
MEASUREMENT & ANALYTICS

Profilglass SpA in Fano, Italy has installed many ABB Force Measurement products in their four cold rolling mills plus tension leveling line



Profilglass SpA's four cold rolling mills plus the tension leveling line are running with 4 Stressometer systems, 6 MTG-gauges, 3 Strip Scanner systems and 8 tension load cells.

Measurement made easy

Background

In 1982 the Paci brothers founded Profilglass – the firm in a space of 20 years became the world-wide leader in the production of spacer bar and decorative profiles for insulating glass.

From the very beginning Profilglass led a constant investment policy focused on the achievement of downstream as well as a vertical upstream.

This investment policy has been successful in the profile market, making even stronger the role of Profilglass as the worldwide leader, as well as in the rolled products field. As a matter of fact, since 2000 Profilglass has constantly increased its market share in the rolled products industry and nowadays the rolling division is representing about 70% of the total turnover.

Profilglass started in the rolling business in year 2000 and two years later, in 2002, they had their first MTG thickness gauge installed. This was the start of a good communication with ABB. One of the main goals of Profilglass is to invest in new technologies for the final product continuous improvements.

Profilglass is very satisfied with the ABB measurement equipment. Profilglass is one of the most complete ABB customers in the rolling mill industry with Stressometer Flatness Control, Millmate Thickness Gauging, Large PillowBlock Tensiometers and Millmate Strip Scanner Systems from the ABB Force Measurement product portfolio.

“We are installing a Stressometer system in the tension leveling line in order to set the flatness level at the end of the process. With higher requirements from the market this is a certification of flatness that our customers ask for.”

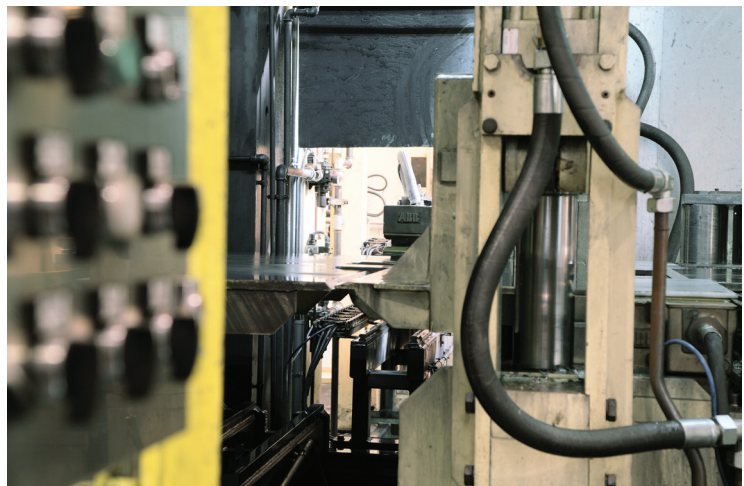
“ABB's modern systems for flatness, thickness, tension, width and position measurement contribute to a reliable control of our production process.”

01 Operator cabin in cold rolling mill.

02 Mr Giancarlo Paci, President, Mr Matteo Paci, Production Manager, successfully managing Profilglass SpA, Fano, Italy. "ABB's modern systems for flatness, thickness, tension, width and position measurement contribute to a reliable control of our production process."

03 MTG-gauge installation in cold rolling mill.

04 Stressometer flatness system installed in cold rolling mill.



What are the main benefits with ABB Force Measurement products and what has been achieved?

Around the conference table we ask Mr Giancarlo Paci, President, Mr Matteo Paci, Production Manager, Mr Stefano Camilli Meletani, Cold Rolling Manager and Mr Cristiano Mercante, Automation Manager to comment the ABB Force Measurement products installed in Profilglass SpA's four cold rolling mills plus tension leveling line:

Profilglass SpA's four rolling mills and the tension leveling line are running with MTG Thickness Gauges, Stressometer Flatness Control Systems, PillowBlock Strip Tension Systems and Millmate Strip Scanner Systems

What are the main benefits with the Stressometer Systems in the cold rolling mills?

"The Stressometer measurement sensors are very reliable and together with logics and electronics the flatness system is an important part for us. Stressometer has an excellent repeatability and we have seen increased productivity in the mills. The Stressometer systems are appreciated, they are easy to operate and they have good interfaces."

