear resistant Iron/chromium carbides in a matrix which can be varied from a soft spheroidized pearlite through to high hardness tempered martensite according to the requirements of the application.

Because of the very high hardenability of Hi-Cr High Chrome Iron, the hardness can be made virtually constant across any given roll section so that the rolls are very suitable for applications where deep grooves are required.

### Tool Steel Rolls

Tool Steel Rolls base material in use that guarantees high durability with relatively low costs, are manufactured in high quality Tool Steels according to a specific forging procedure, with particular attention to the austenitic grain size.

This procedure is adopted in order to maximize the structural uniformity and to obtain the highest possible mechanical properties from those steel grades after heat treatment.

All Tool Steel Rolls are heat treated to exact mechanical properties by means of vacuum furnaces with standardized quenching procedure followed by multiple tempering's,

with the aim of improving structural uniformity through the entire roll and to allow multiple regrinding's of the roll surface without losing lifetime performances.

The rolls obtained from this manufacturing procedure are characterized by high toughness combined with elevated compressive strength resistance and very high wear resistance.

All these characteristics are very important when straightening different long product profiles, and they guarantee high geometrical stability of the roll together with elevated lifetime performances during the entire roll's lifetime.

### Tailor made implementations

Dedicated studies for customers who add new profiles throughout the straightening area.

We can carry out dedicated studies for the feasibility of creating additional profiles on existing rolling plants, including rolling calculations and detailed study of the specific consumables for all the machines in the rolling mill.

