



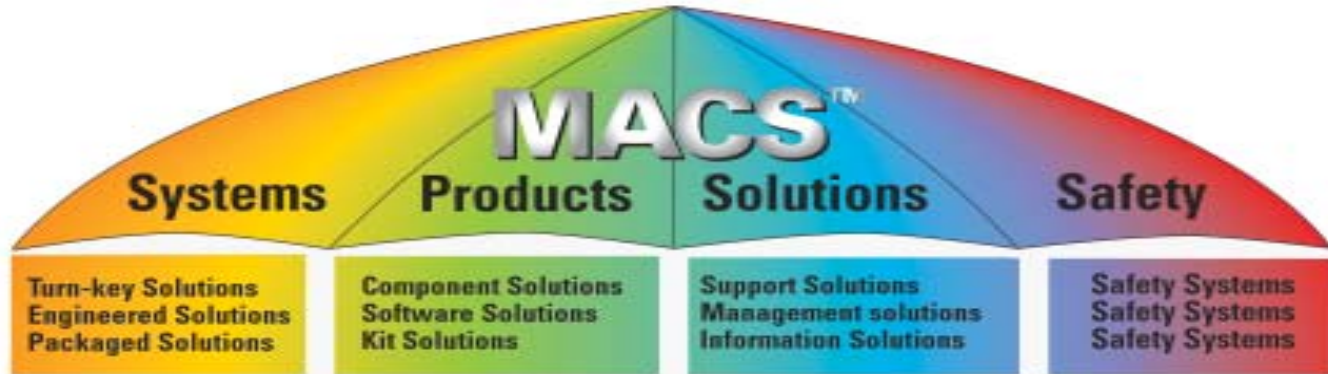
MetalForming Automation Control Solutions

When it Comes to
MetalForming Automation,
MACS™ has You Covered

**Rockwell
Automation**

Global Manufacturing Solutions

Now Your Global Automation Partner Can Help You Where it Counts - at the Bottom Line



Overview

Rockwell Automation offers experience, process knowledge, products, services and solutions to meet the demanding and growing requirements in manufacturing specifically involved in stamping, forming and fabricating. Along with Mechanical and Hydraulic Press and Safety Controls, our component offerings include Motors, Motor Controls, AC/DC drives, PLCs, PCs, HMI, Sensors, Switches, Safety Devices, Safety Light Curtains, Open Networks and Software, just to name a few. But like your bottom line, we don't stop with the Press. Our capabilities with systems and solutions include: Supervisory and Information systems, MES and ERP solutions, Tandem Line Automation, Servo Transfer Feeds, Feeder Controls, Transfer Press Automation, Flat Metal Lines/cut-to-length, Hydraulic and Mechanical Press Controls, Power and Energy Management, Perimeter Guarding/ Safety System and Robotic Automation.

Solutions for Metalforming

The manufacturing landscape is changing: new global competitors are emerging, traditional customers and competitors are merging, and e-business is here today. The companies that make it are the companies that are able to adapt and not only provide what your customers need today, but also be in a position to provide what they need tomorrow. Issues such as Overall Equipment Effectiveness (OEE), Production Monitoring, Predictive Maintenance, Enterprise Resource Planning and Execution, Quality, Health and Safety will all effect the Bottom Line. To that end Rockwell Automation is here today and will be there to meet your needs into the future.

Systems

PressPro - Press Control Systems

For customers who want a complete system in order to minimize risk and start operation as soon as possible, PressPro is the solution. PressPro is an engineered press control system assembled, programmed, tested, and ready to install. It is available as either a standard or custom system.

Rockwell Automation PressPro Systems, help:

- Reduce cost, system development time, and installation time
- Increase system flexibility, operation and expandability
- Reduce downtime through alarms and diagnostic messages
- Reduce risk through the use of standard software modules and field proven designs

Rockwell Automation PressPro standard features include:

- A flexible, customizable and pre-engineered press control system
- Based on Allen-Bradley 6556 dual processor safety control designs to help comply with ANSI, OSHA, and CSA standards
- An OPEN Logix processor for all other press automation control, monitoring, information and network requirements
- A PanelView™ 10" color operator interface
- Main motor, and lube motor controls.

Compact PressMaster™

The Compact PressMaster is a competitive, standard press control system offering clutch/brake, automation and motor controls in a press mountable, NEMA industrial enclosure.



Hydraulic Press Controls

Reduce operating costs and downtime for your hydraulic presses with modern, compact, and reliable PLC controls. Rockwell Automation systems can be designed to control almost any hydraulic press application. Our engineered solution provides complete press control, including motor controls, operator interface, die cushion control, and any special control requirements. The system can be mounted in a NEMA enclosure and designed to help meet ANSI B11.2 and CSA Z142.