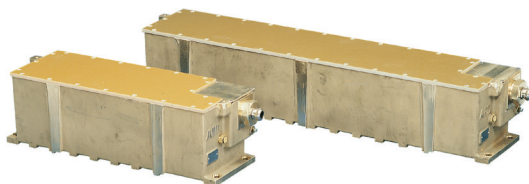
"By the Stressometer installations we do not only control the flatness, we also get a general overview making it possible to adjust the machine and also to increase speed in the mills."



What are the main benefits with the Millmate Strip Scanner Systems in the cold rolling mills?

"The Millmate Strip Scanner System (MSS) is very reliable and the MSS-sensors have been running perfectly for many years of operation."

"The operators really appreciate MSS - it is safe, there is no radiation and it is easy to operate. The MSS-sensors are unaffected by mill environment and they provide stable measurements. Also, the MSS is the most suitable strip position measurement system to be matched with the Stressometer system."

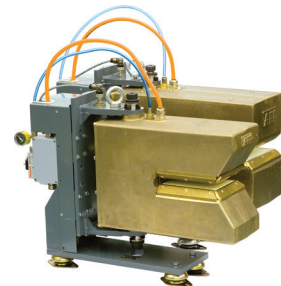


What are the main benefits with the MTG-gauges in the cold rolling mills and process lines?

"Best benefits with MTG are alloy-independence and no need for calibration. This is crucial since we work with more than 10 alloys, 10 series from 1000 to 8000."

"The operators really appreciate MTG – it is safe, there is no radiation, and it is easy to operate thanks to its userfriendly HMI."

"Also, the accuracy is very high with the MTG-gauges."



What are the main benefits with the LPBT load cells in the cold rolling mills and process lines?

"With ABB tension load cells we know what happens in the mills. ABB load cells provide sensible and accurate tension measurement. We get a good and reliable feedback if tension follows the desired value."

"In addition, we get a good view of the mechanicals with ABB PillowBlock load cells."





Company profile – Profilglass SpA

In 1982, when Profilglass SpA started up its business, they had 20 employees and a production area of 7,000 m². With more than 30 years of operation, the company has expanded continuously and now Profilglass has become a 300,000 m² firm with more than 1000 employees.

Profilglass has 4 cold rolling mills, 1 cast-house for slabs, 15 furnaces for thermal treatments, 6 continuous casting lines, 12 slitters for coils, 6 machines for sheets, 7 machines for the production of circles and ovals, 1 machine for the production of triangles and 21 machines for the production of profiles.

These investments have given a strong positive impulse to the sales trend which has shown a constant growth – given the present results Profilglass has as the main objective for the future the achievement of a productive and processing capacity over 250,000 tons.

For more information visit:
www.profilglass.it

ABB Force Measurement products installed at Profilglass SpA

CM 01 4-high single stand

Mill builder	MINO
Thicknesses	0.5 to 10.0 mm
Min. – max. width	1000 to 1650 mm
Rolling speed	1200 m/min
Total ABB portfolio	1 STR, 1 MTG, 1 MSS, 2 LPBT

CM 02 4-high single stand, strip shearer

Mill builder	MINO
Thicknesses	0.1 to 6.0 mm
Min. to max. width	1000 to 1650 mm
Rolling speed	1200 m/min
Total ABB portfolio	1 STR, 1 MTG, 1 MSS, 2 LPBT

CM 03 4-high reversible mill

Mill builder	MINO
Thicknesses	0.2 to 6.0 mm
Min. to max. width	1000 to 1700 mm
Rolling speed	500 m/min
Total ABB portfolio	2 STR, 2 MTG, 1 MSS, 4 LPBT

CM 04 4-high single stand

Mill builder	MINO
Thicknesses	0.25 to 7.0 mm
Min. to max. width	800 to 1200 mm
Rolling speed	500 m/min
Total ABB portfolio	2 MTG

Tension levelling line

Total ABB portfolio	1 STR
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STR = Stressometer Flatness Control System

MTG = Millmate Thickness Gauge

MSS = Millmate Strip Scanner System

LPBT = Large PillowBlock Tensiometers, strip tension measurement