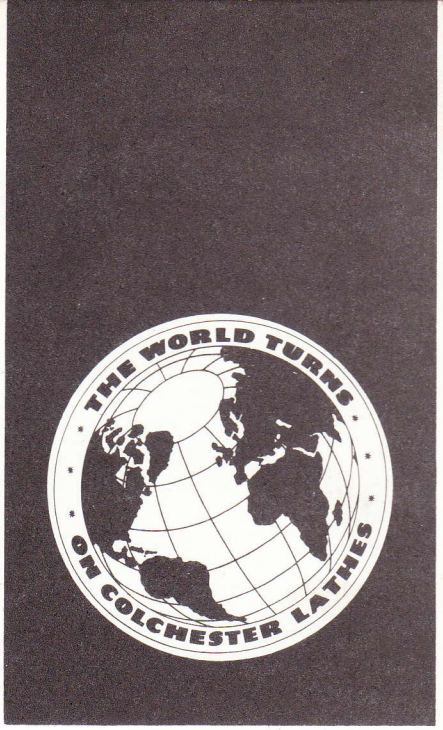
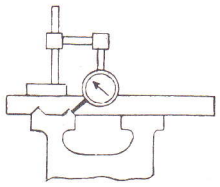
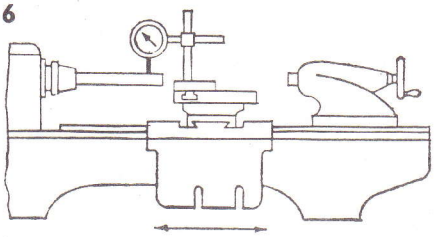
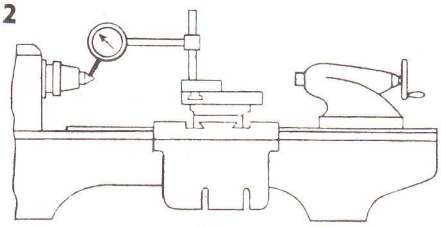
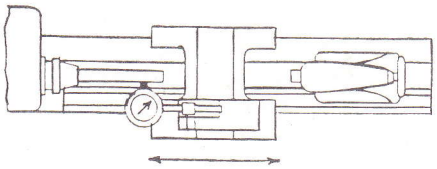
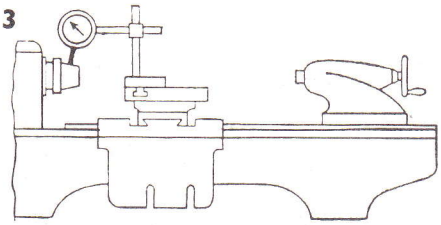
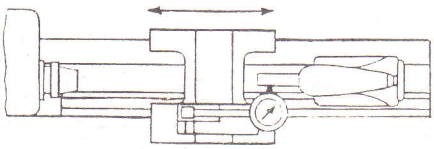
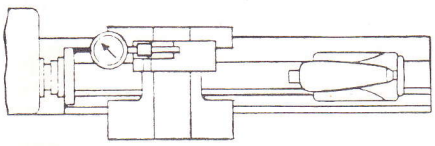
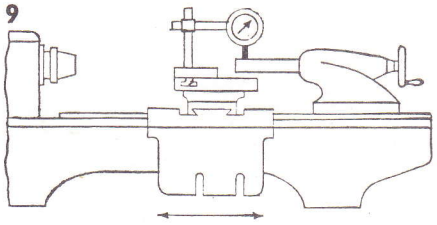
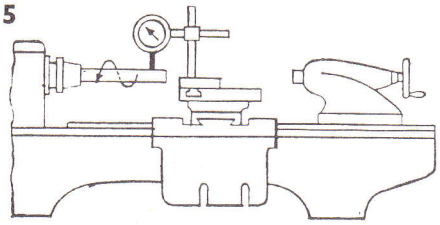
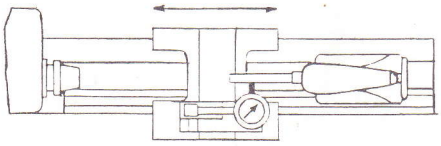


