Contribution ID: **66** Type: **Oral Presentation**

X-Pact® Total Roll Gap Control (TRC®): Improvement of yield and reduction of non-productive time at CCM® Marcegaglia

Tuesday 7 October 2025 12:30 (20 minutes)

A frequent source of yield losses, especially for reversing cold mills, are the unrolled head and tail ends of the strip. The conventional threading method without reduction at the strip head end results in a considerable loss of yield of 1.5 to 3 percent or more of the overall production of the plant.

At the same time, preparation and threading of the strip head-end are time-consuming and require the cooperation of experienced operators. Depending on the type of rolling mill, production capacities and product mix, this procedure must be carried out more than 10,000 times per year. The use of the conventional threading method leads to production bottlenecks and thus increases the operating costs further.
The X-Pact® Total Roll Gap Control (TRC®) is an assistance system, which aims to ensure stable rolling directly from the strip head end while at the same time reducing off-gauge and off-flatness lengths at strip head and tail end. In addition, it ensures an improved, from the operator independent threading process.
SMS implemented the TRC® in the automation system of the two-stand reversing cold rolling mill (CCM®) Marcegaglia in order to achieve minimum off-gauge weights. The respective off-gauge weight of the finished strips and the non-productive times resulting during rolling were then calculated based on the operating results of the plant.

A comparison of the results with active TRC® versus without TRC® shows the advantage achieved with regard to the reduction of the off-gauge weights at the head and tail ends of the finished strips. At the same time, the use of TRC® achieves a significant reduction in non-productive rolling times.

In summary, the use of the TRC® at the CCM® Marcegaglia underlines the potential for improvement in overall production while at the same time reducing the operating costs of a cold rolling mill.

Primary author: Mr KOCH, Markus (SMS group)

Co-authors: Mr SIEGHART, Jörn (SMS group); Mr RICHARD, Sebastian (SMS group); Mr LIUZZO, Umberto (Marcegaglia Ravenna Plant)

Presenter: Mr KOCH, Markus (SMS group)

Session Classification: Rolling Mill Technology & Process Optimization

Track Classification: Rolling of long and flat product