



Clutch Saver 2001™

Microprocessor
Control for your
Multi-spindle
Screw machine



Acme-Gridley
New Britain
Davenport
Wickman
Conomatic



Modernize Your Screw Machine

Unprecedented Operating Flexibility - Simplifies set-up and increases productivity. The diagnostic screen display reduces downtime through quick and easy troubleshooting.

HOW IT WORKS - The patented CS 2001 goes far beyond simply modernizing screw machines. The CS 2001 monitors the drum shaft position in real time (within 1/3 of a degree) with an absolute shaft encoder. Using the touch pad, operators and set up people can enter positions for high point, low point, pick-off point, thread check, and other important settings, and view the new settings right on the screen. The CS 2001 is operator friendly by utilizing familiar selector switches already in use in your day to day operation.

OPTIMIZES SET-UP, MAKES SHORT RUN JOBS MORE

ECONOMICAL - Shift points can be set at optimum positions by using the display window - no more settling for shift points that are "close enough". Overall set-up time is further reduced since high speed and brake cams do not need to be re-timed. Engagement points of pick-off attachments can be set in degrees, using the numeric keypad.

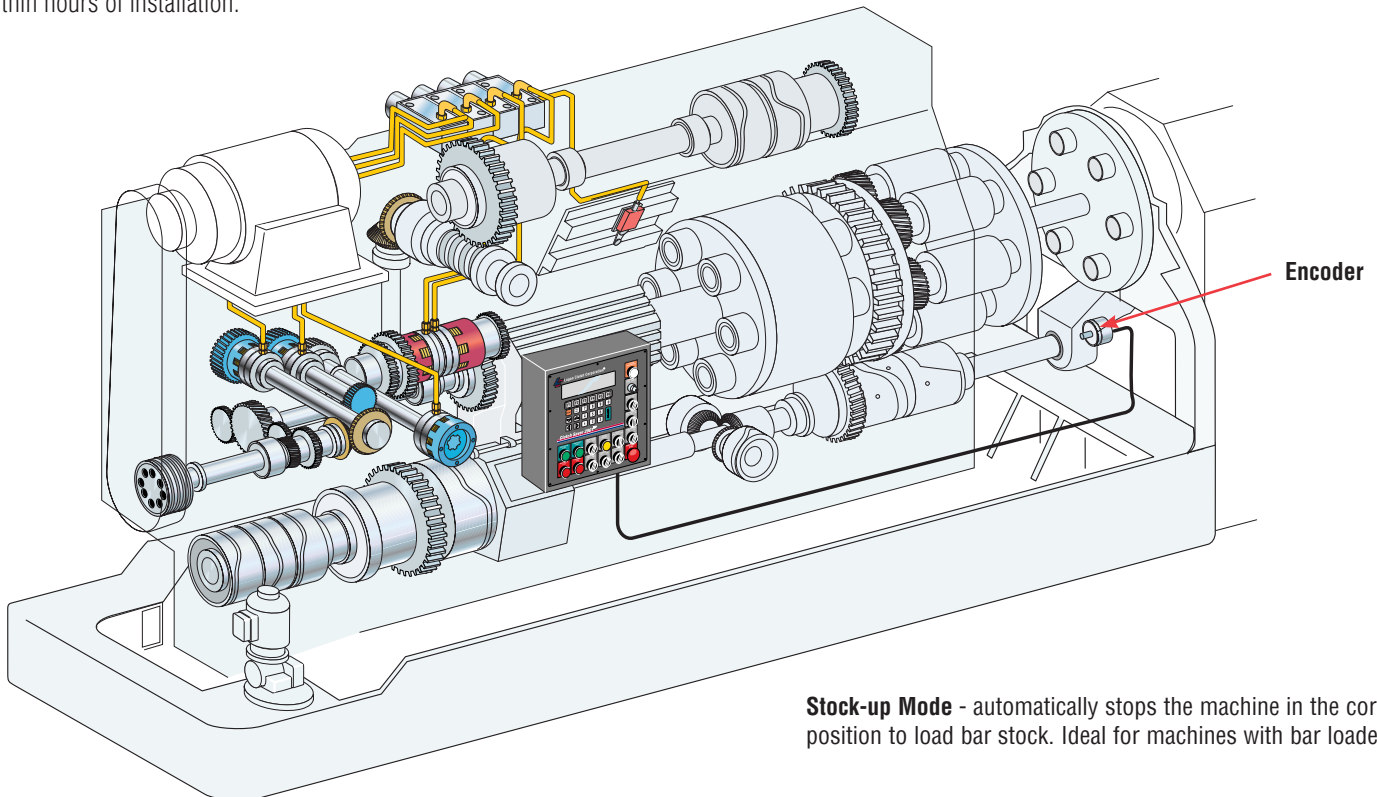
FACTORY AUTOMATION - The CS 2001 monitor has important auxiliary functions such as air pressure, lubrication pressure, and coolant pressure. In addition, output from the CS 2001 can be incorporated into your factory network via The LoganNet WiFi Module production and machine status.

