



ENGLISH

# Datasheet RS Pro Surface Roughness Comparator Composite Set

RS Stock No: 235-7544



## Specifications:

Surface Roughness Comparators are widely used in Drafting Rooms, Inspection Departments and Engineering Workshops. They provide a realistic idea of the feel, appearance and texture of machined components.

Sets are available with the individual plates marked in both MICROINCH ( $\mu$ " AA) and the METRIC system ( $\mu$ m Ra)

Manufactured from Solid Electro Formed Nickel

Conforms to ANSI-B-46-1978, ISO/R. 468 and US Military Standard 45662

Accuracy within permitted tolerance of  $\pm 12\%$  as per ANSI, ISO and Mil Specs

Order Code	Manufacturers Code	Description
235-7544	52-016-008	Surface Roughness Comparator Composite Set



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# Datasheet

## RS Pro Surface Roughness Comparator Composite Set

### Specifications:

This composite set covers a range of six different machining methods and contains a total of 30 specimen reference plates 3/8" x 7/8" as listed below

Set supplied in a rugged vinyl case, complete with information card

Method	No. Of Plates	Range: MICROINCH ( $\mu$ " AA)	Range: METRIC system ( $\mu$ m Ra)
Flat Lapping	3	16, 32, 63	0.4, 0.8, 1.6
External grinding	3	2, 4, 8	0.05, 0.1, 0.2
Grinding	6	2, 4, 8, 16, 32, 63	0.05, 0.1, 0.2, 0.4, 0.8, 1.6
Horizontal Milling	6	16, 32, 63, 125, 250, 500	0.4, 0.8, 1.6, 3.2, 6.3, 12.5
Vertical Milling	6	16, 32, 63, 125, 250, 500	0.4, 0.8, 1.6, 3.2, 6.3, 12.5
Turning	6	16, 32, 63, 125, 250, 500	0.4, 0.8, 1.6, 3.2, 6.3, 12.5

### Instructions for Use: Visual:

For many surfaces, tactile comparison can be supplemented by visual comparison by using a quality magnifying lens approximately 8x mag. or an optical microscope.

### Instructions for Use: Tactile:

Be sure to match the plate with the same machining method which you are employing. 16 microinches for Surface Grinding is not the same as 16 for Face Turning.

Gently wipe clean both plate and workpiece parallel to the lay i.e. along but never across the machine tool or wheel marks.

Run a clean finger nail several times across the lay of the surface to be accessed

Run the same finger nail over each specimen across the lay using the same pressure and speed, in order to decide which two specimens are of the nearest comparable roughness to the surface being assessed. One will be rougher and one smoother than the workpiece.

The value of the selected specimen rougher than the workpiece is then taken as the assessed value