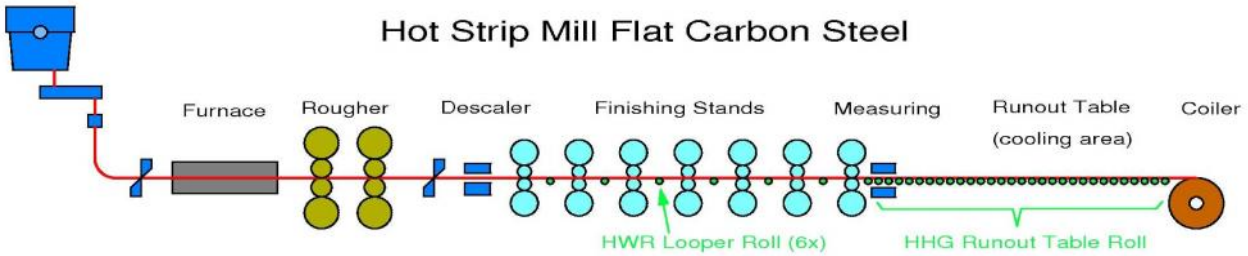
The importance of the runout tables condition in a Hot Strip Mill.



Originally established in 1944, Habets has established an enviable reputation as a Productivity Partner for large and heavy Industrial Components (new and repair) and Surface Technology (thermal spraying and others).

The fact that we offer machining capabilities and thermal spraying under one roof makes us a unique partner.

Habets is located in Nuth, in the South of The Netherlands (near to Maastricht).

Habets is active on various global markets, our main markets are:
- Steel Industry.
- On- and offshore.
- Renewable Energy.

For further Information we refer to the attached brochures and our website **www.habets.nl**.

THE RUNOUT TABLE IN A HOT STRIP MILL.

The capacity and product window of a Hot Strip Mill (HSM) can be negatively influenced if the condition of the Run-Out Roller Table is not in good order. There are cases monitored that indicate capacity-losses up to 25% and restriction to minimum rolling thickness of 2 mm., in spite of the fact that the mill was designed for 1,5 mm. minimum stripthickness. A bad state of the roller-table introduces cobbles at higher strip speed, this high speed is required for thin strips to realise the required finishing temperature. Higher cobble rates affect the mills capacity and stability in a very negative way.
Optimising the roller-table-condition requires optimal roll condition. This combined with good speed matching, minimal roll pitch and correct installation of the rolls (respecting position to the passline and levelling). To reduce maintenancetime and -cost it is utmost important that the roll wear is minimal. For optimal tracking of the strip over the roller-table, friction between rolls and strip have to be as high as possible.
Recognising the above mentioned aspects, Habets developed the "Habets-High-Grip" (H.H.G.) roll with an excellent behaviour when it comes to wearressistance, up to 80 million tons, of the roll itself, corrossionresistance and grip between roll and strip.
Potential savings:

- ✓ Most high performing hot-strip mills in Europe understood the importance of an excellent function of the Run-Out Roller Table and did install the Habets-High-Grip rolls. The savings can be as high as indicated in the below shown example.
- ✓ HSM cobbles, depending of its output, for instance, 60 times per year. When an achieveable reduction of 50% has been reached, this is a saving of 30 times at a cost of €. 50.000,=/cobble, there is a saving of €. 1.500.000,= per year generated.
- ✓ Current max. speed 10 m/sec can be increased to 12 m/sec giving an estimated capacity increase of 5%. This related to a current capacity of, for instance, 3 million tons per year gives an extra output of 150.000 tons per year. The thus generated additional value based on EUR. 400,= / ton will be 60.000.000 EUR. / year. The extra income due to increased product-window is difficult to calculate but can be very high considerating that customers can not be supplied according to their specifications.

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