

Fowler

Micro-Surface Scales

Used by draftsmen, designers and Quality Control inspectors, Fowler's pocket-sized Micro-Surface Scales measure 1" x 5/8" and weigh only 3 oz. (70g).



Special Features:

- Enables user to obtain best results when assessing roughness by sight and touch. Plates marked with 'N' numbers, micrometers and micro inches Ra and Rz.
- Range provides standards for the seven most frequently used machining processes. AA values in micro inches and microns.
- Tactile comparison, using a clean fingernail with moderate pressure, provides the best means of surface roughness assessment. (Slightest speck of dust acts as an abrasive.)
- For certain surfaces, tactile comparison may be supplemented with visual comparison by using a 7 x or 10 x magnifier.
- Includes protective wallet and instruction cards.



Order No.	Machining Method	#Specimens	Micro Inches Ra	Microns Ra	N Nos.
52-725-315	Surface Grinding	8	1—125	.025—3.2	1—8
52-725-316	Cylindrical Grinding	8	1—125	.025—3.2	1—8
52-725-317	Flat—Criss Cross Lapping Parallel	4	1—8	.025—0.2	1—4
52-725-318	Cylindrical Lapping Superfinishing	4	1—8	.025—0.2	1—4
52-725-319	Face Turning (Flat)	8	16—2000	.4—50	5—12
52-725-320	Turning (Cylindrical)	8	16—2000	.4—50	5—12
52-725-321	End Milling	8	16—2000	.4—50	5—12
52-725-322	Reaming	4	16—125	.4—3.2	5—8
	Drilling	4	63—500	1.6—12.5	7—10
52-725-323	Horizontal Milling	7	32—2000	.8—50	6—12
52-725-325	Shaping or Planing	7	32—2000	.8—50	6—12
52-725-326	Linishing (belt sanding)	6	4—125	.1—3.2	3—8
52-725-328	Vertical Grinding	6	8—250	.2—6.3	4—9
52-725-329	Grit Blasting	4	128—720	3.2—18	5—10
	Shot Blasting	4	128—1000	3.2—25	5—10
52-725-331	Spark Erosion	7	16—1000	.4—25	5—11
52-725-333	Hand Filing	5	16—250	.4—6.3	5—9
52-725-334	Casting	7	32—2000	.8—50	6—12
52-725-335	Honing	6	2—63	.05—1.6	2—7
52-725-336	Polishing	5	.5—8	.0125—.2	0—4

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Surface Roughness Standards & Comparator



by symbol the degree of roughness of machine parts—covers every machine method known and every obtainable value.

▲ #52-720-000 Fowler's Surface Roughness Standards—ideal for checking, identifying and specifying

- Grade AA values are displayed in microinch and micron values.
- Quick, easy comparisons. Eliminates costly checking methods, saves time, reduces production of scrap caused by poor finishes.
- 30 specimens, each $\frac{7}{8}$ " x $\frac{3}{8}$ " in size, and made of electro-formed solid nickel.
- Each type of surface finish accurately and consistently reproduced to give operator a realistic idea of the feel, appearance and texture of the machined components.
- Includes instructions and vinyl wallet.

Surface Finish	Number of Specimens	Micro Inches	Microns
Flat Lapping	3	2, 4 & 8	.05, .1 & .2
Reaming	3	16, 32 & 63	.4, .8 & 1.6
Grinding	6	2, 4, 8, 16, 32 & 63	.05, .1, .2, .4, .8 & 1.6
Horizontal Milling	6	16, 32, 63, 125, 250 & 500	.4, .8, 1.6, 3.2, 6.5 & 12.5
Vertical Milling	6	16, 32, 63, 125, 250 & 500	.4, .8, 1.6, 3.2, 6.5 & 12.5
Turning	6	16, 32, 63, 125, 250 & 500	.4, .8, 1.6, 3.2, 6.5 & 12.5



#52-722-000 Economy Roughness Comparator—ideal for engineers, inspectors and purchasing agents to gage accurate surface finishes.

- Range is 16 to 500 microinches. Measures $3\frac{1}{2}$ " x 5", weighs 1 oz. Contains 18 exact surface reproductions (9 on each side). Handy "hang-up" hole.
- Specimens include mill, end mill, grinding, shape turning and flame cutting. Made of tough, scratch-resistant ABS unbreakable plastic (color is black).
- Comes complete with a plastic wallet.

Machining Method	Microinches (AA or Ra)
Grinding	16, 32, 63, 125 & 250
End Milling	63, 125, 250 & 500
Milling	63, 125, 250 & 500
Shape Turning	63, 125, 250 & 500
Flame Cutting	500



Order No.	Description
52-720-000	Complete Scale Set of 30 Specimens.
52-722-000	Plastic Economy Roughness Comparator.