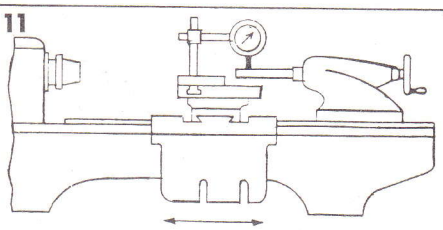
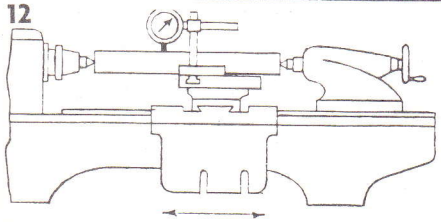
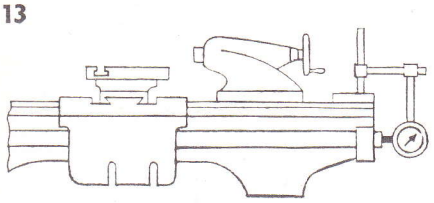
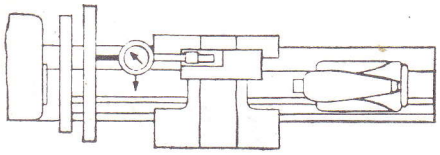
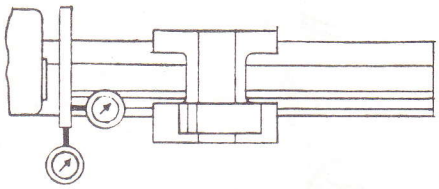
Registered Trade Mark

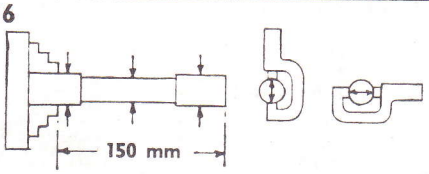
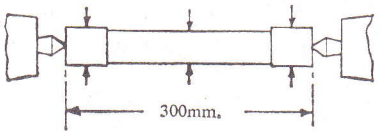
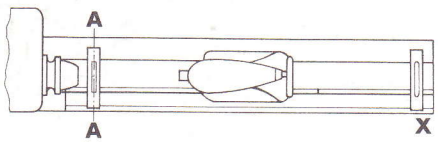
standard accuracy chart

COLCHESTER LATHES

THE COLCHESTER LATHE COMPANY LIMITED
COLCHESTER ESSEX ENGLAND
Telephone: Colchester 5161 Telex 98255 Telegrams: Lathes, Telex, Colchester

TEST	PERMISSIBLE ERROR / ACTUAL ERROR	TEST	PERMISSIBLE ERROR / ACTUAL ERROR
1  TAILSTOCK WAY ALIGNMENT	Max. Reading along Length of Bed 0.0125 mm in 1200 mm 0.0125	6  HEADSTOCK ALIGNMENT—VERTICAL	High at end of 300 mm Test Bar rising towards Tailstock End 0 to 0.0125 mm 0.0025
2  SPINDLE CENTER RUNOUT	Total Indicator Reading 0 to 0.01 mm 0.0050	7  HEADSTOCK ALIGNMENT—HORIZONTAL	At end of 300 mm Test Bar 0 to + 0.015 mm toward tool pressure 0.0075
3  SPINDLE NOSE RUNOUT	Total Indicator Reading 0 to 0.0075 mm 0.0050	8  TAILSTOCK SPINDLE ALIGNMENT— HORIZONTAL	Forward at end of Spindle when fully extended 0 to 0.010 mm 0.0025
4  CAM ACTION OF SPINDLE	Total Indicator Reading with Indicator on face of Spindle 0 to 0.0075 mm 0.0025	9  TAILSTOCK SPINDLE ALIGNMENT— VERTICAL	High at end of Spindle when fully extended 0 to 0.0125 mm 0.0050
5  SPINDLE TAPER RUNOUT	Total Indicator Reading at end of 300 mm Test Bar 0 to 0.015 mm. At end of Spindle Nose 0 to 0.0075 mm 0.010 0.0050	10  TAILSTOCK TAPER ALIGNMENT— HORIZONTAL	End of 300 mm Test Bar 0 to + 0.020 mm toward tool pressure 0.0075

