

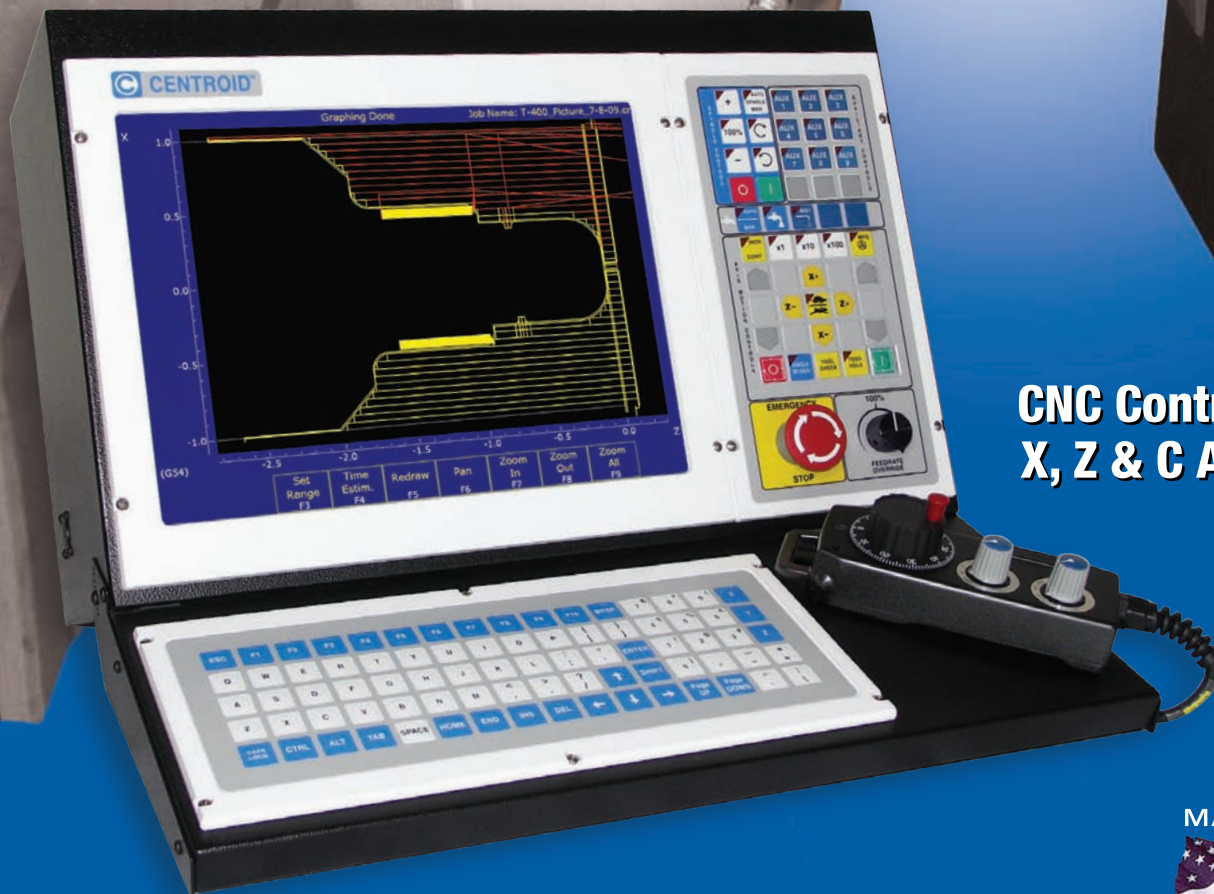


CENTROID™

T-400

CNC Control
For Lathes

Do More With A CENTROID!

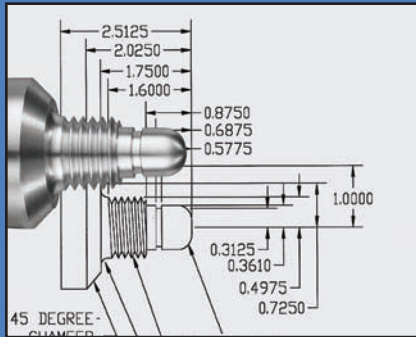


CNC Controls X, Z & C Axis

MADE IN USA



So Easy, You'll Turn Parts The First Day!



