

15L Slant-PRO™

CNC LATHE

PRODUCT DATASHEET



INDEX

Product Overview	p. 2
Specifications	p. 3
Options	p. 4
Workholding	pp. 5-8
Toolholding	pp. 9-12
Warranty	p. 16

CNC LATHE



Tormach 15L Slant-PRO™ CNC Lathe

PRODUCT OVERVIEW

The Tormach 15L Slant-PRO™ is a compact CNC slant-bed lathe designed for prototyping and light production work. With highly customizable workholding, rigid tapping support, and a host of configurable options and upgrades, the Tormach 15L Slant-Pro is a multipurpose CNC lathe for the small shop.

The 15L Slant-PRO can be accessorized with a wide array of tool changing and work holding options, including gang, quick change, or fully automatic tool changing, collet closers, etc.. The available spindle speed range and horsepower make it well suited to cutting most metals, as well as plastics and non-abrasive composites. Conversational programming screens make this lathe a versatile prototyping tool and easy to program CNC tool. Many part geometries can be programmed on the control without resorting to CAD/CAM.

- Cast iron frame
- 15" Swing over bed diameter
- Onboard Conversational Programming Interface
- Native 5C Spindle. A removable taper insert provides up to 1.4" spindle bore
- D1-4 Spindle Nose; accepts D1-4 cam-lock lathe chucks
- Extra Long 24.5" Carriage; Supports QC Tool Post, Gang, and Turret Tooling
- Rigid Tapping Support
- 3500 RPM Spindle
- 12 mos. factory warranty

PN 34444 - 15L SLANT-PRO™ CNC LATHE



Tormach 15L Slant-PRO™ CNC Lathe

TECHNICAL SPECIFICATIONS

Dimensions/Weight:	
Swing Over Bed	15" Diameter
Swing Over Carriage	6.2" Diameter
Carriage Travel	10" x 12" (X, Z)
Carriage Size	24.5" x 6"
Chuck Size	6"
Footprint	58"W x 66"H x 29"D
Shipping Crate Dimensions	65.5"W x 65"H x 37"D

Power:	
Primary	Single Phase, 230 VAC 50/60Hz
Secondary	115 VAC 50/60Hz (Coolant/Control)

Spindle:	
Spindle Power Rating	3HP
Max. Spindle Speed	3500 RPM
Spindle Taper	5C (removable insert)
Spindle Bore Diameter	1.4" (with 5C insert removed)
Spindle Nose	D1-4

Max. Feed Rate:	
X	60 IPM
Z	60 IPM

Control:	
Operator Console	<ul style="list-style-type: none">• Power On• E-STOP• DIN Interface
Programming	<ul style="list-style-type: none">• Complete RS-274 (G & M Code) implementation with no limit to program size.• On-board Conversational Programming Interface with intuitive graphical user interface requires no CAM or manual programming.

Slant-Pro™ CNC Lathe Options



AUTOMATIC OILER - 230VAC

This automatic oiler has programmable control for consistent and worry-free oiling.

- Voltage: 230V
- Programmable Stroke Length and Stroke Interval
- Manual Override / Force Feed Button
- Oil Level Low Audible Alarm
- Reservoir: 1/2 Gal. (2L)
- Compatible Tormach Products: Tormach PCNC 1100 Mill, Tormach 15L Slant-PRO Lathe

PN 31374 - AUTOMATIC OILER - 230VAC



LIFTING KIT FOR TORMACH 15L SLANT-PRO

Lifting Kit for the Tormach 15L Slant-PRO Lathe.

- For safely removing lathe from shipping pallet without need for lifting hoist or fork truck
- Kit includes 4 temporary legs with jack screws and instructions

PN 33269 - LIFTING KIT FOR TORMACH 15L SLANT-PRO



MACHINE ARM FOR TORMACH 15L SLANT-PRO

Machine Arm for Tormach 15L Slant-PRO lathe.

