

Shanghai Copper, Shanghai, China has successfully installed Millmate Thickness Gauges in their rolling mills

Shanghai Copper's two rolling mills are running with four Millmate Thickness Gauges (MTG)



What has been achieved?

We ask Mr Zhang Wenguang, In Charge, Engineer, Technical Expansion Department and Mr Qian Min, Maintenance Engineer, who concordantly express their opinion about the MTG-gauge installations:

"ABB has a good reputation on the market and we really trust ABB products, e.g. reliable Drives and MTG thickness gauges.

We see a big advantage with the non-contact MTG thickness gauges having very stable and reliable measurements over time. A further benefit is that the MTG-gauges are alloy-independent.

Both in the new line (RM1) and in the old mill (RM2) the

MTG thickness gauges are working very well and the accuracy is excellent. Another important issue is the considerable reduction of maintenance. With the new MTG-gauges we save at least 50% on maintenance and spare parts. We really appreciate the low maintenance costs.

Another crucial benefit is that there are no recalibrations needed with the MTG and in case there is a strip break it does not damage the robust MTG gauges.

Also, there are no radiation problems with MTG, a really good benefit compared to before.

To summarize, the new MTG-gauges are working very accurately, they are alloy-independent, they need no recalibration and the maintenance costs are getting lower and lower."



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Mr Qiong He, Operator (RM1) at Chinalco Shanghai Copper:

"In the new line (RM1) the MTG thickness gauges are working very well and the accuracy is excellent"

Supplied equipment

ABB Force Measurement has supplied the following equipment to Chinalco Shanghai Copper's rolling mills in Shanghai, China:

- Two MTG systems with two Standard gauges in each
- Four (4) standard sledges for horizontal movement of the gauges
- Four (4) ABB PillowBlock strip tensiometer load cells, PFCL 201 with one Millmate Controller with Profibus

Mill data RM1, 6-hi standard reversible cold rolling mill

Mill builder	SMS Siemag
Rolled material	Copper alloy, brass
Tonnage	60,000 tons/year
Coil weight	3 – 14 tons
Strip width min./max.	400 – 880 mm
Exit strip thickness min./max.	0.1 – 2.5 mm
Max. rolling speed	600 m/min
Work rolls	250 mm
Back-up rolls	870 mm
Mill motor	1000 kW



Shanghai Copper is a holding subsidiary company of Chinalco

Shanghai Copper is set up on the base of copper processing and sales of former Shanghai Non-ferrous Metals (Group) Co, Ltd and specializes in the business of metals products, processing, cutting, sales of non-ferrous metals products, imports and exports of products and technology. The high quality of cupronickel, brass, bronze and copper strip is used in electric and electronics, building and automotive industries.

Shanghai Copper works in compliance with ISO9000:2000 standard quality management system, national and international environmental protection norms. It supplies products in a very high quality because it set an idea of "meet the demand of customer, surpass the expectations of customer" to all the employees.

(for more information, visit www.shcu.com.cn)

Mill data RM2, 4-hi standard reversible cold rolling mill

Mill builder	CNPT
Rolled material	Copper alloy, brass
Tonnage	24,000 tons/year
Coil weight	3 – 4 tons
Strip width min./max.	400 – 630 mm
Exit strip thickness min./max.	1.0 – 2.5 mm
Max. rolling speed	300 m/min
Work rolls	470 mm
Back-up rolls	1000 mm
Mill motor	900 kW

Contact us

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