

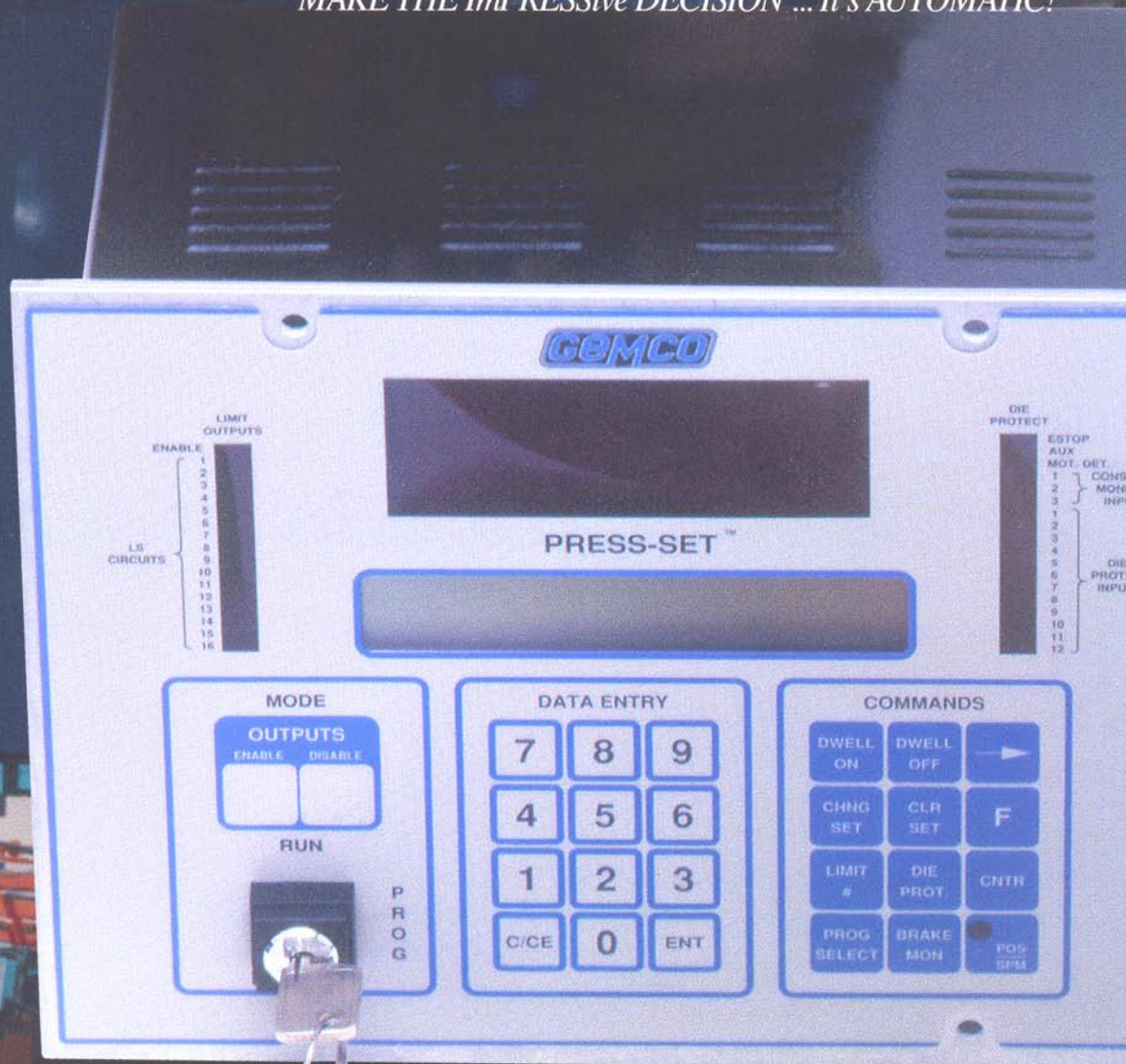
# ***PATRIOT***

**Sensors & Controls Corporation**

# Press-Set™

## Press Automation Controller

*MAKE THE ImPRESSive DECISION ... It's AUTOMATIC!*

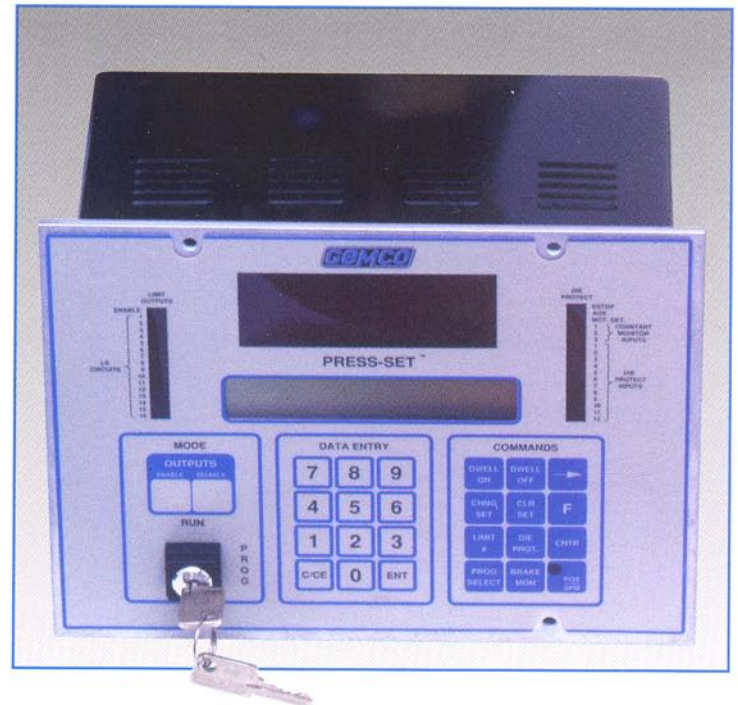


# ***GEMCO***





*All the Tools  
You'll Ever Need  
to Economically  
Automate Your  
Entire System:*



The Gemco™ Series 1992 Press-Set™ Automation Controller is designed as a modular system that allows you to select features and options to reach the level of automation your processes require. The Series 1992 