

FCR-6664



Registered Trade Mark

standard accuracy chart

**COLCHESTER
LATHES**

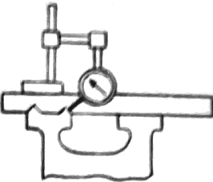
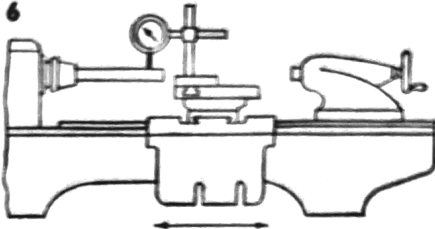
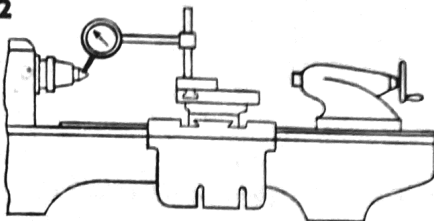
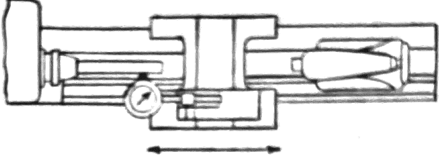
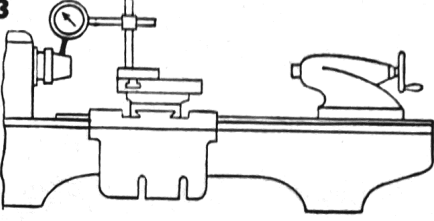
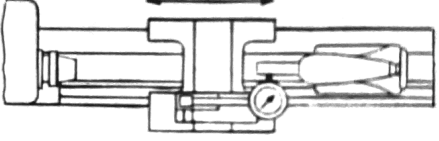
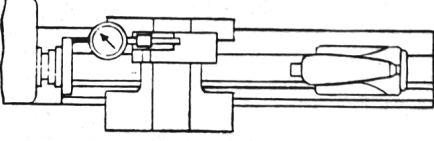
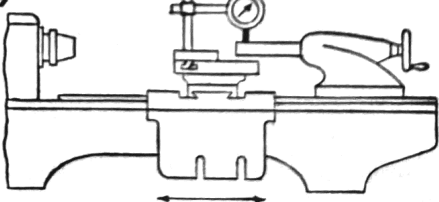
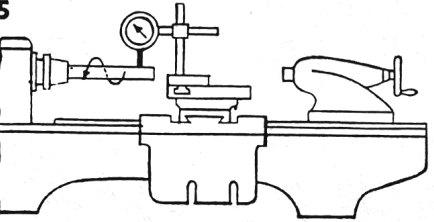
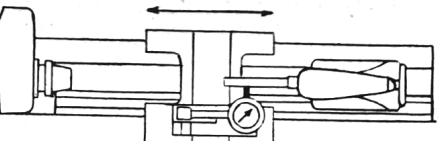
THE COLCHESTER LATHE COMPANY LIMITED
COLCHESTER ESSEX ENGLAND

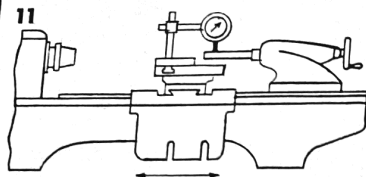
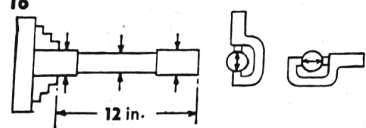
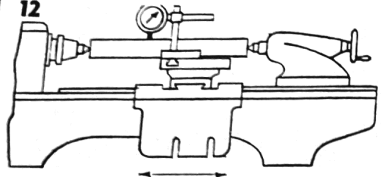
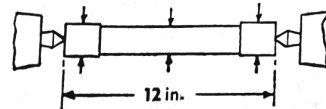
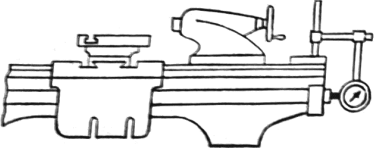
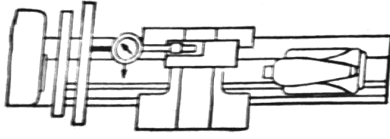
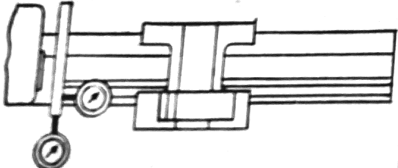
Telephone: Colchester 5161