TRAINING - Operators can learn to operate a CS 2001 control within hours of installation.



U.S. Patent No. 5,730,037

Field Retrofitted - the CS 2001 kit is designed for field installation at your facility, or can be incorporated into your rebuild program.



Stock-up Mode - automatically stops the machine in the correct position to load bar stock. Ideal for machines with bar loaders.

5 Simple Ways to Improve Quality and Productivity

1. Thread Check

Improves Quality. Detects when the tap has cut to full depth. Taps last longer through positive clutch engagement/disengagement.

The Thread Check feature eliminates the possibility of producing parts that are not tapped. While in operation, the CS 2001 determines whether the tapping cycle is complete before high-point.

If the tapping cycle does not complete before high-point, the CS 2001 will immediately shut down the machine prior to indexing; eliminating the possibility of breaking the tap in the workpiece.

In addition to saving the tap and improving part quality, the Thread Check feature eliminates the additional hours of labor needed to sort through thousands of parts to identify whether they were actually tapped.

2. Machine Lock-Up Detection

The patented Clutch Saver™ feature detects machine lock-up in milliseconds, and shuts down the machine. Prevents damage to clutches and drive elements.

3. Programmable High Speed and Low Speed Shift Points

Reduces set-up time and improves cycle-time as much as 20%. Allows the operator to precisely set high and low speed shift points, maximizing tool position in relation to the workpiece, without having to re-time high speed and brake cams. This single feature can pay for your new CS 2001 within months.

4. Programmable Tool Change Counters

Reduces tool breakage and maintains high quality finish on parts. Allows for scheduled maintenance programs.

5. Simple integration of Door Interlocks

The machine will go into a jog mode if a door is opened while the main motor is running. This enables operators and set-up people to work in the tool zone, and jog the machine as required during setup; but prevents the main motor from running. Three levels of security in the software ensure supervisor - operator compliance.



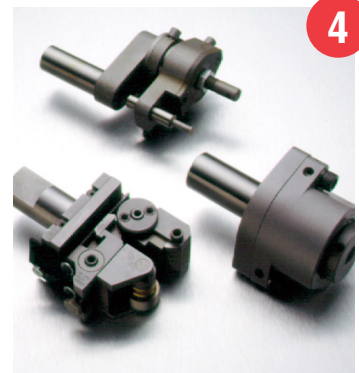
Thread Check Ensures When the Tap Has Cut to Full Depth