Press-Set includes a 16 channel programmable limit switch and 12 programmable and 3 static die protection inputs.

### **Powerful Programming Features**

- Interfacing with feeders, tonnage monitors, lubricators, and part transfer equipment
- Speed compensation, time-based limits, and stroke, batch and total counters
- Fault detection and prevention of end-of-stock problems, buckling and virtually any other abnormal occurrence

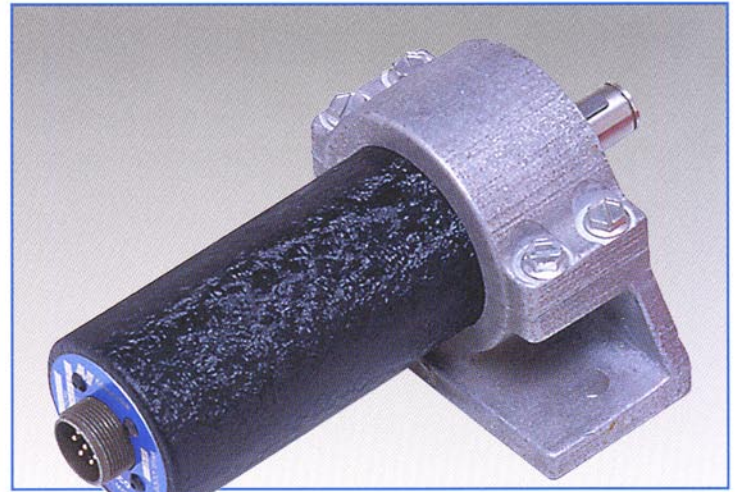
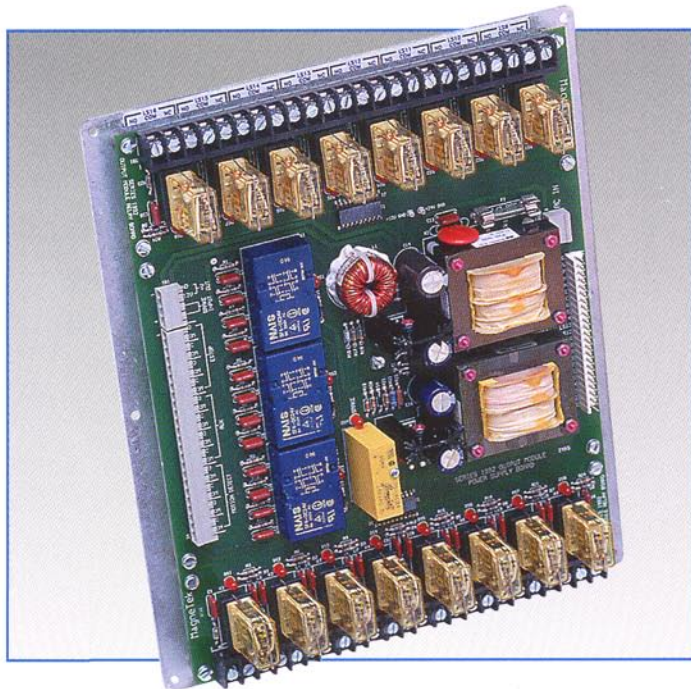
### **Important Press Safety Features**

