



Project Reference list – CONSULTING

COMPANY	FACILITY	PROJECT	DESCRIPTION
AltaSteel	Edmonton, Alberta	New roughing mill study	Feasibility and budget study for the implementation of an in-line roughing mill utilizing used equipment.
ChTPZ	Cheliabinsk, Russia	Meltshop Relocation	Engineering feasibility and budget study for a transfer of a complete meltshop facility from USA to Russia. Assessment of all electrical equipment including; power distribution, motors, drives, control equipment and instrumentation associated with an Arc furnace, Ladle furnace, Caster, Baghouse and water treatment system and all associated auxiliaries. Evaluation of and development of a solution for adaptation of 60Hz equipment to 50Hz facilities.
Chaparral Steel	Multi-Purpose Section Plant, Virginia	Mill Performance Study	Assessment of mill performance, including process, hardware and control strategies. Recommendation for improvements.
Bayou Steel	Harriman, Tennessee	Mill Performance Study	Analysis of mill speed control performance, including cascade controls, loop controls, tension control and HMI systems. Recommendations for improvements.
Kardemir	Karabuk Turkey	Mill upgrade feasibility study	Engineering and feasibility study of used rail mill relocation and development of strategy for a fast bar mill upgrade implementation.
NUCOR	Norfolk, Nebraska	Shear performance analysis	High speed photography, data acquisition system and code review to diagnose shear performance issues. Shear performance improved after code change.
NSS	Bar Mill Wilton, Iowa	Shear cut optimization strategy	Investigation of billet cut optimization strategy in order to reduce cold shear bottlenecks and increase yield.
ASW	Bar Mill Cardiff Wales,	Mill Performance analysis	Investigation and analysis of mill control system and drives performance of a bar mill. Recommendations for improvements and budget.
Gerdau Ameristeel (Co -Steel Lasco)	Structural Mill Whitby, Ontario	Analysis of rolling flats	Investigation and analysis of problems associated with rolling flat products. The use of high-speed videos and data acquisition system points to the source of problems.



Project Reference list – CONSULTING

COMPANY	FACILITY	PROJECT	DESCRIPTION
Slater Steel	Hamilton, Ontario	Mill Upgrade Study	Engineering study of Specialty Bar Plant with a view to increasing product quality and mill utilization.
AK Steel Company	Hot Strip Mill Mansfield Ohio	Mill Upgrade Study	<p>In-depth study of the 6 stand hot strip mill to upgrade existing AGC system.</p> <p>Study of the existing mill performance with the goal in mind to improve the product quality and streamline mill operation.</p> <p>Production of existing systems functional block diagrams</p> <p>Design of a new mill control pulpit</p> <p>Replacement of existing MG sets with new SCR drives.</p> <p>Preliminary engineering for outdoor 138 KV substation.</p> <p>Investigation of existing level 2 system for replacement or upgrade.</p>
Armco Inc.	Meltshop Mansfield, Ohio	Arc Furnace Upgrade	<p>No9 EAF upgrade Engineering Study. Based on the new production requirements new process data was developed to establish optimum melting profiles and operating curves. EAF model was utilized to confirm existing operation set points and also to develop new operational parameters.</p> <p>Specifications and capital budgets were developed for the project, including new Furnace Transformer, Series Reactor, SF6 furnace transformer circuit breaker, upgrade of the existing SVC system and step down transformer, various HV switches, Arc regulator, PLC system upgrade and new Level 2 system. Suitability of the use of the existing equipment such as delta closure and water-cooled cables was evaluated.</p>
Gerdau Ameristeel (Co-Steel Raritan)	Rod Mill Perth Amboy New jersey	Reheat furnace upgrade	Engineering study, specifications and budget generation for upgrading pusher type reheat furnace including combustion control, billet charging system, operator interface and Level II system.
Mittal Canada (ISPAT SIDBEC)	Bar Mill Longueuil, Quebec	Mill speed control system	Feasibility and budget study for the implementation of a low cost, PLC based back-up system to an existing Mill Master Reference installation.
Gerdau Ameristeel (Co-Steel Sayreville)	Bar Mill Sayreville, New Jersey	Mill Upgrade	Feasibility and budget study for the addition of mill stands, new ACVF mill drives, upgrade of existing DC drives, new electrical room, new pulpit and operator console, modifications to power distribution system, new mill control system.



Project Reference list – CONSULTING

COMPANY	FACILITY	PROJECT	DESCRIPTION
Sheffield Steel	Bar Mill Joliet, Illinois	Mill control system diagnostics	Observations, analysis and recommendations of mill control system issues related to tension control, false Head/tail alarms, looper cobbles and random drive trips.
Gerdau Ameristeel (Co-Steel Lasco)	Bar Mill Whitby, Ontario	Mill upgrade	Specification and engineering for retrofitting existing drives with digital regulators and new mill control system
Hoogovens	Billet mill Netherlands	Mill Upgrade	Feasibility and budget study for the upgrade of drives and automation for billet rolling facility
Tower Automotive	Toronto, Ontario	Mill upgrade	Budget study for the upgrade of an aluminum strip rolling mill
Gerdau Ameristeel (Co-Steel Raritan)	Rod mill, Perth Amboy, New Jersey	Mill upgrade study	Mill drives and control system upgrade budget study. Included review of power distribution system, new motor room and pulpit layout considerations.
Mittal Canada (ISPAT SIDBEC)	Rod mill Contrecoeur, Quebec	Shear evaluation	Data acquisition and analysis of Flying shear performance. Recommendation for improvements.
Mittal Canada (ISPAT SIDBEC)	Bar Mill Longueuil, Quebec	Mill upgrade study	Analysis and specifications for the upgrade of rolling mill drives and control system
Hendrickson	Spring Flats production Stratford, Ontario	Reduction mill Upgrade study	Investigate feasibility of upgrading and automating the reduction mill facility.
Mandac	Scrap processing Selkirk, Manitoba	Scrap shear	Preliminary engineering and budgeting for scrap shear Automation.



Project Reference list – CONSULTING

COMPANY	FACILITY	PROJECT	DESCRIPTION
AltaSteel	Bar mill	Mill drives upgrade study	Evaluation of drive performance, specifications and budget preparation for finishing mill upgrade
Gerdau Ameristeel (MRM)	Rolling Mill Selkirk, Manitoba	Improvement Studies	Evaluation of Misc. Systems Performances, recommendations and budgets
AltaSteel	Bar Mill Edmonton, Alberta	Evaluation of Mill drive performance	Data acquisition and analysis of Mill stand loading and dynamic response, recommendations and budgets
Greer Steel	Reversing 30" mill Dover, Ohio	Performance evaluation	Data acquisition and analysis of tension control and dynamic drive response, recommendations and budgets
Northwestern Steel and Wire	Large section Beam Mill, Houston, Texas	Engineering Support	Continuous support in analysis, design and implementation of various mill upgrade projects
Republic Steel	12" Mill Canton, Ohio	Mill study	Performance evaluation of existing drives, recommendations and budgets
Arkansas Steel	Tie Plate Mill Jacksonville, Arkansas	Mill upgrade study	Engineering study and budgeting for mill expansion