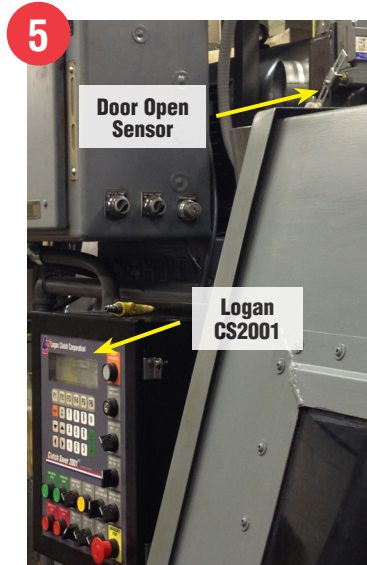
Machine Lock-Up Detection



Programmable High Speed and Low Speed Shift Points Improves Cycle Time by 20%



Programmable Tool Change Counters Reduce Tool Breakage and Increase Quality



Simple Integration of Door Interlocks to Ensure that the Machine Goes Into Jog Mode Only When a Door is Opened



Typical CS 2001 Kit Hardware



The CS 2001 on a
1-1/4" RA-6 Acme-Gridley®

Logan CS 2001™ Control Features and Benefits

- Machine Lock-up Detection:** Greatly increases clutch life by detecting clutch slippage caused by machine lock-up; disengaging the clutch before damage occurs.
- Reduce Cycle Time:** Program the high and low speed shift points in 1-degree increments, giving the operator more set-up flexibility without having to mechanically re-time the high speed and brake cams. Reduces the possibility of going past low point in the high-speed cycle. Go into high speed early or later if your layout completes the machining cycle before or after high point.
- Programmable Pick-off Point:** Enables the operator to program the pick-off engagement point in degrees; simplifies set-up and eliminates mechanical adjustment of cams.
- High Point Stop Reference:** Automatically stops the machine close to high point; useful during set-up.
- Cycle Time Display:** Displays the machine cycle time in seconds. Useful in detecting machine problems. Cycle time variation may indicate clutch slippage.
- Revisable Parts Counter:** Makes it possible to change the counter display. Useful during stock-up, enabling the operator to correct the parts count as needed.
- Air & Lube Pressure Monitor:** Senses below normal air & lube pressure and shuts down the machine.
- Coolant Pressure Monitor:** Senses below normal coolant pressure and shuts down the machine.
- Stock Depletion:** Takes input from your device and shuts down the machine when the bar stock becomes too short to feed out to length.
- Tapping Right Hand/Left Hand Select:** Makes changing from right hand tapping to left hand tapping as easy as pushing a button.
- Thread Check / Tapping Failure Detection:** Shuts the machine down if the tapping cycle does not complete before machine index. Prevents parts without threads, sorting costs, etc.
- Ideal for Bar Loaders:** Automatically stops the machine in the correct position for material loading, or bar load window.
- Programmable Air Blast:** Allows the operator to program the exact time to blast air on the part for chip cleaning, or for part ejection versus a constant air flow; saving compressed air for other uses.
- Alarm Message Display:** Display gives descriptive message of any alarm or error message that occurs, or causes the machine to stop. Saves messages in series for diagnostic review.
- Position Display in Degrees:** The display screen lets the operator know where the machine is in the cycle.
- Mist Collector/Chip Conveyor Control:** Automatically shuts off the mist collector/conveyor after 3 minutes of non-run time. Minimizes coolant conveyed into the chip system.
- Chip Breaker Feature Option:** Avoid the nesting of metal stringers that require a machine to be shutdown to remove. Use this feature to maximize machine up-time and production. The new chip breaker feature sets the point in degrees or hundredths where the machine will pulse the feed according to the chip dwell and chip pulse.
- LoganNet WiFi Capability with Data Acquisition Option:** All XTP controls are now wired with WiFi and data acquisition capabilities. Cycle time, parts counts, machine status available remotely, which frees up administration capacity for other value added tasks.
- Stack Light Integration:** 5-color, Red, Yellow, Green, Blue, Red 24VDC LED stack light control for visual communication on the factory floor.

WARRANTY: CS 2001 Control hardware is warranted for 6 months after installation, or 1 year after purchase. Field installation and service are not under warranty and are sold separately. Consult Logan for details of limited warranty. Specifications subject to change without notice.



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