TEST	PERMISSIBLE ERROR / ACTUAL ERROR
11  TAILSTOCK TAPER ALIGNMENT— VERTICAL	High at end of 300 mm Test Bar 0 to 0.0125 mm 0.010
12  VERTICAL ALIGNMENT OF HEAD AND TAIL CENTERS	High at Tailstock 0 to 0.020 mm 0.020
13  LEADSCREW CAM ACTION	Maximum 0.0075 mm 0.0075
14  CROSS SLIDE ALIGNMENT	To face hollow or concave only on 300 mm diameter 0 to 0.0125 mm 0.010
15  FACE PLATE RUNOUT	On diameter 0 to 0.0125 mm On face at normal diameter 0 to 0.025 mm 0.0125 0.025

TEST	PERMISSIBLE ERROR / ACTUAL ERROR
16  WORK MOUNTED IN CHUCK	Must turn round 0.0025 mm. Must turn cylindrical on 150 mm length of workpiece 0.01 mm 0.00150 0.010
17  WORK MOUNTED IN CENTERS	Must turn cylindrical on a 300 mm length of workpiece 0.010 mm 0.010
18 LEADSCREW LEAD PER 300 mm LEAD IN ANY 100 mm	± 0.025 mm 0.025 ± 0.010 mm 0.010
19 BACK LASH ON CROSS FEED SCREW ON COMPOUND REST SCREW	0.10 mm 0.075 0.10 mm 0.050
20 INDEXING OF SQUARE TURRET	0.025 mm
21  BED LEVEL - TRANSVERSE	Bed level A-A: Zero X: ~~±~~0.050

INSPECTED BY R. T. Hunter MACHINE NO. F.C.G. 5508.

COLCHESTER LATHES

fitted with

GAMET
Precision Machine Tool Spindle Bearings

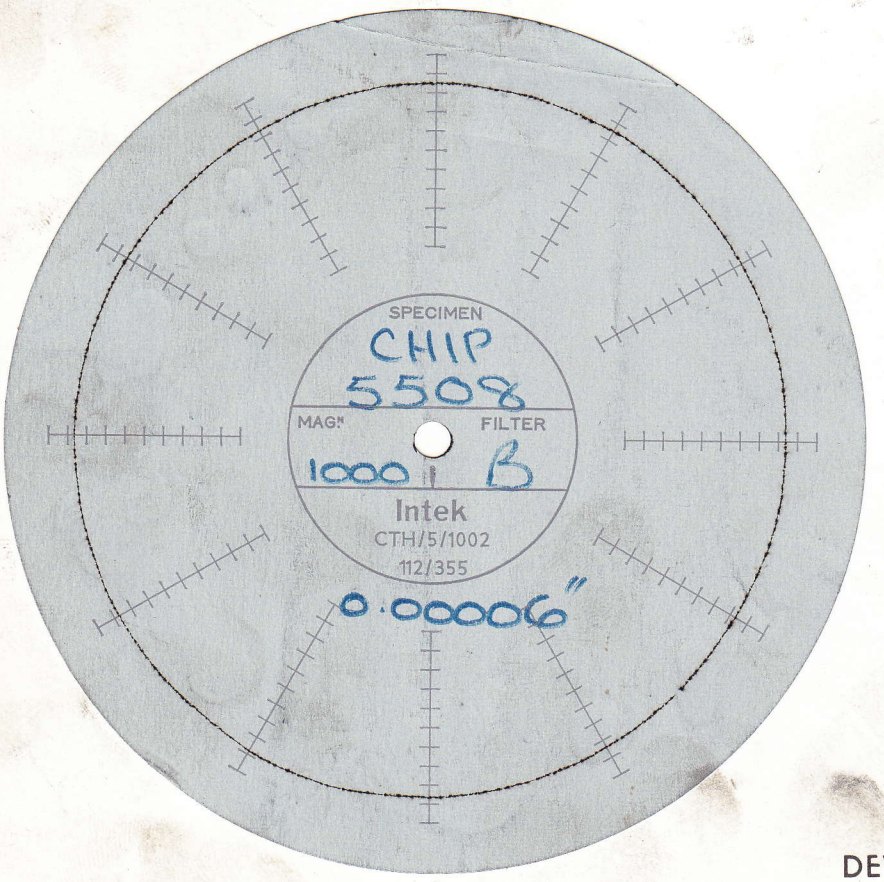
turn ROUND within

one tenth of a thou !

(0,0025mm.)

COMPARE THIS WITH THE FOLLOWING TOLERANCES

Schlesinger Finish Turning Lathe	**0,010 mm.**
Schlesinger Toolroom Lathe	**0,005 mm.**
American Toolroom Lathe	**0,0075 mm.**



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

DEVIATION 0.00150