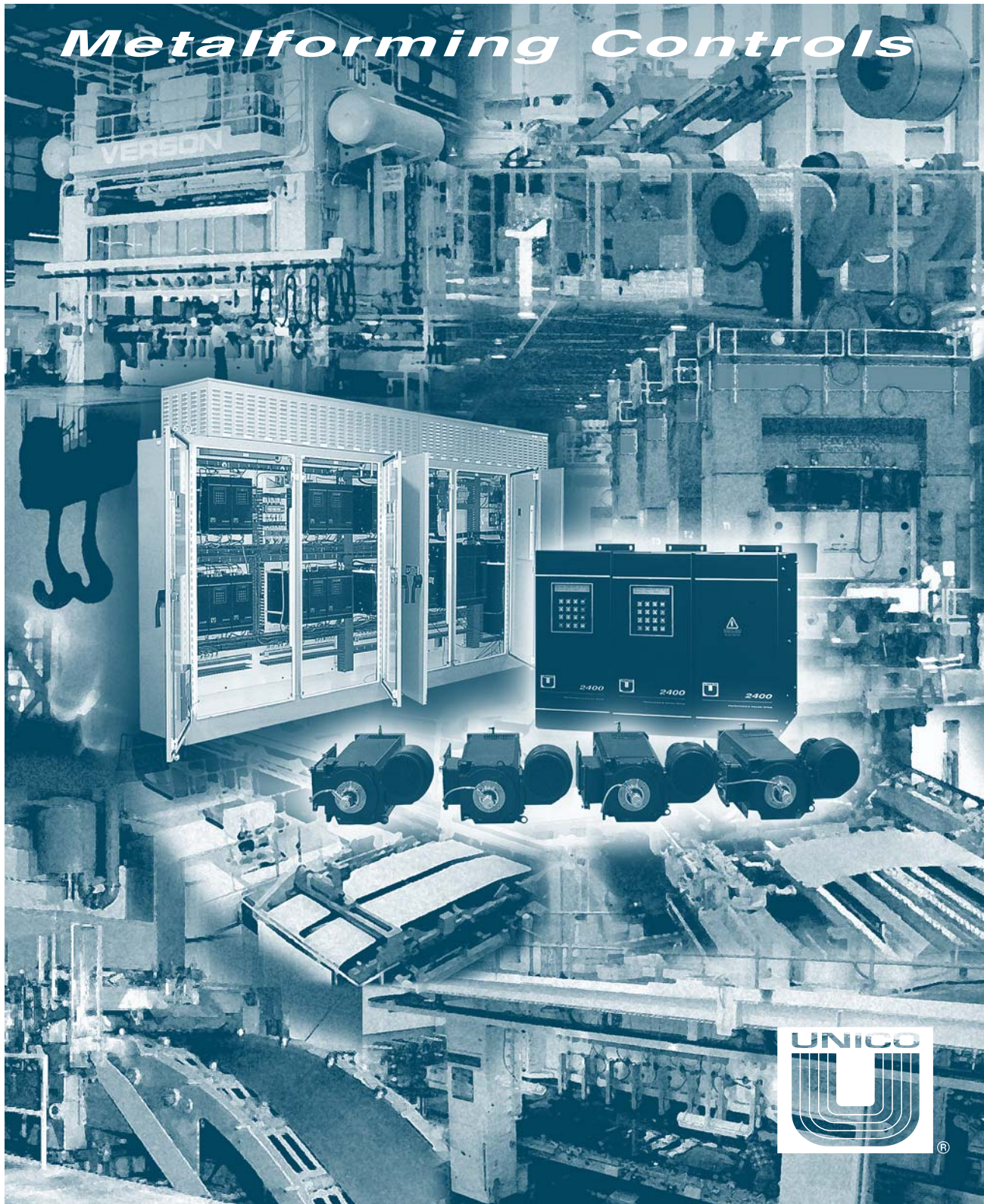


# *Performance*

## *Metalforming Controls*



*Bringing  
out the  
potential  
of your  
machine*



# P E R F O R M A N C E

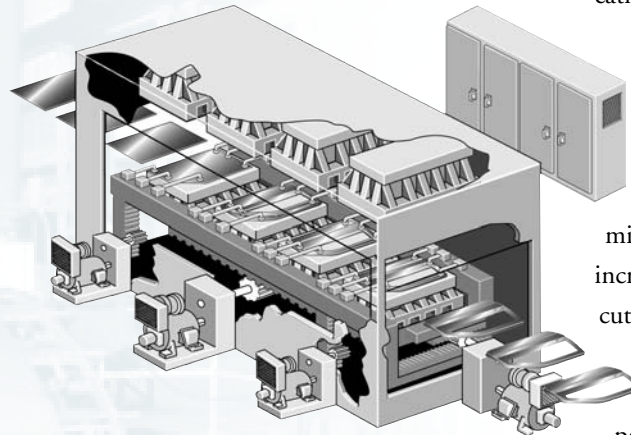
High-performance, cost-effective control solutions for the stamping



**U**nico is the performance solution to process control problems in the metalforming, blanking, and stamping industries. Whether you need to breathe new life into an existing application or you have a new installation that demands superior controls, Unico drives and systems will help you get the most from your equipment.

