

Measurement & Analytics | Measurement made easy

Force Measurement Products

Cold rolling and processing of steel



Safe Rolling and Processing. The core of ABB measurement technologies is long-term measurement accuracy and reliability, boosting mill efficiency at the most competitive life cycle cost.



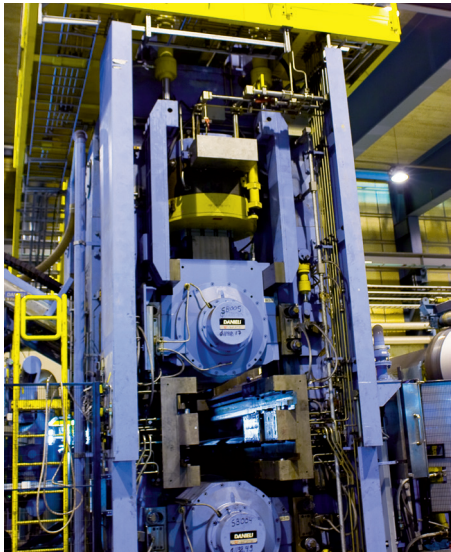
Reliable process control requires reliable long-term measurements. ABB Force Measurement products provide outstanding performance even in the harshest rolling mill environments, fulfilling the core values of mill reliability and strip quality. The ABB combination of application know-how, reliable products and a global network of service engineers assure a minimum of downtime costs, increased productivity and better yield.

ABB offers the most competitive life cycle cost – on the Bottom Line you will save hundreds of thousands of dollars.

The rock-solid design of the Pressductor load cells and the Pulsed Eddy Current edge sensors will assure you many years of accurate measurements in your rolling mills and process lines.

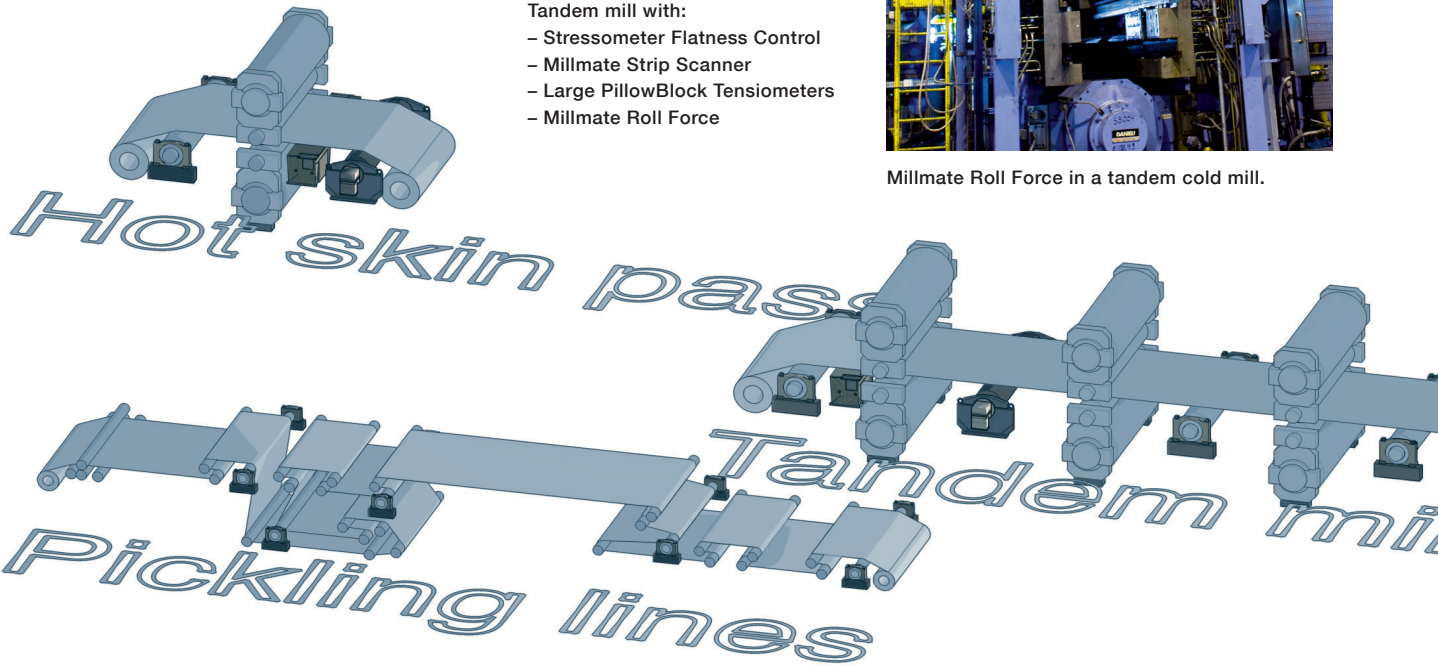
Pressductor® and Pulsed Eddy Current – unique and well proven technologies