- Brake monitoring that checks and displays stopping times or angles – Point-of-Operation guarding can be properly placed
- Motion detection that stops the press if motion is not sensed within pre-programmed SPM cycle
- Programmable speed windows for programming SPM values in variable speed presses



## AUTOMATION FEATURES

- 16-channel programmable limit switch
  - Password protection on individual or groups of circuits
  - Individual timing windows based on angle or timing
  - Programmable E-stop or T-stop
  - Periodic control activation
- 12 programmable and 3 static die protection inputs
  - Die sensor activation viewing window
  - +12VDC sensor supply voltage
  - NPN, PNP and sinking type sensors acceptable
  - Individual time based and angle activation
  - Slug detection
  - Partial revolution constant monitor
  - Maintain monitor
  - Remote die fault reset capable
  - Programmable E-Stop or T-Stop
- 200 job setup memory storage



- 3 counters (stroke, batch and total)
- Brake monitor – complies with OSHA 1910.217 eliminating the need to maintain stop time records. Displays in time or angle
- Motion detector
- Supervisory controlled run/program switch
- Two (2) displays: 3/4" LED's for crank angle or SPM and 20-digit alpha-numeric LCD for programmable and fault display
- Three (3) fail-safe relays: E-Stop, T-Stop and motion detection
- Rename and copy program commands for saving time on programs that are similar
- 16 step programmable speed compensation
- Serial communication ports (RS485), remote display port (RS422), digital outputs in BCD – binary and gray code
- Self-diagnostic and fault code display – continual micro-processor, resolver and cable assembly monitoring
- English language programming
- Speed window for controlling how fast or slow the press can run



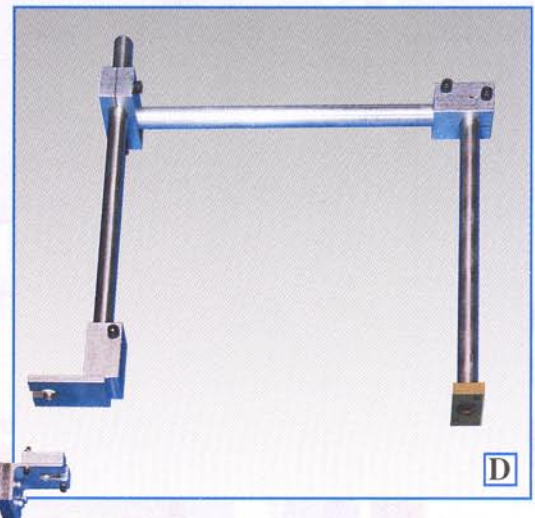
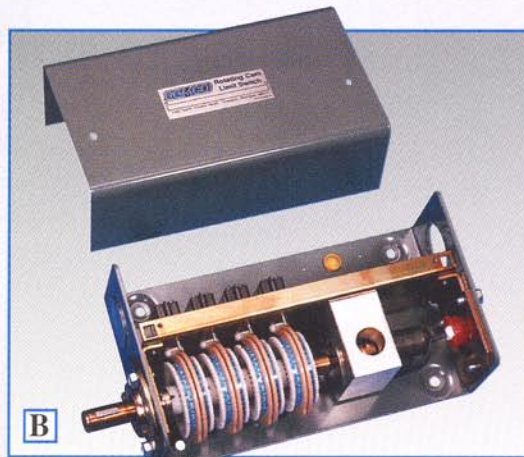
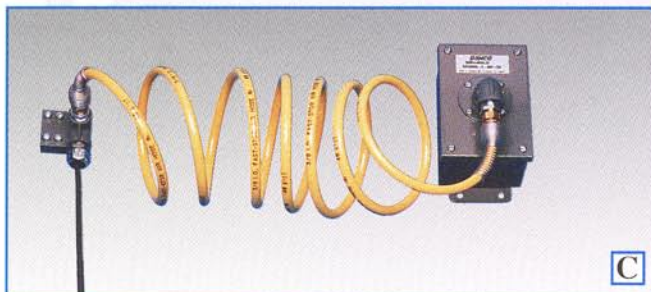
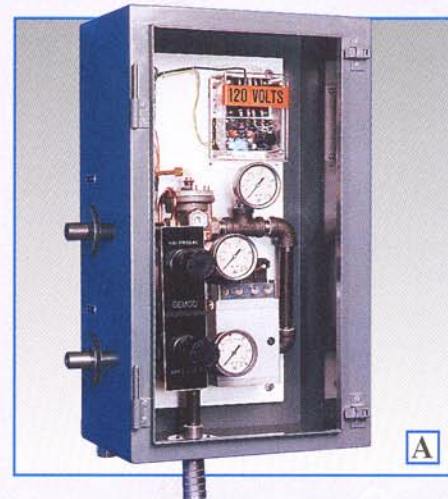
## OPTIONS

