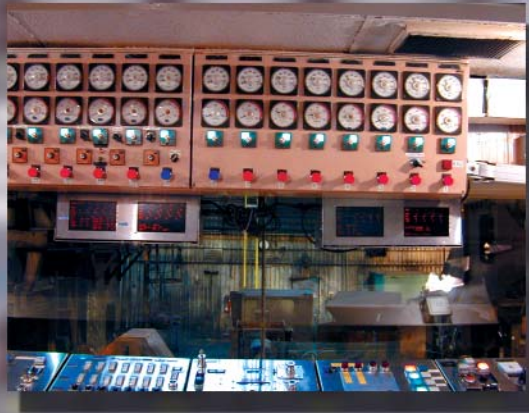


BAR MILL MASTER REFERENCE SYSTEM UPGRADE



OLD



NEW



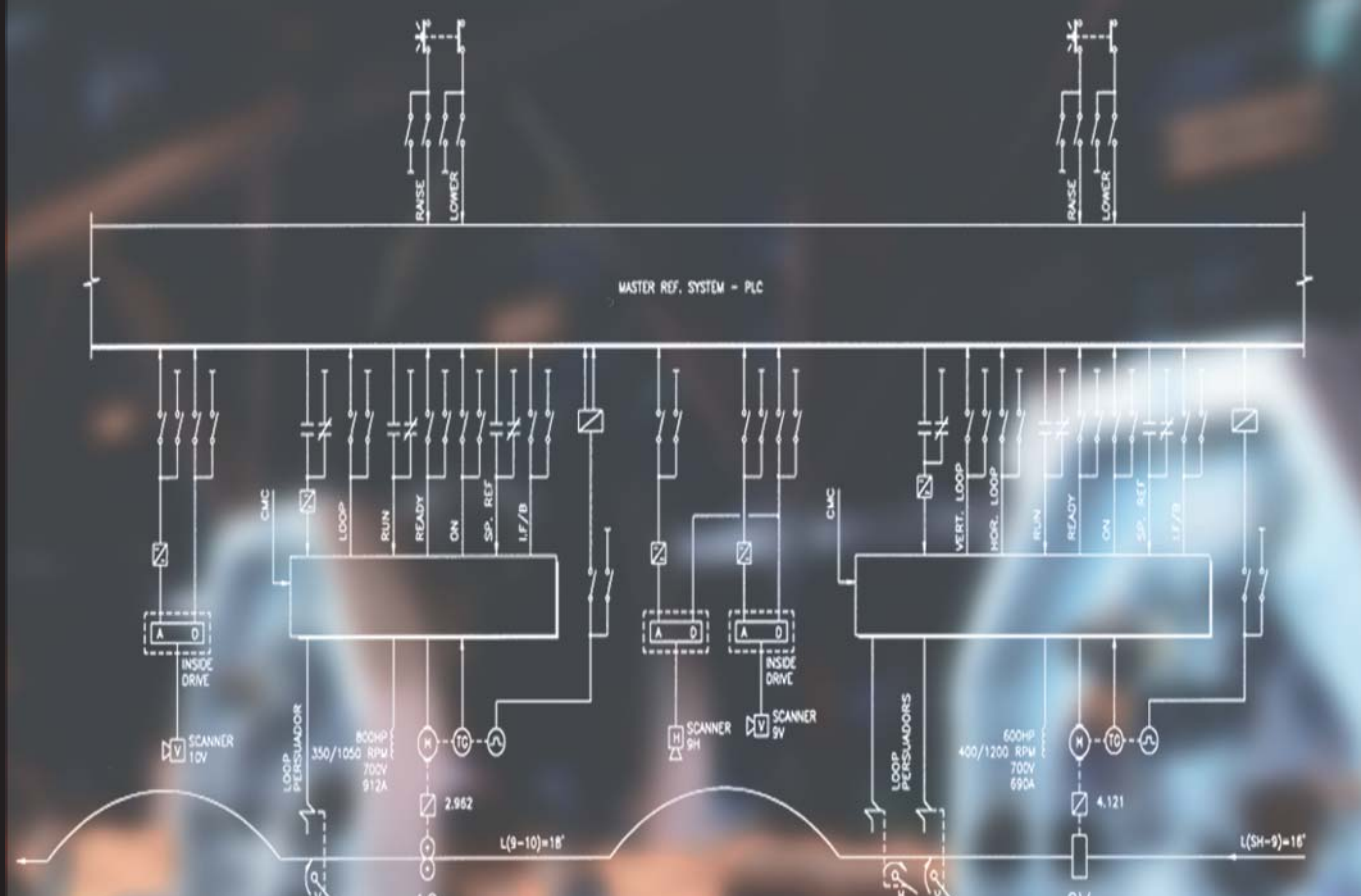
NEW

Process: Sixteen stand continuous bar mill with two shears

Scope: Design, supply and commission rolling mill speed control system including: Mill set-up server, dual HMI control and monitoring system, PLC based speed reference generation and control, cut to length, loop control and tension control systems.

Approach: Develop low cost solution to mill speed control. Apply switch-over control scheme. Connect new system inputs in parallel to existing (shadow existing operations). Control outputs by either system through an instant switch-over.

Benefits: Minimum interruption to production, improved mill set-up and operator interface, ease of maintenance, low cost implementation.



Technical details

PLC: Schneider Quantum

Qty: 1

Discrete I/O's: 350

Analog I/O's: 40

H.S. counters: 20

Networks: Remote I/O, Modbus Plus, Ethernet

Features: Cascade/Individual speed control, Speed droop compensation, Tension control, Loop control, Head and Tail tracking, Shears cut to length control

HMI: Iconics with OPC server

Qty: 3

Hardware: PC based stations, one with two 15" flat screens and one with 21" monitor

Network: Modbus Plus, Ethernet

Features: Mill Configuration, Mill Set-up, Process Monitoring, Process Control, Alarms, Trending, Delay logging

SET-UP SERVER: Microsoft Access data base

Qty: 1

Hardware: PC based station, 21" monitor

Network: Ethernet

Features: Set up schedules for 700 products. Each schedule includes: stand configurations, reductions, groove factors, loop heights, tensions, roll gaps, shears lead speed, head crop, tail crop, divide length