



Project Reference list – CONTROL SYSTEMS DESIGN

COMPANY	FACILITY	PROJECT	DESCRIPTION
Perryman Company	Titanium Rolling Mill Houston Pennsylvania	Mill expansion	Supply of drives, controls and automation system for a Titanium mill expansion. Eight stand, eight drives Kocks block. Cascade speed control, impact speed drop compensation, loop control. System design, Installation engineering, programming and commissioning. Equipment: SSD drives, Quantum PLC, Control View HMI.
Republic Engineered Products	Melt Shop Canton Ohio	Water cooling facilities upgrade	System design, programming, installation engineering and commissioning of new systems related to contact and non-contact water. Included upgrade of existing equipment and implementation of new power and control equipment. Upgrade of existing PLC 5 and HMI stations.
Severstal	Melt Shop Cerepovetz Russia	Melt Shop Baghouse	Design of Control system and instrumentation for a 600,000 CFM Baghouse. Installation and commissioning support. Associated equipment: Three 2000KW main fans, Booster fan, Numerous dampers and monitoring instruments.
Algoma	80" Temper Mill Sault Ste. Marie	Pup Coil Removal System	System design, programming and implementation of controls for a Pup Removal System. Included a multi-axis manipulator, ControlLogix PLC, Rockwell Automation variable speed drive and auxiliary systems.
Mittal Canada (ISPAT SIDBEC)	Bar Mill Longueuil Quebec	Mill drives upgrade	Design and implementation of conversion of two analogue mill stand drives to digital drives.
Preisman Technology Inc.	Falconbridge, Dominican Republic	New scrubber	System design, installation engineering, programming and commissioning of a new wet gas cleaning process.
Preisman Technology Inc.	Sterling Steel Michigan	Fume cooling system	Control system design and supply, programming and commissioning of a new ARC Furnace Fume Cooling System.



Project Reference list – CONTROL SYSTEMS DESIGN

COMPANY	FACILITY	PROJECT	DESCRIPTION
QUANEX CORP. (MACSTEEL)	SBQ Mill Jackson, Michigan	New Shear	Engineering, programming and supply of a complete finishing shear system for a SBQ bar mill. Head and Tail crop, Divide cut. Speed trap for accurate length tracking. Integration with existing GE speed control system and HMI. Equipment: Rockwell automation Shear DC drive, ControlLogix PLC with motion control modules.
Republic Engineered Steel	20" mill Lorain, Ohio	Mill Upgrade	Four stand mill, shear, cooling bed, gauge beam, conveyors. Drives and control system including cascade speed controls, inter-stand tension control, dynamic shear cut optimization strategy, split cooling bed controls with electronic gearing, numerous positioning systems, product tracking and optimization schemes. Equipment: Rockwell Automation DC and VF drives, ControlLogix PLC, RS View HMI, Access database, new pulpit and operator desks [Scope: Equipment supply, system engineering, programming and commissioning]
Mittal Canada (ISPAT SIDBEC)	Bar Mill Longueuil, Quebec	Data acquisition and analysis	Supply of a data acquisition system and process analysis software to enable managers review mill performance over a period of specified time or specified products. Analysis can be done on any process parameter or combination of few. Equipment/Systems: PC with Iconics HMI, Labview software and OPC server. [Scope: Supply of hardware, software and commissioning]
Manufacturing Sciences Corporation	Oak-Ridge, Tennessee	Reversing Mill Upgrade	Complete replacement of drives and control system including operator's console for a reversing rolling mill of high grade/exotic metals. Includes set-up schedules, automatic pass sequencing and hydraulic gap control, data acquisition, process analysis and report generation. Equipment/Systems: Eurotherm Drives, ControlLogix PLC, RS View HMI, Access data base [Scope: Supply of hardware, system engineering, installation engineering, programming and commissioning]
Chaparral Steel (TXI)	Midlothian, Texas	Portable Model Mill	Drive and controls for a model mill used for testing of pass sections using led [Scope: Supply of hardware, system engineering and testing]



