# **KEANE-TATOR SURFACE PROFILE COMPARATOR** for SAND BLAST cleaned surfaces



A complete comparator kit consists of a reference disc, a 5x (illuminated) magnifier with magnetic disc holder, and a viny disc case.



## **REFERENCE DISC DESCRIPTION**

The comparator disc is comprised of five sections, each with a different anchor pattern depth. Each section is marked first giving the nominal anchor pattern depth in mils (one mil = 25.4 microns); next an "S" indicating a sand abrasive and a "70" indicating the year the master disc was made.

#### **HOW TO USE**

The comparator disc can be used as either a visual or tactile reference.

To use as a visual reference, center the disc on the bottom of the

magnifier.

Place the magnifier (with disc attached) on the surface of the sand blasted steel and select the reference most closely approaching the roughness of the sand blast. Comparing a field sand blast in the "V" notch seperating two reference segments may provide greater accuracy. Roughness may lie between two segments and be designated, for example 1.5S70.

To use as a tactile reference, the roughness of a field sand blast as felt by one's fingertip, or a soft wooden stylus, can be compared with the roughness of a segment on the comparator disc.

### **TECHNICAL INFORMATION**

Anchor Pattern Measurement - 50 peak-valley (PV) combinations were measured on  $1 \times 1 \frac{1}{4}$ " segments of sand blasted panels.

Measurements were made by the Steel Structures Painting Council at the Mellon Institute of Carnegie Mellon University, Pittsburgh, Pennsylvania, using a 250 power microscope with a vernier focusing attachment.

The microscope was first focused on the top of a peak, and then at the bottom of an adjacent valley. Readings were converted to mils (accurate to plus or minus 0.01 mils) and segments with average and median measurements most closely corre spending to the desired nominal anchor pattern depths were selected for the master disc.

**Measurement Results** - The following graphs provide peak-valley depth distributional informa lion for each of the five reference segements.





## **OTHER COMPARATOR DISCS**

**GRIT/SLAG (G/S)** - For profile determination of substrates blast cleaned with metallic grit and other non-metallic abrasives.

SHOT (SH) - For profile determination of substrates blast cleaned steel shot.

**SAND (S)** - For profile determination of substrates blast cleaned sand.



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