The 6556-MLHK Hydraulic Press Control Kit incorporates Rockwell Automation's innovative 6556 redundant MicroLogix 1500 PLC architecture for control of the Main Hydraulic Ram on hydraulic presses. This kit is designed to:

- Provide hydraulic press users, rebuilders, and OEMs with low cost, modern controls, that keep you competitive.
- Help comply with ANSI B11.2 (1995) and CSA Z142 hydraulic Press Safety Standards.
- Reduce design time and maximize production time.
- Include PLC controls, I/O, relays, application software and documentation.

Proven Value Over Other Control Solutions

"Black Box" type controls offer limited hardware compatibility, expandability and maintainability. Obsolete relay-only controls are not able to meet the required standards. A modern hydraulic press control system provides expandability and diagnostic capability beyond safety relays.



MACS™ Products

Press Control Product Solutions

Rockwell Automation provides kits for customers who need basic press controls to meet ANSI and OSHA requirements. We offer a variety of different products that range from basic clutch/brake kits all the way through configurable systems that include auxiliary functions such as Programmable Limit Switch, Die Monitoring, Lube control and Production Monitoring.

Rockwell Automation provides a range of press control packages, which helps to:

- Meet safety regulations and reduce risk
- Allow flexibility and expandability
- Leverage standard, familiar PLC's with standard open networks
- Reduce costs and improve control system reliability

Examples of these products include:

- 6556-PXXX - variety of PLC-5/x6 kits.
- 6556-SCBK/M - programmable SLC-500 series controllers.
- 6556-SCBK2/2DC - fixed SLC 5/02, AC and DC clutch/brake only kits.
- 6556-SCBK3/3DC - configurable SLC 5/03, AC and DC clutch/brake kits, with Press Automation Control.
- 6556-MLCBK/KDC - MicroLogix AC and DC clutch/brake kits.
- Compact PressMaster™ - affordable and ready to install, Press Control System.
- 6556-PNLMA1/MD1 - Assembled AC and DC MLCBK kits, panel mounted.
- 6556-MLHK - Hydraulic press control to help meet ANSI B11.2.



Clutch/Brake Kits are designed to meet ANSI B11.1, CAN/CSA-Z142 and OSHA 1910.217 safety requirements for programmable controls. Kits contain redundant processor hardware, application software, relays and documentation.

Motors and Drives

Power-Matched Drives and Motors

Reliance Electric and Allen-Bradley have long been leading brands for press main motors and drive systems. They offer special "press duty" motors incorporating features capable of withstanding up to 3g shock loads found on stamping presses. Reliance was among the first brand of drives to supply regenerative DC drives for stamping press applications and today, offers AC drives and motors which reduce maintenance and provide reliable control of press speed. Regenerative AC drive systems are also employed to reduce flywheel stopping time.

Rockwell Automation drives and motor offerings include:

- Bulletin 1395 Digital DC drives and motors
- Bulletin 1336 AC drives and motors used for main drives, bolster and die cart automation
- PowerFlex™ drives

Motion Control Products

Rockwell Automation provides a range of integrated motion control products, which help to:

- Reduce cost
- Operate more efficiently
- Reduce control system complexity
- Operate equipment 'smoothly'

Motion Control Products are used for interpress automation, press feeders, and transfer feed systems.

Offerings include:

- 8720 Spindle Drives
- 1398 Ultra Drives and Motors
- 1394 Drives and Controllers
- 1756 ControlLogix™ Motion Controllers w/Sercos and Analog Interfaces



Main Press Drives power the flywheel used to move the slide on a stamping press. These have historically been DC drives and motors. Today the trend is to move to AC drives and motors to improve cost and maintainability. Newer regenerative AC drives lend themselves to this use.

Servo Transfer Feed - STF Pro™

Today's stampers are increasingly turning to the use of Servo Transfer Feed Systems for their transfer presses. Servo Transfer Feed Systems provide increased flexibility in die design as well as improved throughput when compared to older mechanically driven transfer systems.

Rockwell Automation's STF Pro™ Systems:

- Increase process throughput
- Provide configurable motion profiles that can be adapted to your die's specific needs.
- Offer a "Smooth Profile" motion path with reduced jerk that increases machine longevity and decreases downtime.

Rockwell Automation Servo Transfer Feed System features include:

- Common DC bus drive solutions for reduced energy consumption
- Components that are easily supported in your plant
- The use of open architecture systems that are easily programmed and understood by your personnel



A Servo Transfer Feed system is often used to improve the production rates of older mechanical transfer presses.