Project Reference list – CONTROL SYSTEMS DESIGN

COMPANY	FACILITY	PROJECT	DESCRIPTION
Tower Automotive	Toronto Ontario	Aluminum Rolling Mill Upgrade	Replacement of drives and control system, including operator console, for a flat aluminum mill consisting of pinch roll, main mill and coiler/stacker. The mill is fed directly from a caster. Equipment: Eurotherm drives, ControlLogix PLC, RS View HMI [Scope: Engineering, programming, commissioning]
Wolverine Ratcliffs Inc.	Fergus, Ontario	New mill drives and control system	New drives, mill control systems, HMI's, MCC's, installation engineering, commissioning and start up of a Tandem Mill (two Mill Stands, Coiler and Un-coiler). Feature: automatic screwdown, PLC based AGC control system, speed and tension control. Hardware/Systems: GE motors, Eurotherm drives, ControlLogix PLC, RSView HMI [Scope: Turnkey]
Mittal Canada (ISPAT SIDBEC)	Bar Mill Longueuil, Quebec	Shear upgrade	Development and supply of a low cost Shear control system for a Clutch/Brake flying dividing shear. Equipment/Systems: Momentum PLC, Concept software [Scope: Engineering, programming and supply]
Mittal Canada (ISPAT SIDBEC)	Bar Mill Longueuil, Quebec	Upgrade of pack annealing system	Drive and control system supply for a multi-product pack annealing system on a bar mill cooling bed. Equipment: Control Techniques drive, Quantum PLC, Iconics HMI [Scope: Supply, engineering, programming and commissioning]
Bayou Steel	Bar Mill Harriman, Tennessee	Bar Mill Upgrade	New drives and control system for the reheat furnace charging system. Detailed design and installation engineering for new 6 roughing mill stands. Equipment/Systems: A-B AC drives, GE PLC, Cimplicity HMI. [Scope: Turn Key]
Intermetal	Tunisia	Mill control system upgrade	Supply and implementation of a new mill master reference system, new operator console, HMI's and mill schedule set-up system. Controls included cascade speed control, interstand tension control, loop control and shear crop and divide cut control. Systems: Quantum PLC, Iconics HMI, Access database [Scope: System engineering, software development, commissioning]



Project Reference list – CONTROL SYSTEMS DESIGN

COMPANY	FACILITY	PROJECT	DESCRIPTION
Mittal Canada (ISPAT SIDBEC)	Bar Mill Longueuil, Quebec	Master Reference System Upgrade	Supply of a new Mill Speed Control system. The system replaces ABB controls. Fast switchover scheme from the existing to new system and back allows for the commissioning of the system with minimum interference with the production. System includes rolling schedules database, speed reference generation and control, tension and loop control, cut to length systems. Equipment/Systems: Quantum PLC, Iconics HMI, Access Database [Scope: Hardware supply, engineering, programming, commissioning]
Larco Industrial Services	Structural Mill Gerdau Ameristeel (Co-Steel Lasco) Ontario	Strapping system	New drives and controls for an automated four head strapping system. Equipment: A-B AC drives, Quantum PLC, Iconics MMI. [Scope: Engineering, programming, supply, commissioning]
Gerdau Ameristeel (Co-Steel Lasco)	Structural Mill Ontario	New finishing mill equipment	New power distribution, drives and control system, electrical rooms, pulpits and operator consoles for a new Straightener, cold transfer, cold shear, cold saw, gauge beam, stacker and strapper. Equipment: A-B AC and DC drives, Quantum PLC, Iconics MMI. [Scope: System design, programming, installation engineering, commissioning]
Gerdau Ameristeel (Co-Steel Lasco)	Structural Mill Ontario	Rolling mill upgrade	Addition of new mill stand drives, new mill control system, new operator's console, radio control for mill stand movements, upgrade of drives and controls for furnace charging and discharging equipment. New electrical room and power distribution system. Equipment: G.E. DC motors, Reliance Automax and Sigma, Modicon PLC [Scope: Engineering, programming of aux. systems]
Tower Automotive	Toronto, Ontario	Four-high Temper Mill Rebuilt	Complete power distribution, drives and control system for a four-high temper mill with coiler, uncoiler, automatic screw-down and coil handling equipment. Sheet gauge data acquisition system and SPC. Equipment: Eurotherm DC drives, Omron PLC and touch screen. [Scope: Engineering, programming, supply, commissioning]



