Nordson
Measurement & Control

Industry: Metals

Application: Shear Control

Controlling Shear for Plate Mills

Profile:

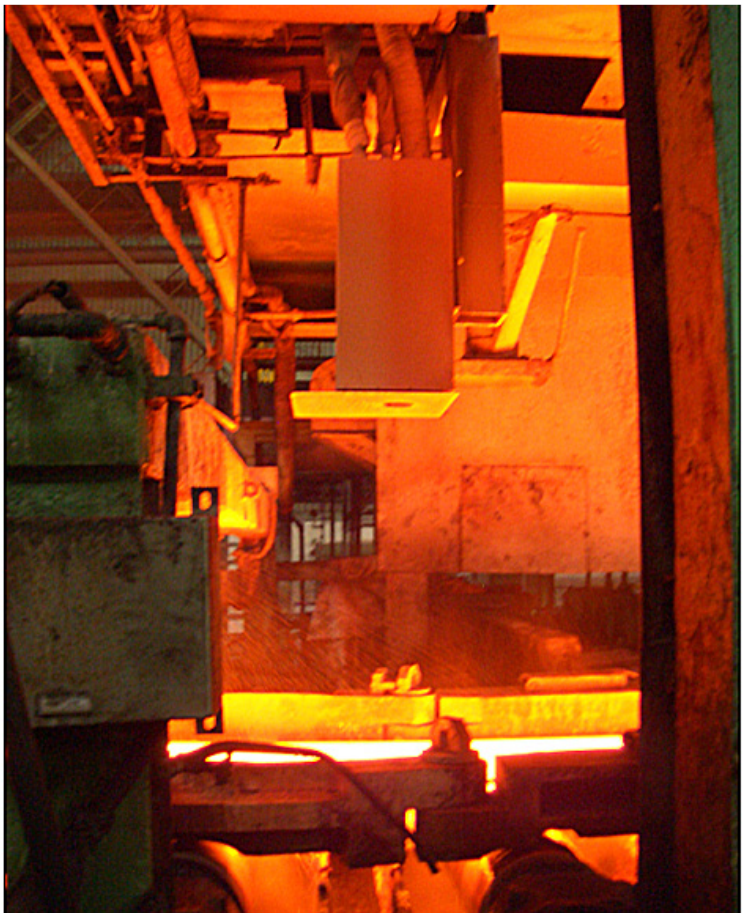
Steel plate mill

Solution:

LaserSpeed® Pro 9500

Results:

- Accurate measurements even during plate acceleration or deceleration
- Non-contact measurement eliminates measurement errors associated with contact measurement techniques
- Accurate position measurements even when the plate jogs back and forth for fine position control
- Integrated system saves time and money previously spent on tweaking the mill control system to keep the product within specs



Controlling shear for plate mills isn't easy. This application note describes how you can complete this task with ease using the LaserSpeed Pro 9500 gauge.

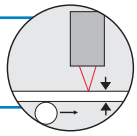
The Challenges:

Measuring Plate Position

Controlling shear for plate mills requires manufacturers to measure the position of the plate when the plate is moving into position at a fast speed and also during the deceleration as the plate nears its final position. Also important, is the position measurement when the plate jogs back and forth for fine position control.

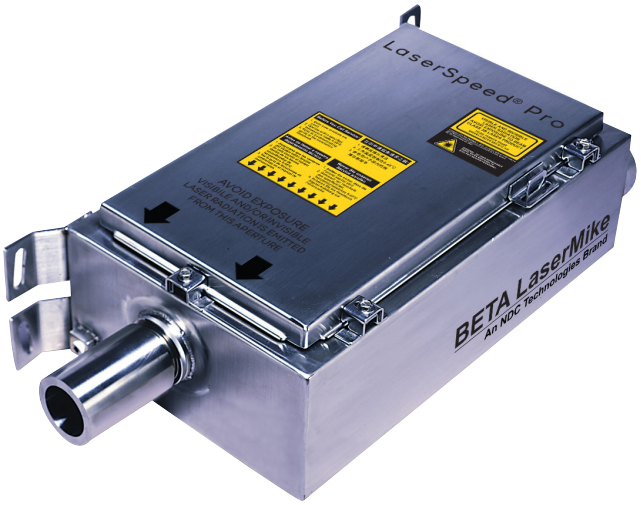
The Solution:

LaserSpeed® Pro 9500



The LaserSpeed Pro 9500 gauge was designed specifically for this type of application. The LS Pro 9500 uses a special Acusto-Optical Modulator to be able to measure very fine back and forth movements as well has high acceleration and deceleration rates needed for positioning control.

The LS Pro 9500 can automatically detect the plate when it enters the gauge's measurement region. Then it can determine the direction of travel and follow even the most minute movements of the plate. The gauge can keep track of the plate's position and send the position to the PLC via all the common communication protocols. This makes the LS Pro 9500 the ideal gauge for plate position and shear control. The LS Pro 9500 gauge can work for both cold and hot plates.



Recommended gauges:

- LS Pro 9500-310E
- LS Pro 9500-315E

The Results:

The LaserSpeed Pro 9500 delivers the following benefits:

- Accurate measurements even during plate acceleration or deceleration
- Non-contact measurement eliminates measurement errors associated with contact measurement techniques
- Accurate position measurements even when the plate jogs back and forth for fine position control
- Integrated system saves time and money previously spent on tweaking the mill control system to keep the product within specs

The LaserSpeed Pro non-contact gauge is the most accurate, reliable, and cost-effective measurement solution for positioning control and ensuring product quality.

Nordson

Measurement & Control

For questions or support go to: https://ndc.custhelp.com/

Document #: M-APPL-SENS-Nordson LS Pro Plate Mills-EN-2025MAR24
Date of Issue: March 2025

Nordson Measurement & Control is represented in over 60 countries worldwide. www.nordson.com