Flatness measurement and control. The Stressometer® System FSA is known to combine the best strip flatness performance with the lowest life cycle cost.



- Tandem mill with:
- Stressometer Flatness Control
 - Millmate Strip Scanner
 - Large PillowBlock Tensiometers
 - Millmate Roll Force

Millmate Roll Force in a tandem cold mill.



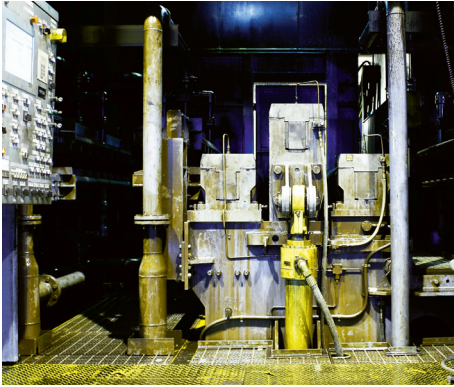
Millmate Strip Scanner and Stressometer Flatness Control System in a temper mill.



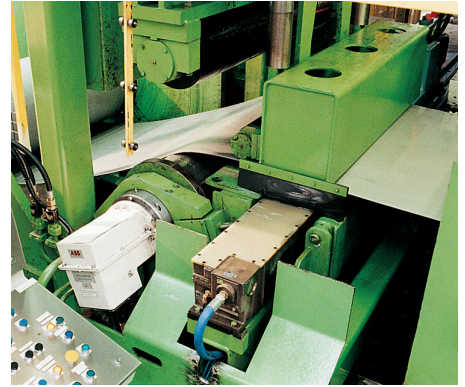
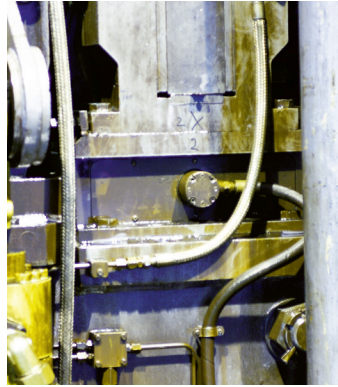
Large PillowBlock Tensiometers in a continuous annealing line