- Fully adjustable steel extension arm and a center pivot
- Machined cast iron support bracket
- Use with any LCD with a standard VESA 75 mm or 100 mm mount

PN 33318 - MACHINE ARM FOR TORMACH 15L SLANT-PRO



JOG SHUTTLE CONTROLLER

USB connected electronic hand wheel for intuitive and accurate positioning and manual control during cutting.

- 4 Axis selection buttons toggle between X,Y,Z, and A axes
- Increment select button cycles through .0001", .0010", and .0100"; increment sizes can also be customized in the control software
- Spring-loaded Outer Wheel has 7 jog speeds from slow crawl to fast rapid.
- Inner Wheel is incremental jog, each click will move the specified increment distance

PN 30616 - JOG SHUTTLE CONTROLLER

15L Slant-PRO™ Workholding

LATHE D1 WORKHOLDING

D1 Workholding for Tormach 15L Slant-PRO lathe: 3-Jaw and 4-Jaw Lathe Chucks.



4-JAW INDEPENDENT REVERSIBLE 6" LATHE CHUCK (D1 TYPE DIRECT MOUNT)

4-Jaw Chuck with Independent Reversible Jaws. 6" Diameter, D1-4 direct mount.

- Diameter: 6"
- Thru Hole Size: 1.75"
- Mount: D1-4 (flange not included)
- Hardened and Ground Operating Screws
- Includes Reversible Jaw set, Chuck Key, and Cam Wrench
- Max RPM: 2000

PN 33336 - 4 - JAW INDEPENDENT REVERSIBLE 6" LATHE CHUCK



3 - JAW REVERSIBLE 6" LATHE CHUCK (D1 TYPE DIRECT MOUNT)

3 - Jaw Chuck with Reversible Jaws. 6.25" Diameter, D1-4 direct mount.

- Diameter: 6.25"
- Thru Hole Size: 1.6"
- Mount: D1-4 (flange not included)
- Hardened Scroll Plate
- Maximum 0.003" TIR Using Nominating Pinion
- 0.001" Repeatability Using Nominating Pinion
- Includes Reversible Jaw set, Chuck Key, and Cam Wrench
- Max RPM: 2500

PN 33156 - 3 - JAW REVERSIBLE 6" LATHE CHUCK

Lathe 5C Collet Workholding



5C COLLET CLOSER (LEVER-ACTION)

5C Collet Closer with Lever-Action for Tormach 15L Slant-PRO CNC Lathe (*optional pneumatic kit available).

- Material Capacity: 1-1/16"
- Includes Draw Tube
- Includes Adapter Plate
- Includes all necessary hardware
- Made in the USA

PN 33283 - 5C COLLET CLOSER (LEVER-ACTION)
***PN**



5C ADJUSTABLE COLLET STOP

Adjustable Collet Stop for 5C Collets

- Threaded Positive Solid Stop
- Works with all 5C collets: Fractional, Metric, Decimal, Hex, Square, Rectangular, and Emergency
- Provides adjustable depth setting to maximum of 3.125"
- Steel, Black Oxide Finish

PN 33108 - 5C ADJUSTABLE COLLET STOP

Lathe 5C Collet Workholding

5C ROUND COLLET SET (18 PCS.)

18 Piece 5C Round Collet Set. Covers 1/16" to 1-1/8" nominal diameters (1/16" increments).

- 1/16" increments
- Maximum Runout less than .0005" TIR
- Precision Ground
- Fully Hardened Spring Steel Construction
- Internal and External threads correspond to 5C standard
- Includes Wooden Storage Case

Set includes: 1/16", 1/8", 3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 13/16", 7/8", 15/16", 1", 1-1/16", 1-1/8"



PN 34728 - 5C ROUND COLLET SET (18 PCS.)

5C ROUND COLLET SET (35 PCS.)

