

NYCO Minerals

Willsboro, NY

Crushing Area Control System Upgrade

NYCO Minerals is a mineral processing company with a facility in the upstate New York. Hallam-ICS worked very closely with NYCO to upgrade the control system for an existing Crushing Mill. Hallam-ICS provided a plant-wide control system solution for NYCO's Plant 1 Crushing facility.



CONTROLS ENGINEERING

Siemens S5 to Allen-Bradley PLC-5/40C Upgrade including: ControlNet architecture, requirements, and routing; Remote I/O architecture, requirements, and routing; PLC, I/O & RS-View workstation hardware bill of materials; Electrical Power requirements; PLC and RS-View Functional Enhancements; system commissioning; survey and documentation of existing I/O; demolition plan for removal of Siemens I/O; Plan and electrical design for connection to Allen Bradley I/O; Installation plan for new operator console; Convert S5 ladder program to PLC-5/40C logic; define control system power requirements and components.

CONTROL PANEL/CONSOLE DESIGN/BUILD
Design Crushing Area RS-View/PLC-5/40C control console layout; design feed bins remote I/O electrical panel; mount and wire all necessary hardware components; provide electrical and layout prints in AutoCad hardcopy and electronic formats;

INSTALLATION

Installed new control console; remove existing Siemens electrical panel and pushbuttons; install wiring and conduit for Controlnet and Remote I/O. communications; install Remote I/O hardware; wire all field I/O; replace Siemens I/O racks with Allen-Bradley I/O; install wiring and conduit for Controlnet and Remote I/O. communications.

CONTROL SYSTEMS START-UP

Pre-power wiring checks; ground wiring checks, power-on voltage checks; power-up sequence verification; I/O device operation verification; test control system operation.