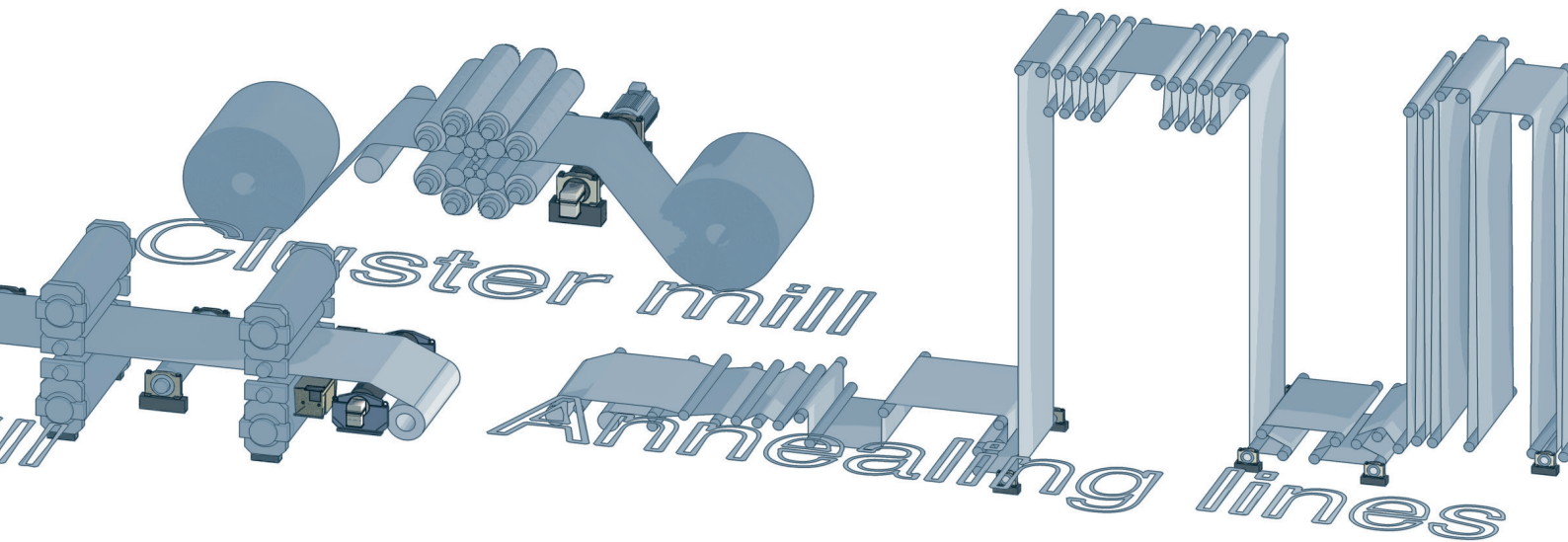
Roll force measurement. Load cells designed for demanding applications in cold rolling mills.



Large PillowBlock Tensiometers in a tandem cold mill.



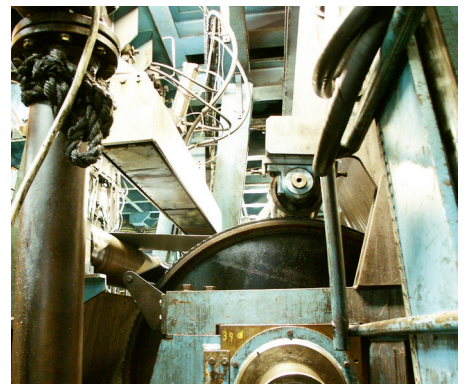
Stressometer Flatness Control System and Millmate Strip Scanner in a stainless steel cluster mill.



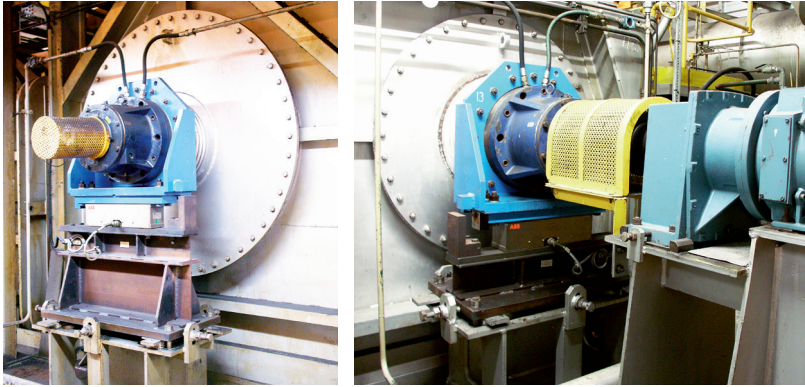
Stressometer System in a tandem mill.



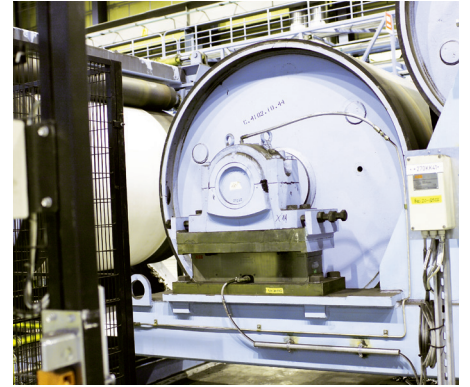
Millmate Strip Scanner in a stainless processing line.