**From print to part...
in minutes!**



**Quick, at-the-machine
part programming
with Intercon**



**Easy file transfer with
USB, LAN & RS-232**

15" color LCD screen

Spindle control

USB 2.0 port

LAN connection

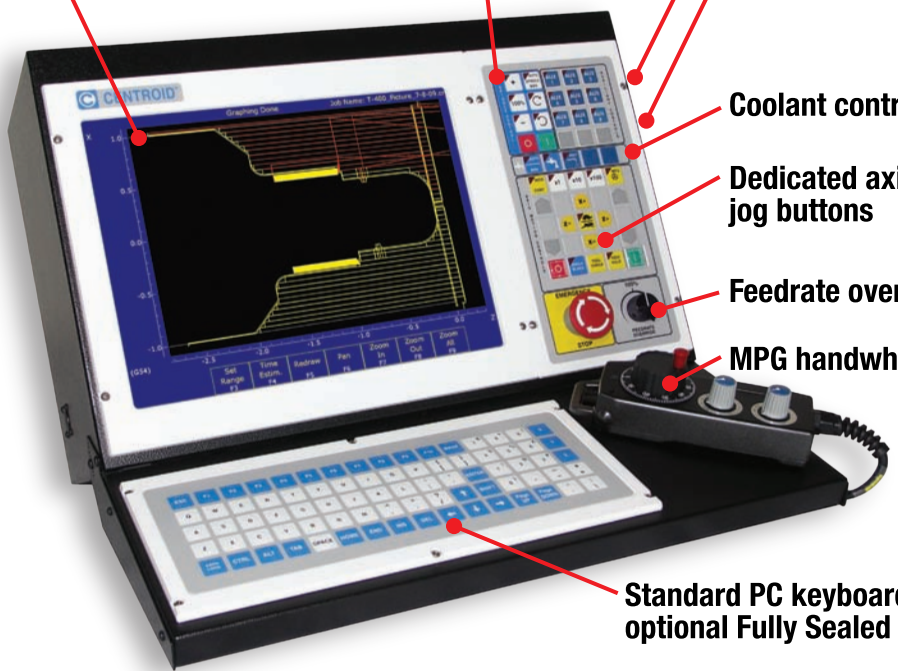
Coolant control

Dedicated axis
jog buttons

Feedrate override

MPG handwheel*

Standard PC keyboard or
optional Fully Sealed



Do more with a CENTROID!

- Cut parts the first day with intuitive, straightforward operation
- Increase production with faster setups and easier programming
- Expand your machining applications and compete on higher paying jobs without higher cost
- Connect easily to any computer system by using USB, LAN, or RS-232 (serial)

Advanced features include:

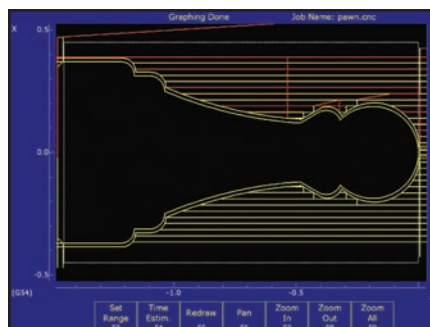
- Multi axis simultaneous motion control with spindle speed control
- High-speed machining with superior accel/decel look ahead
- Digital servo amplifiers and motors
- Large, built-in solid state hard drive
- AC or DC servo motors
- Easy-to-use part and tool setup menus
- Large, easy-to-read color LCD display
- Tool path graphics, with runtime display
- Accepts standard G-Codes from any CAD/CAM system

Intercon Conversational Programming

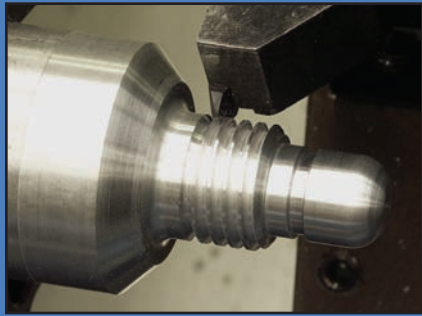
- Quickly create part programs right at the control
- Easy "fill in the blank" menus
- Graphical help menu with math assistance for missing dimensions
- Software automatically generates the G-code
- Check your work instantly with tool path graphics
- No knowledge of G-codes necessary
- Drill, bore and tap*

Full Graphical Preview

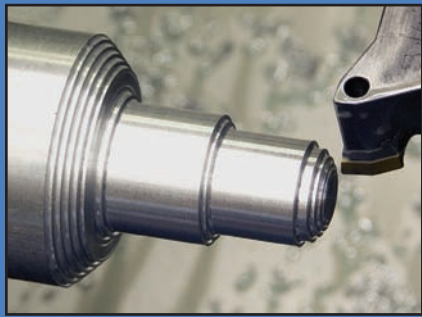
- Preview and step through your part program before cutting
- Easily identify and correct overtravel events
- Accurately estimate actual job run time
- Stop and start the preview at any point
- Eliminate wasted time and material by confidently producing perfect parts on the first program run



The features you need in a CNC Lathe



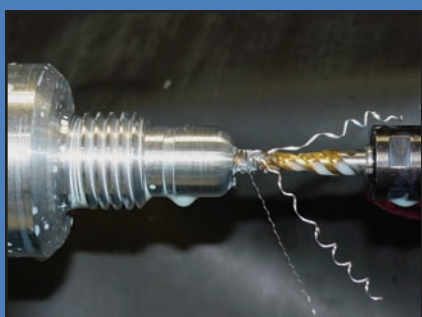
Threading Cycles



Automatic Profiling



C Axis Positioning*



Drill/Bore and Tapping

Fast, menu-driven part & tool setups

Set Z Part 0/Position

- 1) Jog to Touch Off on Part
- 2) Edit the Value if Necessary
- 3) Press F10 to Set Position

Axis	Part Position	Tool Number
Z	5.2564	1

WCS #1 (G54)