35 Piece 5C Round Collet Set. Covers 1/16" to 1-1/8" nominal diameters (1/32" increments).

Set includes: 1/16", 3/32", 1/8", 5/32", 3/16", 7/32", 1/4", 9/32", 5/16", 11/32", 3/8", 13/32", 7/16", 15/32", 1/2", 17/32", 9/16", 19/32", 5/8", 21/32", 11/16", 23/32", 3/4", 25/32", 13/16", 27/32", 7/8", 29/32", 15/16", 1", 1-1/32", 1-1/16", 1-3/32", 1-1/8"



PN 34727 - 5C ROUND COLLET SET (35 PCS.)

METRIC 5C COLLET SET (9 PCS.)

Covers 4 - 12mm nominal diameters (1mm increments).

- 1mm increments
- Maximum Runout less than .0005" TIR (.013mm TIR)
- Precision Ground
- Fully Hardened Spring Steel Construction
- Internal and External threads correspond to 5C standard
- Includes Wooden Storage Case

Set includes: 4mm, 5mm, 6mm, 7mm, 8mm, 9mm, 10mm, 11mm, 12mm

PN 34799 - METRIC 5C COLLET SET (9 PCS.)

METRIC 5C COLLET SET (12 PCS.)

Covers 13 - 25mm nominal diameters (1mm increments).

Set includes: 13mm, 14mm, 15mm, 16mm, 17mm, 18mm, 19mm, 20mm, 21mm, 22mm, 23mm, 24mm, 25mm

PN 34798 - METRIC 5C COLLET SET (12 PCS.)



5C Collets, Chucks and Fixtures

5C COLLET SETS

We offer both metric and imperial 5C collet sets. Imperial sets are available in 1/16" increment and metric sets are available in 1mm increment. Each 5C Collet is precision machined from high quality spring steel.

11 PIECE 5C SQUARE COLLET SET

11 Piece Imperial 5C Square Collet Set.

- Covers 1/8" to 3/4" (1/16" increments)
- Steel, hardened and precision ground

PN 33104: 11 PIECE 5C SQUARE COLLET SET



13 PIECE 5C HEX COLLET SET

13 Piece Imperial 5C Hex Collet Set.

- Covers 1/8" to 7/8" (1/16" increments)
- Steel, hardened and precision ground

PN 33105: 13 PIECE 5C HEX COLLET SET

5C EMERGENCY BRASS COLLET

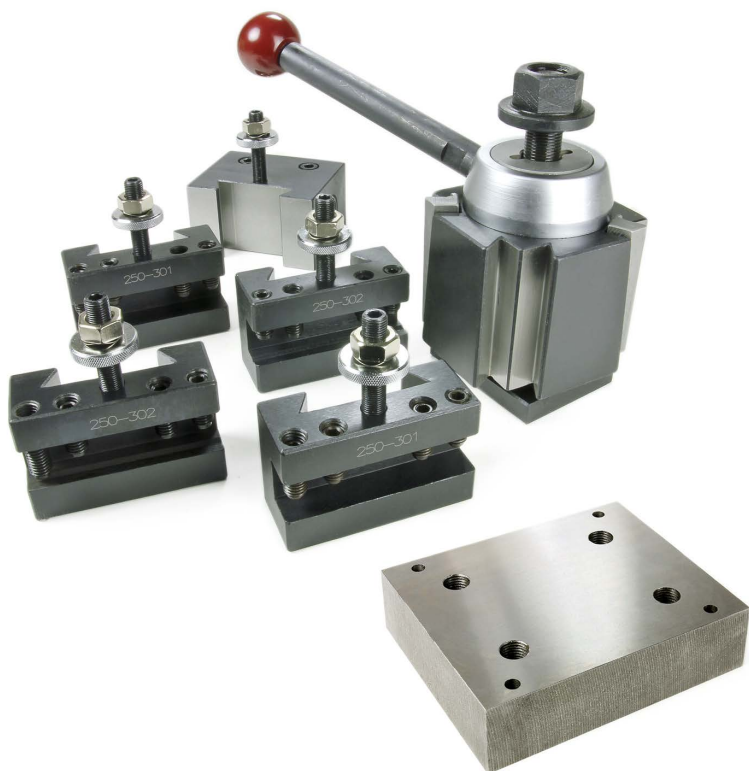
5C Emergency Brass Collet can be bored or machined to desired size or hole geometry.