To complete your automation system, or to customize your system to your press operations, consider the following options:

- **Feeder Interface Software** to automate and coordinate your material handling functions
- **(A) Automatic Static Counterbalance** control to improve press efficiency, reduce wear on press components and assure compliance to OSHA 1910.217
- **(B) Rotary Cam Box** with built-in resolver
- **Automatic Shut Height Control** to dramatically reduce setup time and reduce scrap
  - **(C) Cable Termination Kit** provides flexibility in connecting LDT to the controller
  - **(D) Universal Transducer Mounting Bracket** for fast and accurate installation of LDT
  - **(E) Patriot Supplied LDT** for harsh environments

## Accessories & Sensors

The Press-Set is compatible with a wide range of commercially available photo-electric, fiber optic and proximity sensors in both sinking and sourcing design. Application assistance is available to help you select/recommend the best sensor for your application.





## IT'S DECISION TIME

We all know that to stay competitive in the metal forming business you must decrease your "hit-to-hit" time, achieve longer tool life and reduce scrap, while improving product quality and batch run profitability. That's the easy part. How you get there is the question – and the answer is automation.

*Weigh our Options ... Then Press for the Best.* You can order new, fully automated presses, or you can fully automate the presses you have.

*The Decision.* The Gemco Series 1992 Press-Set – a comprehensive and economical Press Automation Controller.

## BENEFITS: Profits and Production

*The Series 1992 Press-Set is a resolver-based system designed specifically for harsh pressroom environments.* With its "ready-to-serve" menu, Press-Set reduces setup time and scrap and tooling damage while increasing uptime and improving profits and efficiency. This single compact controller enables easy setup of all press automation and auxiliary equipment sequencing such as feed control, air blow-off, stock lubrication, loader/unloader and pilot release.

*Forget trial and error* and mechanical cam switch adjustment forever with a 200 job setup memory storage that eliminates time-consuming manual adjustments. Just enter your job number and your setup parameters are instantly recalled and implemented — limit switch, counter, SPM, die protection settings and more.

- Easy-to-use press automation system provides quick, easy and errorless setup
- Increase uptime while reducing setup time, scrap and tooling damage
- Eliminate time-consuming manual adjustments
- Improve manufacturing process
- Increase productivity and profits

## SPECIFICATIONS

<b>Power Requirements:</b>	Controller 115V AC 50/60 Hz Output Module 115V AC 50/60 Hz
<b>PLS Output Relays:</b>	Mechanical-S.P.D.T. 10A, 230V AC (Optional) A.C. Solid State-Single Pole N.O. 1 AMP, 70-230V AC (Optional) D.C. Solid State-Single Pole N.O. 2 AMP, 5-60V DC
<b>Dimensions:</b>	Control-8-1/4" X 6-1/2" X 7" Output Module-11" X 13" X 3-1/2"
<b>Operating Speed:</b>	1000 SPM
<b>Angular Display:</b>	Displays to nearest degree
<b>Sensor Supply Voltage:</b>	+12 VDC
<b>Counters:</b>	Stroke, Batch, Total
<b>Job Set-Up Memory:</b>	200 Jobs
<b>Communications Outputs:</b>	Serial Communications (RS485) Remote Display Ports (RS422) Digital Outputs: BCD, Binary, Gray Code

**Patriot Sensors & Controls Corporation** markets, engineers and manufactures sensors and controls for demanding and harsh industrial environments. Products include Gemco™ linear and rotary position sensors and controls, Industrial Brake Systems, Catrac™ Cable and Hose Carriers, B/W™ Liquid Level Controls, PCC™ Soft Start Motor Starters, and Rayelco™ pressure transducers, accelerometers and linear motion transducers. Patriot has more than 50 years of application experience and markets its products globally.

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