

Steelscape Inc in Kalama, WA, USA has successfully installed Stressometer flatness control system



Steelscape's 4-hi single stand reversible mill running with a Stressometer 7.0 FSA system, controlling the flatness on both entry and exit sides.

Measurement made easy

Choice makes the difference

Steelscape is owned by BlueScope Steel Limited and Nippon Steel Corporation with steel assets throughout the world. Steelscape offers customers an endless combination of choices. Customers may order their steel bare or painted; passivated, oiled and/or resincoated; in a wide range of thicknesses, widths, grades and coating weights. Vertically integrated processing means higher quality.

Steelscape is the only coated-steel producer in the western United States that can process the raw material (hot band coil) – from pickling to painting – in its own facilities. Such vertically integrated processing results in shorter lead times, lower cost and greater consistency in quality for the customer. Our facilities are strategically located to best serve the West Coast and South East coated steel markets. Our facilities are equipped with state-of-the-art testing equipment.

Each coil is monitored and tested during every stage of the coating process. And once the order has been shipped, customers can count on us for sound advice and flexible service. Our facilities are strategically located near the three major modes of shipment – ship/barge, truck and rail – to ensure that all destinations can be served promptly and efficiently.

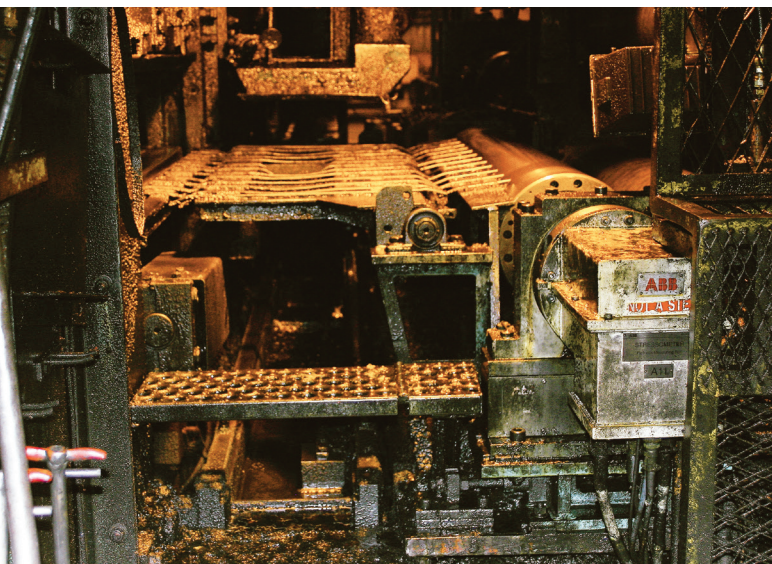
What has been achieved?

We ask Mr. Paul Tunak, Process Engineer:

"The Stressometer flatness control system is running extremely well. After fifteen months of the Stressometer installation we have not had one shape-related strip break problem. Also we have seen an increased uptime with the new flatness system."

"Stressometer is a very robust and reliable system and we really trust the feedback we get from the system. Operators are very comfortable with the system and we reached comfort levels very quickly after the installation. At Steelscape we are diligent with maintenance."





01

01 ABB Stressometer flatness system installed in cold rolling mill.

02 Cold rolling mill at Steelscape.



02

“After fifteen months of the Stressometer installation we have not had one shape-related strip break problem.”

Paul Tunak, Process Engineer at Steelscape Inc in Kalama, WA, USA.

“We have created a new target shape, which gives tighter edges. We have no wavy edges anymore. At first we had some problems with the Millmate Strip Scanner (MSS), but now we are very happy after changing to new components and good service from ABB. The Strip Scanner is working perfectly and we have had no issues with the MSS in a year. That is very good.”

Mr. Bob Pliler, Operator, comments the Stressometer 7.0 installation:

“With the Stressometer system everything is running extremely well. There is nothing I would like to change. I am very happy with all the ABB equipment. We had a very smooth transition at start-up and the Stressometer flatness system works very well in automatic mode. And so far we’ve had no strip breaks due to shape-related problems.”

Supplied equipment

ABB Force Measurement has supplied the following to the 4-hi single stand reversable cold rolling mill:

- One Stressometer 7.0 FSA flatness system
 - Two standard rolls, diameter 313 mm
 - 27 measuring zones, each zone 52 mm wide
- One Millmate Strip Scanner system
- One Millmate strip tension system, PillowBlock tensiometer system

The Stressometer 7.0 FSA system delivery includes skewing, work roll bending, spot cooling and Stressometer Flatness Logger 6.3 system. A short commissioning time was needed and the last tuning of the equipment took place before setting the mill in full production.

Mill data CRM	
Mill builder	IHI
Rolled material	Steel
Tonnage	450,000 tons/year
Coil weight	25 tons
Strip width min./max.	610 to 1350 mm
Exit strip thickness min./max.	0.20 to 1.5 mm
Max. rolling speed	1480 m/min
Work rolls	490 to 430 mm
Backup rolls	1360 to 1260 mm
Mill motor	5500 kW

ABB AB
Measurement & Analytics
Elektronikgatan 35
S-721 36 Västerås, Sweden

abb.com/stressometer
abb.com/stripscanner

We reserve the right to make technical changes or modify the contents of this document without prior notice. With regard to purchase orders, the agreed particulars shall prevail. ABB does not accept any responsibility whatsoever for potential errors or possible lack of information in this document.

We reserve all rights in this document and in the subject matter and illustrations contained therein. Any reproduction, disclosure to third parties or utilization of its contents – in whole or in parts – is forbidden without prior written consent of ABB. Copyright© 2020 ABB. All rights reserved.