

Roughing mill revamped for Gerdau Manitoba in Canada.

AIC Team successfully commissioned the complete automation system for the rougher stand in GERDAU Manitoba Rolling Mill n°4.

The intervention focused on roughing mill automation using a new Allen Bradley ControlLogix PLC to achieve a fully automatic cycle, as well as adding main control desks for the rougher pulpit (Fig. 1); the rougher stand, previously manually operated from operator now is running fully automatically without any human intervention.



Figure 1,2 – Main pulpit and new electrical panels.

As part of the solution, strategical PLC panels and AC & DC drive panels (Fig.2) have been included, HMI system added to the AIC previously installed Rolling mill control system in 2019 makes possible to control and command the area from everywhere within the production site thanks to the use of Thin clients around the plant. Completed the package all the software for auxiliaries' machines from the Reheating Furnace exit side till the continuous mill entry side, continuous mill was previously commissioned by AIC in 2019.

In fact, this order follows the significant mill automation revamping carried out at the same site in 2019 and highlights the strength of collaboration between AIC and GERDAU Group.

The commissioning was finished on before scheduled and within the allotted time frame in just ten days outage this Summer. The production has been operating at maximum capacity since the first day.



Figure 3 – AIC and GERDAU teams working side-by-side in Selkirk, MB.

AIC Capitanio Tailored Automation is a global system integrator that designs, manufactures and commissions turn-key plants worldwide, providing advanced and tailored automation and mechatronics solutions for the steel industry, with the aim to continuously improve both efficiencies, competitiveness and safety of the production processes. With more than 1500 applications worldwide and more than 45 years of history, AIC can boast a unique experience in both greenfield and revamping projects, especially in meltshops and long products rolling mills.

Gerdau Long Steel North America (GLN) manufactures structural steel, piling, rebar, merchant bar, and special bar quality products for the agricultural, automotive, civil construction, distribution, energy, industrial, and mining markets. GLN is a wholly owned subsidiary of Gerdau S.A.

Gerdau AmeriSteel Manitoba (GAM) located in Selkirk Manitoba Canada, operates two electric arc furnaces. One furnace (eccentric bottom tapped, EBT) is used for the melting of scrap steel and the other, a ladle furnace, for subsequent processing of the molten steel. The mills installed are two, named 4 mill and 5 mill, existing the same Reheating Furnace billets can be rolled on each side mill or roughed on one mill and then rolled on the opposite mill.

For more information:



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