Telex 98255

Telegrams: Lathes, Telex, Colchester

Bed Level ± 0.001

TEST	PERMISSIBLE ERROR	TEST	PERMISSIBLE ERROR
	ACTUAL ERROR		ACTUAL ERROR
<p>1</p>  <p>TAILSTOCK WAY ALIGNMENT</p>	<p>Max. Reading along length of Bed 0.0005" in 48 in.</p> <hr/> <p>0.000 /</p>	<p>6</p>  <p>HEADSTOCK ALIGNMENT—VERTICAL</p>	<p>High at end of 12 in. Test Bar rising towards Tailstock End 0 to 0.0005"</p> <hr/> <p>0.000 3</p>
<p>2</p>  <p>SPINDLE CENTER RUNOUT</p>	<p>Total Indicator Reading 0 to 0.0004"</p> <hr/> <p>0.000 2</p>	<p>7</p>  <p>HEADSTOCK ALIGNMENT—HORIZONTAL</p>	<p>At end of 12 in. Test Bar 0 to + 0.0006" toward tool pressure</p> <hr/> <p>0.000 2</p>
<p>3</p>  <p>SPINDLE NOSE RUNOUT</p>	<p>Total Indicator Reading 0 to 0.0003"</p> <hr/> <p>0.000 2</p>	<p>8</p>  <p>TAILSTOCK SPINDLE ALIGNMENT—HORIZONTAL</p>	<p>Forward at end of Spindle when fully extended 0 to 0.0004"</p> <hr/> <p>0.000 /</p>
<p>4</p>  <p>CAM ACTION OF SPINDLE</p>	<p>Total Indicator Reading with Indicator on face of Spindle 0 to 0.0003"</p> <hr/> <p>0.000 /</p>	<p>9</p>  <p>TAILSTOCK SPINDLE ALIGNMENT—VERTICAL</p>	<p>High at end of Spindle when fully extended 0 to 0.0005"</p> <hr/> <p>0.000 /</p>
<p>5</p>  <p>SPINDLE TAPER RUNOUT</p>	<p>Total Indicator Reading at end of 12 in. Test Bar 0 to 0.0006" at end of Spindle Nose 0 to 0.0003"</p> <hr/> <p>0.000 4</p> <hr/> <p>0.000 3</p>	<p>10</p>  <p>TAILSTOCK TAPER ALIGNMENT—HORIZONTAL</p>	<p>End of 12 in Test Bar 0 to + 0.0008" toward tool pressure</p> <hr/> <p>0.000 2</p>

TEST	PERMISSIBLE ERROR	TEST	PERMISSIBLE ERROR
	ACTUAL ERROR		ACTUAL ERROR
11  TAILSTOCK TAPER ALIGNMENT— VERTICAL	High at end of 12 in. Test Bar 0 to 0.0005"	16  WORK MOUNTED IN CHUCK	Max. deviation from true roundness 0.0001" Must turn cylindrical 12 in. length of workpiece 0.0008"
12  VERTICAL ALIGNMENT OF HEAD AND TAIL CENTERS	High at Tailstock 0 to 0.0008"	17  WORK MOUNTED IN CENTERS	Must turn cylindrical on a 12 in. length of workpiece 0.0004"
13  LEAD SCREW CAM ACTION	Maximum 0.0003"	18 LEAD SCREW LEAD PER FT.	$\pm 0.001"$ 0.00 /
14  CROSS SLIDE ALIGNMENT	To face hollow or concave only on 12 in. diameter 0 to 0.0005"	19 BACK LASH ON CROSS FEED SCREW ON COMPOUND REST SCREW	0.004" 0.00 / 0.004" 0.002
15  FACE PLATE RUNOUT	On diameter 0 to 0.0005" on face at normal diameter 0 to 0.001"	20 INDEXING OF SQUARE TURRET	Indicator Reading 0.001"
	0.0005" 0.00 /		0.00