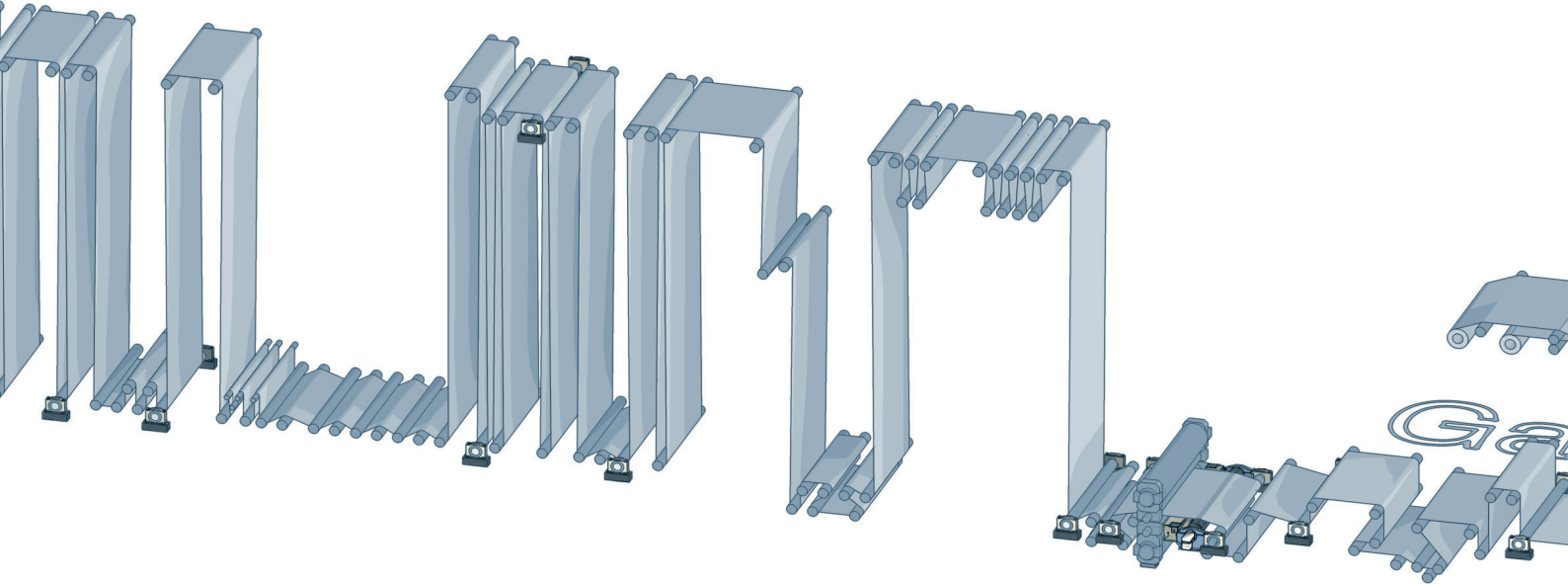
Strip tension measurement. A large selection of load cells to cover a wide range of demanding applications.



Large PillowBlock Tensiometers in furnace section of an continuous annealing line.



Large PillowBlock Tensiometers in bridle roll in an annealing pickling line.



Stressometer Flatness Control System in a reversible cold mill.

Stressometer Flatness Control System combined with Millmate Strip Tensiometer in a temper mill.