- 1/16" Pilot Hole
- Pinned for machining accuracy
- Internally threaded to accept collet stop

PN 33107: 5C EMERGENCY BRASS COLLET



Quick Change Lathe Toolholders



QUICK CHANGE TOOL POST SET

Quick Change Post kit for Tormach 15L Slant-PRO Lathe.

Set Includes:

- 6 Piece QC Post Kit, size CXA (PN 34134)
 - (1) 2 -Position Quick Change Post
 - (2) #1 Toolholder for Turning/Facing
 - (2) #2 Toolholders for Turning/Facing/Boring
 - (1) #4 Toolholder for Boring Bar
- QC Post Mounting Plate for Tormach 15L Slant-PRO

PN 33272 - QUICK CHANGE TOOL POST KIT

Part Number	Individual Quick Change Components
33123	#1 Tool Holder for QC Post (Size CXA)
33124	#2 Tool Holder for QC Post (Size CXA)
33125	#4 Tool Holder for QC Post (Size CXA)
34129	Quick Change Tool Post (Size CXA)
33202	Quick Change Post Mounting Plate

Lathe Gang Toolholders



RISERS FOR 0.500" AND 0.750" CENTER GANG TOOLING

Riser for 0.500" and 0.750" Center Gang Tooling. Compatible with Tormach 15L Slant-PRO CNC Lathe.

- Length: 6.3" (160mm)
- 1/2" T-Slot
- 3 Hold downs
- Black Oxide Finish

PN 33326 - RISER FOR 0.500" CENTER GANG TOOLING

PN 33328 - RISER FOR 0.750" CENTER GANG TOOLING

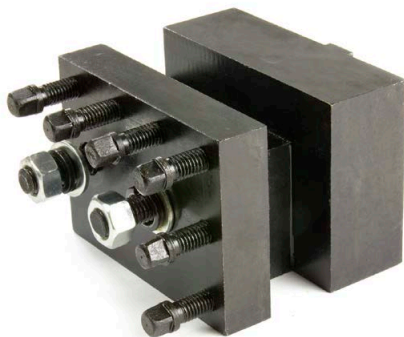
SHORT AND LONG GANG PLATES FOR TORMACH SLANT-PRO LATHE

325mm and 605mm Gang Plates for Tormach Slant-PRO CNC Lathe.

- Length: 12.8" (325mm)
- Length: 23.8" (605mm)
- 1/2" T-Slots (x3)
- Thickness: 1/2" (30mm)

PN 33204 - 325MM GANG PLATE FOR TORMACH SLANT-PRO CNC LATHE

PN 33203 - 605MM GANG PLATE FOR TORMACH SLANT-PRO CNC LATHE



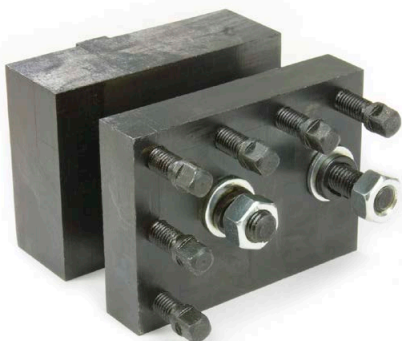
RIGHT HAND HEAVY DUTY GANG BLOCK

Right-Handed Heavy Duty Gang Block for Tormach 15L Slant-PRO CNC Lathe.

- Compatible with 3/4" Square Tooling
- Mounts Directly to Gang Plate (PN 33203 or PN 33204)
- Height-matched to Centerline of 15L Slant-PRO*
- 2 Hold Downs
- 2.7" Wide x 3.7" Long

* Shimming Required. Use PN 34725

PN 33205 - RIGHT HAND HEAVY DUTY GANG BLOCK



LEFT HAND HEAVY DUTY GANG BLOCK

Left-Handed Heavy Duty Gang Block for Tormach 15L Slant-PRO CNC Lathe.