Machine Serial No. *FCR-66664* Inspected by. *[Signature]*

COLCHESTER LATHES

fitted with
GAMET
Micron Precision
Taper Roller Bearings

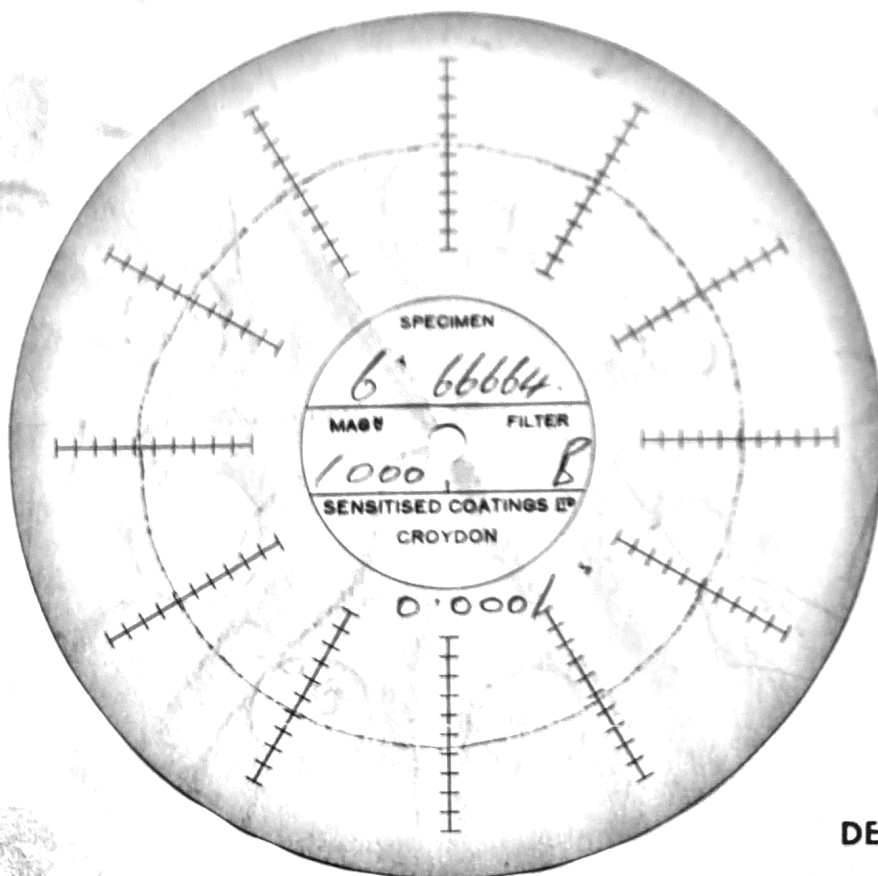
turn **ROUND** within

one tenth of a thou!

COMPARE THIS WITH THE FOLLOWING TOLERANCES

Schlesinger Finish Turning Lathe
Schlesinger Toolroom Lathe
American Toolroom Lathe

0.0004 in
0.0002 in
0.0003 in



This 'TALYROND'
graph indicates
the deviation
from true
roundness on a
sample workpiece
turned on this lathe

DEVIATION 0.0001