

Bringing

out the

potential

of your

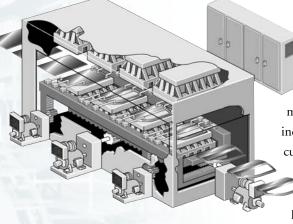
# PERFORMANCE

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



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

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.

# **Experience. Technology. Commitment. Solutions.**

- Uncoilers
- Indexing conveyors
- Cranes and hoists







# C O N T R O L S

### and blanking industries







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.



## Typical performance goals include achieving repeatable and accurate positioning, optimizing throughput, tightly coordinating multiaxis motion, minimizing setup time, maximizing

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.

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

- 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

#### Feature Benefit State-of-the-art AC Superior performance without flux vector control the maintenance costs of DC motors Performance DC drives Retrofit flexibility that protects that easily convert to AC your existing DC motor investment while allowing future upgrade Energy-sharing modular Reduced power consumption drive bus and installation expenses Single product platform Simplified learning curve for from 11/2 to 2,000 hp customers with complex multiaxis AC or DC machinery or a mix of equipment of various sizes Precise and efficient operation Integrated control systems at a lower cost Wide variety of interface and Easy integration of multivendor communication options systems, both new and existing Embedded control Dedicated software for most architecture 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

Quick response, less downtime, and lower service costs

# Performance Metalforming Controls

**Remote diagnostics** 





### 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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Unico is a leading global innovator of motion-control solutions for industry. Founded in 1967, the company develops, manufactures, and services variable-speed drives, application-engineered drive products, integrated drive systems, and ancillary products that improve operations by increasing productivity, safety, and equipment life while lowering energy and maintenance costs.



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Specifications subject to change without notice.