Flat Metal Lines - FeederPro™

Rockwell Automation Flat Metal Line Systems provide you with a global solution for your blanking lines. We have a range of solutions that are adapted to meet your needs. Systems range from low cost simple feeder controls (Feeder Pro) to highly sophisticated common bus systems utilizing high performance AC drives and motors.

Feeder Pro is an "off the shelf" solution for press feed control.

Rockwell Automation's Flat Metal Lines and Feeder Pro Systems help by providing:

- Coil Inertia compensation for better control of backtension
- Turnkey or component solutions to meet your needs
- Off-the-shelf components that reduce training and inventory needs

Rockwell Automation Flat Metal Line features include:

- Single source for all your control needs from motors to motion control
- Common bus systems that reduce energy consumption by recycling regenerated energy
- Open architecture that is easily programmed and understood by you



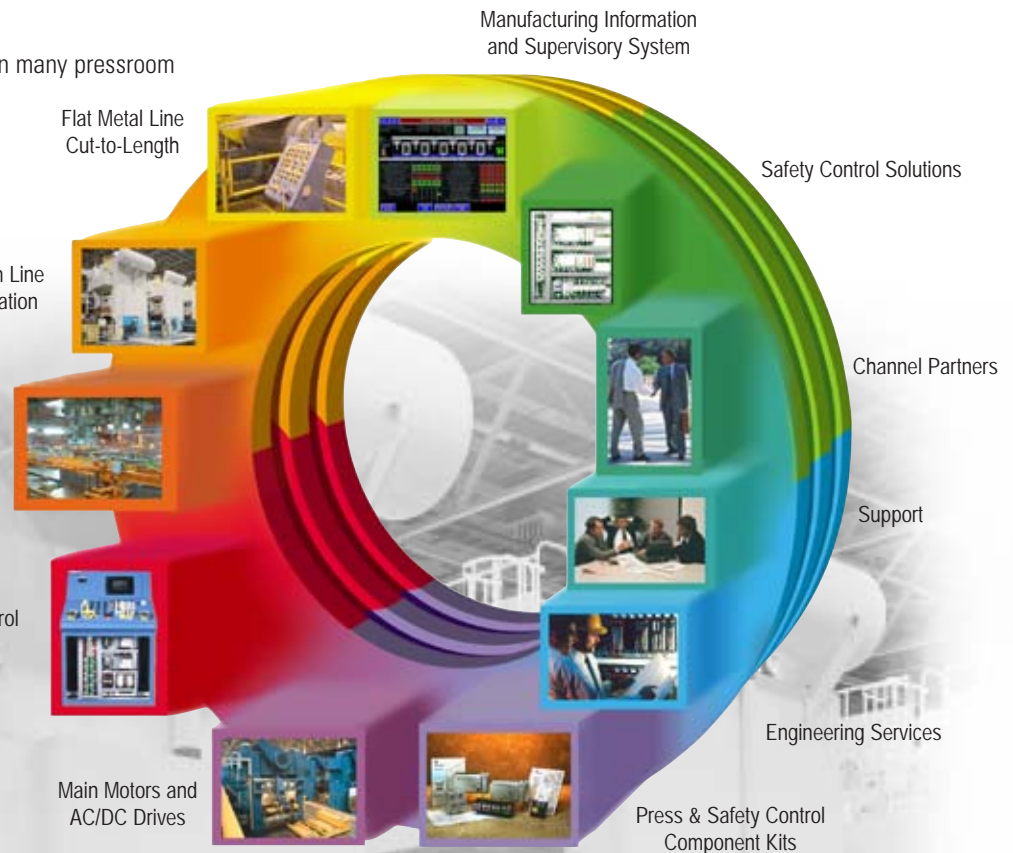
Rockwell Automation can supply a cut-to-length system that will provide a smooth profile that results in reduced slippage and marking of material

MetalForming Automation Control Solutions

MACS™ . . . Complete Automation for Metalforming Automation Control Solutions

Rockwell Automation has extensive expertise in many pressroom applications, including:

- Mechanical Presses
- Hydraulic Presses
- Straight-side Presses
- Progressive Dies
- Transfer Presses
- Servo Transfer Feeds
- Motion Control
- Inter-press Automation
- DeStackers
- Coil Feed
- Stacking Carts
- Supervisory Control
- Tandem Lines
- Cut-to-length



For more information, go to:
www.rockwellautomation.com/metalforming



www.rockwellautomation.com

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