Press Release #02
05/02/2024
USA

Installation of level 2 automation for billets quality improvement in South Africa

Cape Gate commissioned AIC the design, realization and installation of an Advanced Process Control Level 2 System at their Reheating Furnace in the rolling mill.

This system is able to perform the automatic control of billets thermal profile inside the pusher type furnace installed at Cape Gate Bar Mill rolling mill and it is a table-based model system.

AIC is going to install Level 2 table-based reheating furnace on an existing third-party supplied reheating furnace for optimizing Gas consumption and improving the quality of billets produced.

AIC system will perform following tasks:

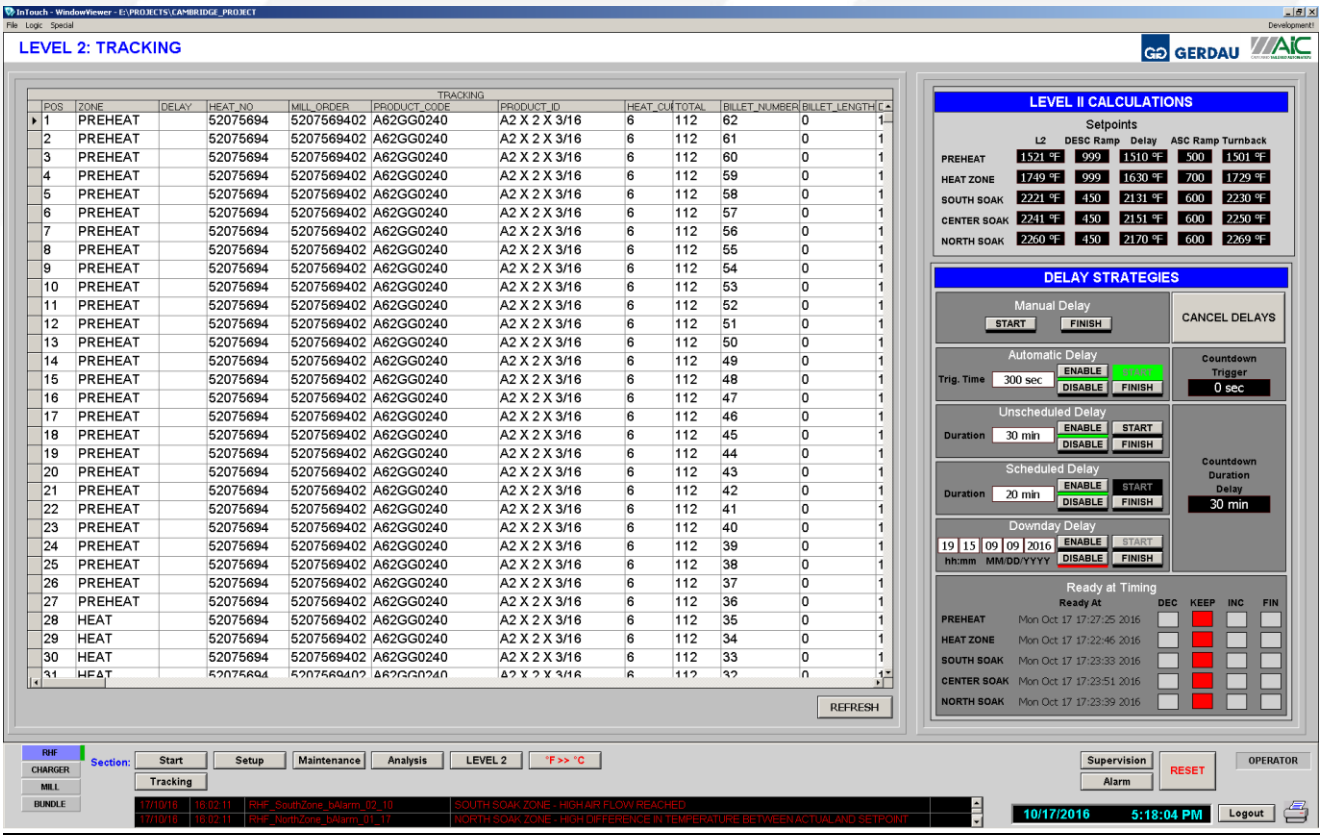
- Heating and cooling ramps of the reheating furnace
- Temperature curves set-up managed by recipes
- Delay strategies
- Material tracking inside furnace
- Billets are flagged in tracking if too long and information sent to handling PLC.
- Feedback of the exit temperature of the material at rougher stand
- Feedback of the rougher stand(s) current absorption

With following benefits:

- Reduce heating delays on products and their effects on consumptions
- Improving the maximum productivity T/h
- Decrease the gas consumptions, setting zones temperatures according to the set thermal efficiency of the furnace based on tables
- Improve and standardize the final product quality

Other functionalities of Level 2 system are:

- Reach the desired billet temperature at the discharge in accordance with the rolling requirements
- Keep present of production delays, minimizing pieces over heating
- Set a heat up curve for each kind of product inside the furnace and low the consumptions
- Tracking of each piece inside the furnace
- Main furnace operator’s functions are managed by the level 2 system so that operators can dedicate their time to other tasks
- Delay strategy to handle production delays.
- Production reports



(level 2 system HMI screen installed at another facility)

About Companies:

AIC Group is a technological partner with extensive experience and deep know-how and stands itself as a global power control supplier and system integrator designing, manufacturing, and implementing automation systems, process control, and mechatronic solutions for both greenfield and revamping projects. Focusing on the steel and metals industries for long and flat products, the Group provides cutting-edge technical solutions by handling complex project schedules and thus establishing satisfactory and remarkable partnerships through its 6 international offices.
More than 45 years of modernization for endless reliability processes.

Cape Gate Fence & Wire Works (Pty) Ltd is a South African market leader in the steel industry, with over 85 years of experience in delivering quality products. It is a wire manufacturer and supplier of steel products, wire products, rod mill and bar mill services.

For more information:

Katia Solvesi
Head of Marketing
Email: katia.solvesi@aicnet.it
Tel: +39 0365 826333

For businness inquires:

Antonio Ambra
Managing director AIC NA
Email: antonio.ambra@aicnet.it
Tel: +1 551 277 8918