- Compatible with 3/4" Square Tooling
- Mounts Directly to Gang Plate (PN 33203 or PN 33204)
- Height-matched to Centerline of 15L Slant-PRO*
- 2 Hold Downs
- 2.7" Wide x 3.7" Long

* Shimming Required. Use PN 34725

PN 33206 - LEFT HAND HEAVY DUTY GANG BLOCK

Lathe Gang Toolholders



1 POSITION GANG BLOCK (HEAVY DUTY)

1 Position Gang Block. 2 Hold downs for increased rigidity.

- Between Centers: 2.100"
- Bore Location: Center
- 2 Hold downs for increased rigidity

PN 33907 - 1 POSITION GANG BLOCK

1 POSITION GANG BLOCK

1 Position Gang Block. Use as a spot-drill tap station.

- Center Height: 1/2"
- Overall Length: 1.5"
- Bore Location: Left
- Overall Length: 1.5"
- 1 Hold Down

PN 33906 - 1 POSITION GANG BLOCK

MACHINABLE GANG BLOCK

Machinable Gang Block for Custom Tool Holding.

- Machinable Steel
- Overall Height: 1.500"
- Overall Length: 5.00"
- Overall Width: 1.625"
- Bolt Center: 4.250"
- 2 Hold downs

PN 33910 - MACHINABLE GANG BLOCK

RH TURNING/FACING GANG BLOCK

Right-handed Turning/Facing Gang Block. Using with 80° Diamond, Triangle, or Trigon Inserts. Integrated End Stop for quick changeover repeatability.

- Accepts 0.500" Tooling
- Overall Width: 1.250"
- 1 Hold down
- 3 Set Screws per position

PN 33911 - RH TURNING/FACING GANG BLOCK

LH TURNING/FACING GANG BLOCK

Left-handed Turning/Facing Gang Block. Using with 80° Diamond, Triangle, or Trigon Inserts.

- Accepts 0.500" Tooling
- Overall Width: 1.250"
- Integrated End Stop for quick changeover repeatability
- 1 Hold down
- 3 Set Screws per position

PN 33912 - LH TURNING/FACING GANG BLOCK

Lathe Gang Toolholders

LATHE GANG TOOL HOLDERS

Gang Toolholders for Tormach 15L Slant-PRO CNC Lathe

- Center Height: 0.5000"
- Bore: 0.7500"
- 2 Set Screws per position (Except for the RH and LH Turning/Facing Gang Blocks with 3 Set Screws)
- Integrated End Stop for quick changeover repeatability
- Black Oxide Finish



6 POSITION GANG BLOCK

6 Position Gang Block. Use as a Spot-Drill-Tap Station. 3 holes at 0.875" for center spacing spot-drill-tap station; rest at 1.250"

- Distance Between Centers: 0.875" and 1.250"
- Overall Length: 6.500"
- Integrated End Stop for quick changeover repeatability
- 3 Hold downs for increased rigidity

PN 33909 - 6 POSITION GANG BLOCK



3 POSITION GANG BLOCK

3 Position Gang Block. Use as a Spot-Drill-Tap Station.

- Distance Between Centers: 1.250"
- Overall Length: 3.500"
- Integrated End Stop for quick changeover repeatability
- 2 Hold downs for increased rigidity

PN 33902 - 3 POSITION GANG BLOCK



2 POSITION GANG BLOCK

2 Position Gang Block. 1 Hold downs with end stop. Use as ID/OD Turning Station or Drilling/Boring Station.

- Distance Between Centers: 2.100"
- Integrated End Stop for quick changeover repeatability
- 1 Hold down

PN 33908 - 2 POSITION GANG BLOCK

Lathe Gang Toolholders



POSI-LOCK GANG POST FOR 1/2" CENTER TOOLING

Posi-Lock Gang Post for 1/2" Tooling. Use with Posi-Lock Toolholders.