## We Know Controls

Unico pioneered electronic drive controls back in 1967. Our earliest applications were press feed-to-stop lines. In the early 1980s, we revolutionized the stamping industry with our Servo Transfer Feed technology. Over the years, we have stayed at the cutting edge of technology, leading the way with such innovations as AC flux vector drives. Today, thousands of our drive systems are hard at work in metalforming applications throughout the world. Four decades of experience have taught us what it takes to meet—and exceed—the needs of machine builders and users alike. We've learned the best ways to maximize output, minimize downtime, increase efficiency and productivity, cut operating costs, and minimize maintenance expenses. We know how to make a machine perform at its potential.



- Press and shear flywheels
- Direct-drive shears
- STF® Servo Transfer Feed systems
- Servo presses
- Servo die cushions
- Tandem press automation
- Orientation stations
- Destackers
- Stackers
- Feeders
- Levelers / straighteners / flatteners

## Experience. Technology. Commitment. Solutions.

- Uncoilers
- Indexing conveyors
- Cranes and hoists



# C O N T R O L S

## and blanking industries



- Increase production
- Improve accuracy
- Streamline operations
- Reduce waste
- Reduce power consumption
- Minimize downtime
- Cut maintenance costs
- Lower service costs
- Extend machine life
- Minimize capital outlay

### Unique Synergy

Unico capitalizes upon a unique synergy between product development and systems engineering. Not only do we develop and manufacture the drives we use in our systems, but those systems, in turn, help to shape the products we make. Demanding applications ensure that our product base pushes the performance limits in speed, accuracy, and cost-effectiveness. The resulting drives and systems embody the best of technology and experience.

### Building Blocks

Our product portfolio consists of building blocks in power control, drive control, communications, and operator interface. Our engineers work closely with you to identify the unique requirements of your application. They then draw upon our accumulated experience to tailor a solution to your requirements by integrating these building blocks into a custom control system.

### Performance Goals

Typical performance goals include achieving repeatable and accurate positioning, optimizing throughput, tightly coordinating multi-axis motion, minimizing setup time, maximizing safety using redundant controls, and electronically synchronizing machine sections, to name a few.

### Global Support

Unico provides the training, service, and aftermarket support you need to realize the maximum benefit from your system. We offer customized training for your personnel at your plant or ours. We also provide worldwide service and start-up assistance for new systems and upgrades. Remote diagnostic capabilities eliminate needless service calls by allowing our personnel to troubleshoot your system from our service center. To keep your machine running smoothly, we also offer on-going preventive maintenance programs.

Feature	Benefit
State-of-the-art AC flux vector control	Superior performance without the maintenance costs of DC motors
Performance DC drives that easily convert to AC	Retrofit flexibility that protects your existing DC motor investment while allowing future upgrade
Energy-sharing modular drive bus	Reduced power consumption and installation expenses
Single product platform from 1 1/2 to 2,000 hp AC or DC	Simplified learning curve for customers with complex multi-axis machinery or a mix of equipment of various sizes
Integrated control systems	Precise and efficient operation at a lower cost
Wide variety of interface and communication options	Easy integration of multivendor systems, both new and existing
Embedded control architecture	Dedicated software for most common applications with all time-critical motion and coordination tasks handled directly in the drive
Modular control platform	Use Unico drives to control a single piece of equipment or an entire press line
Remote diagnostics	Quick response, less downtime, and lower service costs



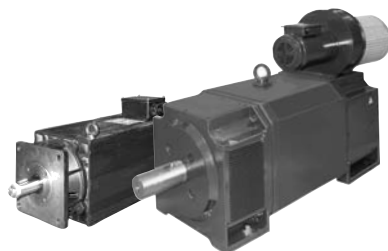
*From engineering to manufacturing to aftermarket support, Unico is a comprehensive single-source provider*

# Product Platform



## Power Control

- AC or DC PWM regulated drive systems
- Modular flux vector or variable-speed AC controls
- Regenerative power sharing
- Integrated keypad for interrogation and diagnosis
- Digital signal processing (DSP) for superior positioning control
- Self tuning to motor and driven load
- Automated transducer identification and sizing

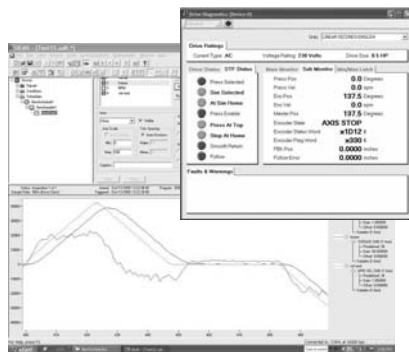


## Drive Control

- Software blocks embedded within the drive axis
- Distributed control utilizing multiple processors
- Wide variety of feedback, input/output, and serial interface options
- IEC 1131 programmable logic

## Serial Communication

- Numerous serial protocols available, including Modbus Plus, Ethernet, Profibus, ControlNet, DeviceNet, CANopen, and CC-Link
- RS-232, RS-422, RS-485, fiber-optic, and wireless connections
- Modular design for simple addition of serial ports
- SSI fiber-optic interface for master/slave operation of multiple drives in torque, velocity, or position modes
- DSP SyncBus fiber-optic network for multidrive coordination and synchronization



## Diagnostics

- Plain-language fault messages
- Logging of 50 most recent faults with date and time stamps
- Advanced data sampling and charting capabilities
- Custom HMIs available with at-a-glance machine status



## UNICO-Worldwide



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Specifications subject to change without notice.

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