Tool	X Offset	Z Offset	Radius
T01	0.3750	0.2500	0.0000
T02	0.5000	0.8750	0.0000
T03	1.0500	1.7500	0.0000
T04	0.0000	1.0000	0.0000
T05	0.0000	0.0000	0.0000
T06	0.0000	0.0000	0.0000
T07	0.0000	0.0000	0.0000
T08	0.0000	0.0000	0.0000
T09	0.0000	0.0000	0.0000
T10	0.0000	0.0000	0.0000

X Diam: 1.0000
Z Ref: Not set

Entry mode: incre

X Diam	Manual Measure	Auto	Abs Inc	+ .001	-.001
F1	F2	F3	F4	F5	F6

Simple Setup

- Easy-to-use graphical menus guide you through part and tool setups.
- Tool library, offsets, and zero-positions are stored in the T400's memory, even after the machine is turned off and restarted — never reset a tool or part position again!
- Stop and restart jobs at any point — make adjustments to the tool offset or part program and resume where you left off with the push of a single button.

Threading and Grooving Cycles

- Canned threading cycles include Inside, Outside, Compound, and Tapered thread cycles.
- Threading cycles can be used by simply selecting the type of thread and entering pitch, diameter, and length.
- Grooving canned cycles can make Straight, Chamfered, or Radiused Grooves — on the inside, outside, front, or back of the part.

Automatic Profiling

- Automatic material removal saves you time by generating all the commands to remove excess material from stock.
- Profiles are defined by simple lines and arcs, and material around the profile is automatically “roughed off”.

C Axis Positioning*

- Used for contour milling and spindle positioning for drilling and tapping.
- Produce special profiles such as square sides, pockets, cams, and even lettering.
- Provides accurate positioning around the circumference, on the face, or inside the part.

Constant Surface Speed Control

- Spindle automatically adjusts RPM to provide the correct surface speed that you have specified over the entire part.
- Ensures consistent surface finish, superior turning, and longer tool life.

Tapering

- Add any taper to your part, at any angle, by specifying a start and end point, or use the angle and length of the taper.
- CENTROID's conversational programming will automatically calculate any unknown values.

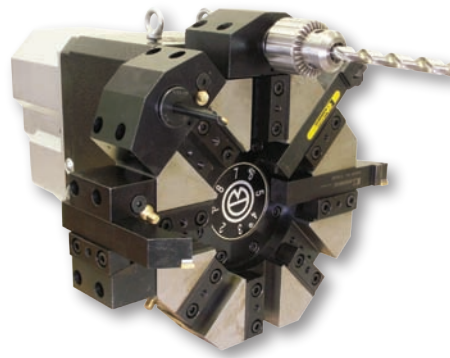
Drill/Bore and Tapping

- Canned drill/bore cycles include: Peck drill/bore (chip breaking), Deep Hole drill/bore (chip removal), and Drill/Bore.
- Use a tap to make threads with the canned Floating-tap or Rigid-tap cycle.*
- Specify threads-per-inch, spindle speed, and depth and the Control does the rest.



T-400 Options

- 8 position Automatic Tool Changer
- Dual Handwheels
- C-Axis
- Rigid Tapping
- Laser Compensation
- MPG Handwheel
- Fully Sealed Keyboard



8 Position Automatic Tool Changer*

CENTROID's T400 control easily interfaces with any automatic tool changer, or with our own 8 position turret-style changer:

- Front or rear mount configuration to accommodate any lathe
- Uses standard right or left-handed 1" tooling
- Coolant port for each tool, flow is supplied when tool is indexed
- 10 RPM speed for fast tool changes
- Comes equipped with boring bar holders and ID holders — everything you need except tooling!

Intuitive Dual Handwheel Control*

- Electronic wheels for each axis combines manual control with CNC machining
- Makes part and tool setup fast and simple
- Center mounted joystick allows for easy jogging of both X and Z axes in both directions
- Can be mounted anywhere on the lathe with the provided sealed mounting box



Designed to last, with over 30 years of experience

- CENTROID has been designing and manufacturing its own state-of-the-art CNC control components for over 30 years. This in-house production and quality control allows us to provide the industry's most affordable replacement CNC parts and support long after the sale. Low CENTROID CNC control operating costs increase your bottom line.
- CENTROID is a U.S.-owned and operated company with thousands of CNC controls in operation worldwide.

Stay up to Date

- Software updates allow CENTROID users to easily stay ahead of the curve and current with the latest CNC technology.
- In just minutes new CNC features can be added to the control.

Certified Worldwide Support



- Worldwide network of factory-trained and certified technicians provide fast and affordable CNC sales, training, service, and support.



Retrofit & OEM CNC Control Systems

- CENTROID retrofit upgrade kits are perfect for good machines with obsolete controls
- Common CNC control configurations are in stock and ready for immediate shipment



CENTROID
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Sales: 814.353.9256 • Fax: 814.353.9265
www.centroidcnc.com

**optional*

Distributor:

Available from:
Machines in Motion Inc.
(877) 733-5500 toll free
cnc-machine-controls.com
cnc-retrofit.info