

# Sherline Lathes

DMS has two similar Sherline microlathes - a model 4000 lathe with 8" bed and a model 4400 with 17" bed and Digital ReadOut (DRO). The model 4000 lathe can be used in either manual or CNC mode, driven by electronically controlled stepper motors. Accessories are interchangeable.



**SHERLINE 4000 CNC Lathe**



**CNC Controller for SHERLINE 4000**

## Operation

- (list operating restrictions here - no wood, etc.)
- Return the lathe to the condition in which you found it.
- If you reverse the chuck jaws, return them to the "normal" position before leaving. Instructions can be found on the instructions for the chuck (below).

## Specifications

[Model 4000 Specifications](#)  
[Model 4400DRO Specifications](#)  
[Standard dimensions of Sherline tools](#)

Spec	Model 4000	Model 4400DRO
Swing Over Bed	3.50 (90 mm)	3.50 (90 mm)
Swing Over Carriage	1.75 (45 mm)	1.75 (45 mm)
Distance Between Centers	8.00 (200 mm)	17.00 (430 mm)
Hole Through Spindle	.405 (10 mm)	.405 (10 mm)
Spindle Nose Thread	3/4-16 T.P.I.	3/4-16 T.P.I.
Spindle Nose Taper	#1 Morse	#1 Morse
Travel of Crossslide	4.25 (110 mm)	4.25 (110 mm)
Tailstock Spindle Taper	#0 Morse	#0 Morse
Protractor Graduations	0° to 45° by 5°	0° to 45° by 5°
Handwheel Graduations	.001 (.01 mm)	.001 (.01 mm)
Length Overall	23.5 (597 mm)	32.5 (826 mm)
Width Overall	10.5 (267 mm)	8.00 (267 mm)

Height Overall	8.5 (216 mm)	8.00 (216 mm)
Spindle Speed Range	70-2800 RPM	70-2800 RPM

## Documentation

### Sherline MicroTools

[Sherline microtools manual](#) including 4000/4400 lathes

[Sherline Accessories Guide](#)

[Sherline Accessories Help Sheets and Instructions](#)

[Sherline lathe parts exploded view diagram](#)

### Tutorials and Learning




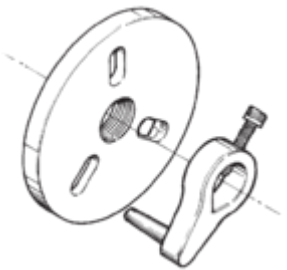
**Class notes:** The notes used for the Sherline Lathe Intro class are available on the committee drive:








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**Video tutorials:** An excellent set of [Sherline-specific lathe tutorials](#) from MiniMachining





**Lathe tooling:** The [learning center at The Little Machine Shop](#) has good descriptions of all of the various types of lathe workholding and tooling and what they are used for. While it is intended as a cross-reference to the products they sell, it also explains what these things are used for.

### Accessories

Picture	Accessory	Specifications	Links
<b>Work Holding</b>			
	4-jaw independent chuck	Model 1030 3.1" chuck Jaw capacity: Normal position: 3/32 (2mm) – 1-3/16 (30mm) Reverse position: 3/32 (2mm) – 2-1/4 (56mm)	<a href="#">Instructions</a>
	3-jaw centering chuck	Model 1040 3.1" chuck Jaw capacity: Normal position: 3/32 (2mm) – 1-3/16 (30mm) Reverse position: 3/32 (2mm) – 2-3/4 (70mm)	Instructions <a href="#">Media:1040inst.pdf</a>
	4-jaw centering chuck	Model 1076 3.1" chuck Jaw capacity: Normal position: 3/32 (2mm) – 1-1/2 (38mm) Reverse position: 3/32 (2mm) – 2-3/4 (70mm)	<a href="#">Instructions</a>
	Faceplate and Drive dog	Model 4007 Faceplate/4009 Drive dog	<a href="#">Instructions</a>

	Steady rest	Model 1074 Parts up to 1.75" diameter	<a href="#">Description</a> <a href="#">Instructions</a>
	Follower rest	Model 1090	<a href="#">Description</a> <a href="#">Instructions</a>
<b>Cutter Holders</b>			
	Rocker tool post	Model 3057 for 1/4" tool	<a href="#">Description</a>
	Quick change tool post	Model 2250, with 3 positions	<a href="#">Description</a> <a href="#">Instructions</a>
	3/8" tool holder	Model 7600 for 3/8" round or square shank tools Intended for use with insert holders (boring)	<a href="#">Instructions</a>
<b>Boring Tools</b>			
	RH Carbide insert holder for boring	Model 2259 - 80 degree insert holder Starting hole 0.5", Max depth 2"  Model 2260 - 55 degree insert holder Starting hole 0.75", Max depth 2"	<a href="#">Instructions</a>
	Boring bars	Model 3061 - Starting hole 0.25", Max depth 0.6" Model T3061 - Boring tool with special undercut Model 3063 - Starting hole 5/16", Max depth 1" Model 3064 - Starting hole 5/16", Max depth 1.5"	<a href="#">Instructions</a>

**Specialty Accessories**

 A black metal tailstock die holder with a smaller die holder inside, and a hex key.	<p>Tailstock Threading Die Holder</p>	<p>Model 1206 Die holder for 1" and 13/16" button die holders</p>	<p><a href="#">Instructions</a></p>
 A black metal radius cutting attachment with a cutting edge and a small screwdriver.	<p>Radius cutting attachment</p>	<p>Model 2200 Internal radius, external radius, ball up to 1.5" diameter</p>	<p><a href="#">Notes on using</a> - original maintained in Machinshop Committee files <a href="#">Instructions</a></p>
 A black metal knurling tool holder with two knurling tools and two screws.	<p>Knurling tool holder with knurls</p>	<p>Model 3004 Diamond-shaped knurls for diameters up to 1" 25TPI 30 degree RH and LH knurl tool</p>  <p>Knurled example (not included in kit)</p>	<p><a href="#">Notes on using</a> - original maintained in Machinshop Committee files <a href="#">Instructions</a></p>