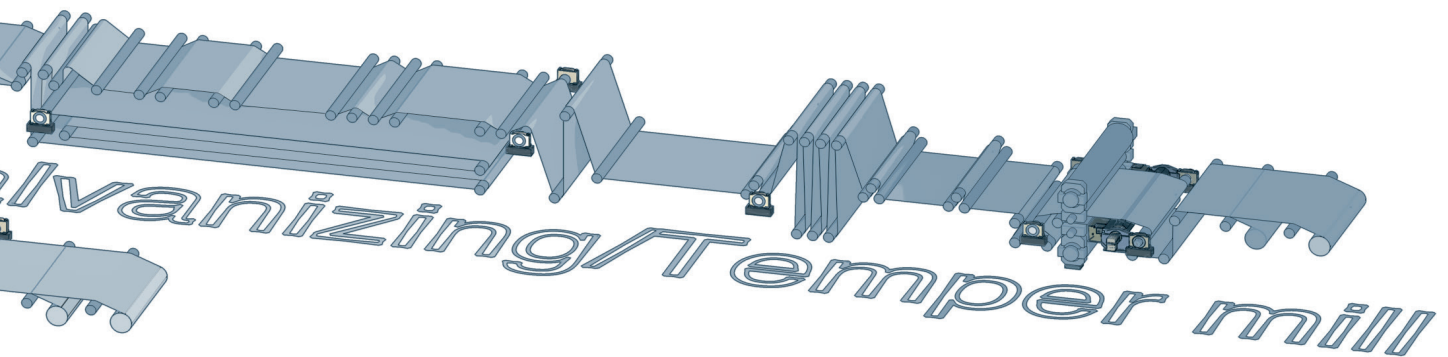
Edge and width measurement. Accurate measurement in a demanding mill environment independent of coolant and steam.



Stressometer Flatness Control System combined with Millmate Strip Scanner in a reversible cold mill.

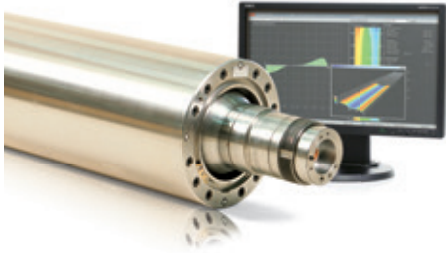


High quality coils produced in lines relying on ABB Force Measurement equipment.



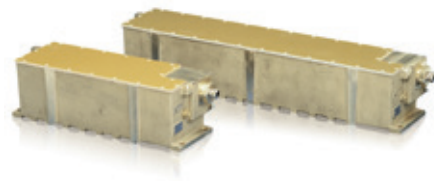
Large PillowBlock Tensiometers in a steel processing line.





Stressometer Flatness Control – the unsurpassed way to become more competitive

The Stressometer System is since more than 50 years recognized as the world standard in flatness measurement and control in flat rolling mills. Based on our experience from more than 1200 installations the Stressometer System provides the advanced automated control system needed to produce the high quality flat strip demanded by producers.



Millmate Strip Scanner Systems – position and width measurement

One of the most important parameters to measure in a rolling mill are the position and the width of the strip. If these are accurately determined, the strip can be guided in a correct and consistent lateral position in the mill and the roll actuators can be adjusted to reach the target flatness. Furthermore, edge trimming can be reduced to a minimum, and strip breakage due to over-stressed edges can be eliminated.

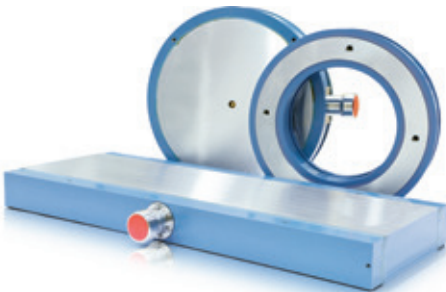
Millmate Strip Scanner system is widely used to measure strip edge position, off-center and strip width in rolling mills as well as in processing lines.



Large PillowBlock Tensiometers – Strip tension measurement

One of the crucial parameters in achieving correct strip thickness during hot and cold rolling is the strip tension. In order to reach the highest possible accuracy, a strip tensiometer is the best and most reliable alternative. It keeps the strip tension constant within the desired range, during both acceleration and deceleration.

The Millmate Strip Tensiometer System consists of a Millmate Controller 400, a junction box and two load cells matched to the desired measuring range. The load cells are available for measurement in two different directions, one for vertical measurement and the other for horizontal measurement.



Millmate Roll Force Systems – Roll force measurement

A truly measured roll force is crucial in achieving correct roll gap settings, true force distribution from operator side to drive side of your mill and supervision of the backup bearings and roll eccentricity. The Millmate Roll Force System incorporates all three essential features.

The Millmate Roll Force System consists of a Millmate Controller 400 and two load cells with matching units. The various types and the wide load range of the Millmate Roll Force load cells cover practically all conceivable force measurement applications.

Contact us

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