- Overall Height: 1.375"
- Integrated Wedge Clamp w/Locking Screw
- 2 Hold downs for increased rigidity
- 2 Locking Screws to Secure Posi-Lock Holders.

PN 33903 - POSI-LOCK GANG POST FOR 1/2" CENTER TOOLING



1" EXTENSION TURNING TOOL HOLDER FOR POSI-LOCK GANG POST

1" Extension Turning Toolholder for Posi-Lock Gang tool post system.

- For square tools up to 0.5"
- Overall Width: 1.50"
- Fine adjustment screw for precise centering
- Use with Posi-Lock Tool Post, PN 33903

PN 33904 - 1" EXTENSION TURNING TOOL HOLDER FOR POSI-LOCK GANG POST



6° CUT-OFF TOOL HOLDER FOR POSI-LOCK GANG POST

6° Cut-Off Toolholder for Posi-Lock Gang tool post system.

- Accepts Blades 0.4"-0.125" wide; 5/8"-11/16" high
- Rake Angle: 6°
- Fine adjustment screw for precise centering
- Use with Posi-Lock Tool Post, PN 33903

PN 33905 - 6° CUT-OFF TOOL HOLDER FOR POSI-LOCK GANG POST

15L Slant-PRO™ Toolholders



ER16 COLLET CHUCK

ER16 Collet Chuck

- Hold drills, taps, and reamers
- 3/4" straight shank with weldon flat
- Use with #4 Quick Change Tool Holder (Size CXA) or similar.
- ER-16 collets not included

PN 34057 - ER16 COLLET CHUCK



ER20 COLLET CHUCK

ER20 Collet Chuck

- Hold drills, taps, and reamers
- 3/4" straight shank with weldon flat
- Use with #4 Quick Change Tool Holder (Size CXA) or similar.
- ER-20 collets not included

PN 34058 - ER20 COLLET CHUCK



TOOLHOLDER BUSHING

1/4", 1/2", 3/8" ID

Toolholder Bushings

- Reduce 3/4" Bore to 1/4", 1/2" and 3/8" respectively
- Use with Weldon shank tools and tool holders
- For Gang Tool applications

PN 33927 - TOOLHOLDER BUSHING - 1/4" ID (PACK OF 1)

PN 33929 - TOOLHOLDER BUSHING - 1/2" ID (PACK OF 1)

PN 33928 - TOOLHOLDER BUSHING - 3/8" ID (PACK OF 1)

CNC LATHE



Tormach 15L Slant-PRO™ CNC Lathe

ABOUT TORMACH

The people at Tormach are dedicated to delivering tools, accessories, and components of unprecedented value in the world of CNC and motion control. Whether you're involved in R and D, education, short run production, or simply an entrepreneur with an idea, you need to make things.

Tormach products allow you to make what you need easier, quicker, and more affordable. We want to help make your goal a reality, to enable your ideas. Our mission is to empower people who make things. Whether you're cutting parts with our machine tools or building your own equipment using our components, our focus is to manifest your concepts and help you bring your ideas into reality.

ORDERING, PAYMENT AND SHIPPING

Quotations can be requested online using our web based quotation system, or through FAX, email, or over the phone. Machines and Accessories can also be ordered using our secure web shopping cart. Payment can be made by check, credit card, or wire transfer. Machines and machine stands are shipped via truck freight in North America, while accessories are normally shipped via package service (UPS, USPS, FedEx). Tormach ships worldwide in cooperation with established international freight forwarding companies.

WARRANTY AND SUPPORT

Machines and accessories are warranted for 12 months. Warranty service is limited to repair or replacement of components with telephone support, there is no on-site field service staff. Replacement parts are stocked at our Wisconsin facility. Additional information is available at www.tormach.com