



Spang Power Electronics

SOLUTIONS FOR THE METALS INDUSTRY

Why Our “Best Total Value Systems” Give You the Most

Spang Power Electronics' approach to providing custom-engineered solutions for the metals industry is simple: design and manufacture a complete, integrated system that creates the “best total value” for the customer.

Whether it's a multi-million-dollar plant expansion, or a simple modernization project, Spang recommends the right solution for the job. We take pride in our worldwide industry experience as we design integrated control systems for applications including:

- Pickling and Cleaning
- Annealing
- Tension and Stretch Leveling
- Electro-Galvanizing
- Hot-Dip Galvanizing
- Slitting and Multi-Strand Recoiling
- Grinding and Polishing
- Coating and Electro-Plating
- Run-Out Tables

We have experience with materials such as brass, copper, cold and hot rolled steel, stainless steel, aluminum, beryllium copper and foil products.

We Spoil Our Customers

A Spang Power Electronics systems engineer assumes full project management responsibility from start to finish, including design, hardware/software development, manufacturing, testing and commissioning. To meet customers' aggressive startup requirements, Spang manufactures power control products within an ISO 9000 quality system, completes each project on-time and includes thorough documentation.

THE POWER B



■ **WINDER CONTROL**



■ **TENSION & POSITION**

A Complete Range of Proo

DRIVE CONTROL SYSTEMS

Drive Control Systems

- Specialists in speed, tension and winder control.
- Continuous and non-continuous web processing applications.
- Integrated DC, AC vector or servo drive controls.
- Coordinated online and offline AC motor, machine and process control.
- Total project management through all phases of design, build, test and line commissioning.
- Fully automated or manual control.
- New equipment or modernizations.

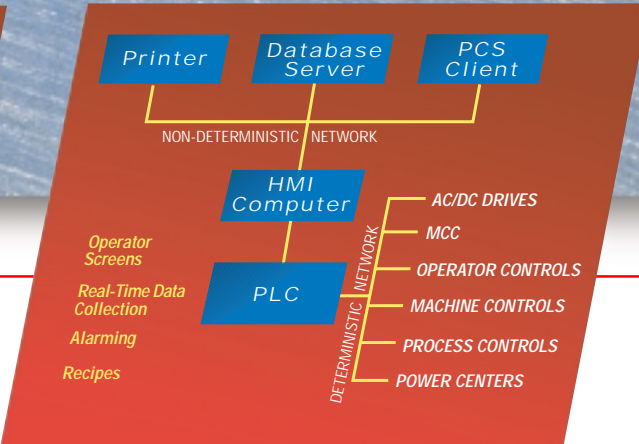
BEHIND THE PROCESS



CONTROL



COORDINATED DRIVE CONTROL



AUTOMATION CONTROL

Products and Solutions for the Metals Industry

AUTOMATION CONTROL

Automation Control Systems

- Level I: Programmable logic control of drives, process and machine.
- Level II: HMI (Human Machine Interface) operator interface, historical data collection, alarming, trending and recipes.
- Level III: Long-term data collection to relational databases for MES and MRP systems.
- Custom software interfaces to serial devices, networks, printing devices, scales and other terminal equipment using:
 - Co-processors
 - Assembly
 - C/C++
 - Visual Basic
 - Other object oriented programming tools
- Closed loop process (PID) control (temperature, level, flow, position, tension, etc.)

POWER CONTROL SYSTEMS

Rectifier/DC Substations

- Rectifiers for electroplating, electrogalvanizing, electrolytic pickling and electrocleaning applications.
- Rectifiers and DC substations for overhead crane operations.
- Custom designed in sizes of 200 KW and up.
- Current ratings up to 30,000 amperes.
- Input voltages up to 15,000 volts.

Dry-type Transformers

- 5 and 15 KV class dry-type transformers
- Custom designed in sizes of 500 KVA and up.
- Designed for general purpose, drive isolation and rectifier-duty applications.

Electric Furnace Controls

- AC and DC power controllers and systems for electric furnace applications.

A Solution for Every Application

Spang Power Electronics has over 15 years of experience in the design and automation of multi-motor drive systems for the metals, plastics, paper, fiber and film industries. Spang has also satisfied hundreds of industrial process requirements with over 40 years of high-quality power systems and transformers for the metals, automotive, glass, mining, transportation, heating and chemical industries.

In addition to our AC and DC drive systems and our integrated automation control systems, we apply our industry knowledge to create other state-of-the-art products, including:

- Specialty AC and DC drives, including integrated motor/control packages.
- SCR power controllers, phase angle and zero-cross, 15 amps to 3000 amps

Spang Power Electronics has extensive experience using hardware/software brands such as:

- Allen-Bradley (drives and automation)
- Reliance Electric (motors, drives, and automation)
- Siemens (drives and automation)
- Modicon, Cutler-Hammer, GE, ABB
- Intellution, Wonderware, Xycom, USData
- Oracle, Sybase, Microsoft SQL Server



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