Project Reference list – CONTROL SYSTEMS DESIGN

COMPANY	FACILITY	PROJECT	DESCRIPTION
Steel of West Virginia	Bar Mill West Virginia, Huntington	Rolling mill upgrade	Addition of new mill stand drives, radio control for mill stand movements, new drives and controls for conveyors, cooling bed, chain transfer, straightener, layer forming transfer. New electrical room, power distribution system, pulpit, operator console. Equipment: A-B AC drives, Reliance DC drives, A-B PLC, Panelview touchscreens. [Scope: Engineering, programming]
Gerdau Ameristeel (MRM)	Bar Mill Selkirk, Manitoba	New reversing rougher	Engineering and implementation of drives and control system for a new, 3000hp, reversing mill facility including hydraulically shifting reversing rougher, screwdown, bar turners, conveyors, chain transfers. New electrical room and power distribution system Equipment: A-B networked AC drives, A-B PLC, Controlview MMI. [Scope: System design, programming, installation engineering, commissioning]
Larco Industrial Services	Stelco Bar Mill Hamilton, Ontario	Bar Bundling and strapping system	Drives and control system for a new automated bundling facility. Prefab., portable electrical room/pulpit. Equipment: A-B AC drives, Quantum PLC, Panelmate touchscreen. [Scope: System design, programming, commissioning]
Perryman Company	Houston, Pennsylvania	New Rolling Mill	Design and supply of complete mill electrical, drives and control systems for a combination reversing and continuous mills. A fifteen pass reversing mill includes entry and exit manipulating robots, screwdown and conveyors. A continuous Kocks mill includes a block, shear, pouring coiler and coil handling facility. The mill can roll coils or bars. The complete mill is fully automated and is controlled by a single operator. Equipment: Eurotherm DC and AC drives, Quantum PLC, Xycom touchscreens and FactoryLink MMI. Remote on-line diagnostics support is provided. [Scope: Engineering, programming, supply, commissioning]
Halla engineering	Kang Won Steel Making Pohang, Korea	New baghouse	Design of electrical control and MMI systems for a new baghouse facility



Project Reference list – CONTROL SYSTEMS DESIGN

COMPANY	FACILITY	PROJECT	DESCRIPTION
Mittal Canada (former Stelco)	Bar mill Contrecoeur, Quebec	Drives modifications	Design of a back-up system for Mill drives
Republic Steel	Billet mill Massillon, Ohio	Cooling bed	Design and implementation of Cooling bed upgrade including drives and controls.
Mittal Canada (former Stelco)	Bar mill Contrecoeur, Quebec	Mill upgrade	Design and implementation of mill modernization, new drives, PLC and MMI
Mittal Steel USA (Bethlehem Steel)	Steelton, PA	Rail stamping machine	Design, programming, supply and commissioning of drive and control system for a rail stamping machine
Kang Won	Steel making Pohang, Korea	Baghouse	Basic engineering and detailed design of Baghouse control and automation system
Mittal Canada (former Stelco)	Bar Mill Contrecoeur, Quebec	Mill upgrade	Engineering and implementation of an upgrade to the 18" Roughing Mill drives
Mittal Canada (former Stelco)	Bar Mill Contrecoeur, Quebec	Mill product expansion	Drives and control system design for new products mill expansion