



QAI

Your Drives and Automation Partner

Our Experience with Siemens Products

S7 Configuration and Programming

Simotion position control applications

Profibus and Profinet communication Networks

WinCC screens and database applications

Drives:

- *Sinamics S120*
- *Perfect Harmony*
- *Micromaster*

QAI, a Systems Integration company consists of a group of highly specialized professionals and is located in Toronto, Ontario, Canada.

Since its inception in 1991, QAI has de-signed and implemented Drives, Control and Automation solutions to a variety of industries, primarily the metals sector.

In order to stay ahead of the pack, QAI has heavily invested in R&D projects, both system and product related. We also believe in innovation as it comes to system integration. We apply latest available technologies to achieve performance and economy in every application.

Our extensive industrial experience includes feasibility and budget studies, process analysis, system and equipment design and supply, programming and field implementation, as well as post start-up support.

Core competencies
The core competency of our group includes the following areas:

- Plant Power Distribution Systems
- Control and Automation Solutions
- Variable speed drives applications
- Process Instrumentation
- Energy Management
- Building services and illumination
- Installation Engineering

Services Provided

In each of the above categories we provide both Green and Brown field solutions.

Power Systems:

- Audit of existing systems, including; load flow, power factor and harmonic distortions
- System Operational Improvements, including; Power quality and power factor correction, protection devices coordination, reduction of power demand through load levelling
- Existing systems upgrades, including; studies for load additions, load flow and budgets. New equipment specifications. Metering relaying and data acquisition systems. Detailed design and Installation engineering.



Certificates

We have proven our competence as Siemens Solution Partner Automation in the following areas:

- Automation Systems
- Large Drives

Services Provided, cont...

Control and Automation Solutions:

- Design and supply of control and automation systems
- Upgrades and retrofits of existing systems
- Process monitoring and production enhancement tools
- Application of latest technologies in PLC's, HMI's, Instrumentation and communication networks

Variable speed drives applications:

- AC and DC drive technologies
- Design of single and multi-drive systems.
- Speed and position synchronization
- Typical applications: Reversing mills, Continuous rolling mills, Cut to length systems, Coilers, Material Handling

Energy Management:

- Study of energy consumption as it relates to production costs, including; gas, water, steam, air and electric power.
- Metering and Targeting
- Real time utilities cost monitoring
- Performance analysis and reporting

Installation Engineering:

- Equipment specifications
- Electrical equipment layouts
- Conduits, trays and duct-banks design

- Cable list and termination schedules
- Cable line diagrams
- Installation specifications
- Site supervision

Equipment Supply

As part of projects scope we include the supply of the following classes of equipment:

- Medium and Low voltage Power distribution equipment, including transformers, switchgear, motor control centres and protection relaying, monitoring and alarm systems.
- Emergency power supply systems, including generators and UPS
- Medium and low voltage AC and DC variable speed drives
- Control pulpits, complete with built in operator consoles
- Prefabricated control rooms
- Control panels and field operator stations
- Field sensors and instrumentation

References

- **Perryman**, Titanium reversing rolling mill, including; Mill Drives (1400KW each), Screwdowns, Sideguides, control and automation system, Sinamics S120

- **Severstal**, Meltshop Baghouse, Instrumentation and controls, S7
- **CMC**, Meltshop Alloys Feeding System, drives, instrumentation, control and automation, WinCC, S7, ET200M
- **Evrax**, Rail Head Hardening system, drives, control and automation, material tracking, WinCC, S7,
- Micromaster, MV Perfect Harmony drive
- **Mittal, Quebec**, Bar Mill Speed Control System
- **Republic, Ohio**, Drives, Control and Automation, Mill Speed Control, Flying Shear Cut to length System, HMIs, Product Tracking



Information about the Siemens Solution Partner Program

Under the Siemens Solution Partner Automation and Power Distribution Program, we join forces with our Solution Partner. By merging our product and systems expertise with the application and industry knowledge of our partners, we have created a common basis for the fast, smooth and highly efficient implementation of your requirement – customized solutions for your competitive advantage.

www.siemens.com/automation/solutionpartner

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