



Mission
& Flight



Maintenance
& Systems



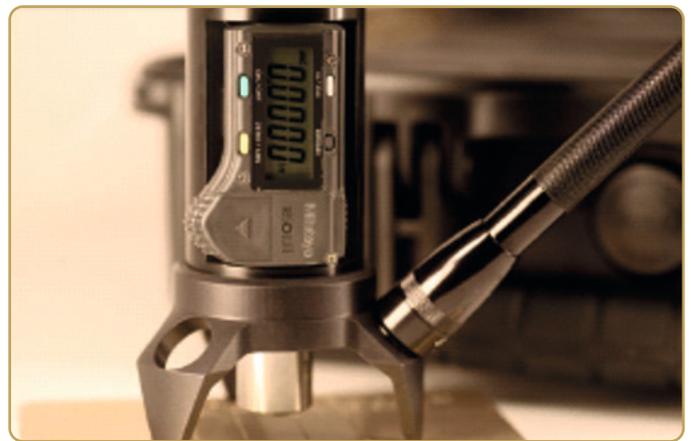
Ground
& Support



Service
& Advising

Tool for Non Destructive Testing

8400K DIGITAL OPTICAL MICROMETER



- **exact and reproducible**
- **saves time and money**
- **enables trend tracking**
- **replaces „estimation work“**

- **portable and versatile**
- **improved traceability**
- **straightforward operation**
- **simplified quality control**

NO MORE GUESSING!

The optical micrometer is used for the evaluation of:

Scratches, dents, bumps, deformations, corrosion, milling marks, notches, drill holes, openings.

For inspections on:

Windshields, cabin roofs, fuselages, shafts, masts, rotors, mechanical parts, leading edges, propellers, laminates, landing gear parts, skids, landing gear, etc.



PRODUCTS

Exact and reproducible

Very specific tolerances often apply to surface damage. Precise measurements are required here. The 8400K allows for repair decisions to be made quickly and accurately, with absolute precision and precise measurement data.

Replaces „estimation work“

It enables fast and safe visual inspections through reliable evaluation. The use of faulty parts is eliminated and parts within tolerance remain in use.

Technical Data

8400K with leg	Diameter 7.65 cm, Height 22.90 cm, 681 g
8400K with Case	33,1 x 28 x 15,3 (h) cm, 3176 g
Measurement precision	+/- 0.02mm / 0.001"
Range	6.4 mm (10x), 32 mm (4x)
Resolution	0.01 mm / 0.0005"
Repetition	0.01 mm / 0.0005"

Mag	Eyepc / Obj	Accuracy	Max Depth	Field of View
40X	10X/4X	+/- 0.001"	1.150"	0.18" Dia
80X	20X/4X	+/- 0.001"	1.150"	0.10" Dia
100X	10X/10X	+/- 0.001"	0.250"	0.07" Dia
200X	20X/10X	+/- 0.001"	0.250"	0.04" Dia

Overall **magnification** is calculated by multiplying the power of the eyepiece and objective lens; for example, using the 10X eyepiece and the 10X objective will produce 100X magnification.

Note: The Dino-Eye camera has 20X magnification.

Use 100X and 200X to inspect small features, like corrosion pits. Use 40X and 80X for wider features or to measure the thickness of a transparent surface, like a windshield.

How it works

The 8400K measures the distance between two points or relevant areas. Clear and accurate measurement results are generated in just three simple steps. The first step is to focus on the first relevant area, usually the undamaged area of a surface, immediately next to the surface change. Focusing is achieved by rotating the micrometer body. Once the surface area appears optically sharp, the display is zeroed. The last step is to focus on the bottom of the altered surface. As soon as this appears optically sharp, the measured value can be read from the LCD display.

Step 1: Focus on surface

Step 2: Set display to zero (press ABS)

Step 3: Focus on target

Portable and versatile

The 8400K kit is handy and with interchangeable base and lenses it is suitable for almost any surface, including transparent materials. A single tool enables the measurement of multiple types of damage.

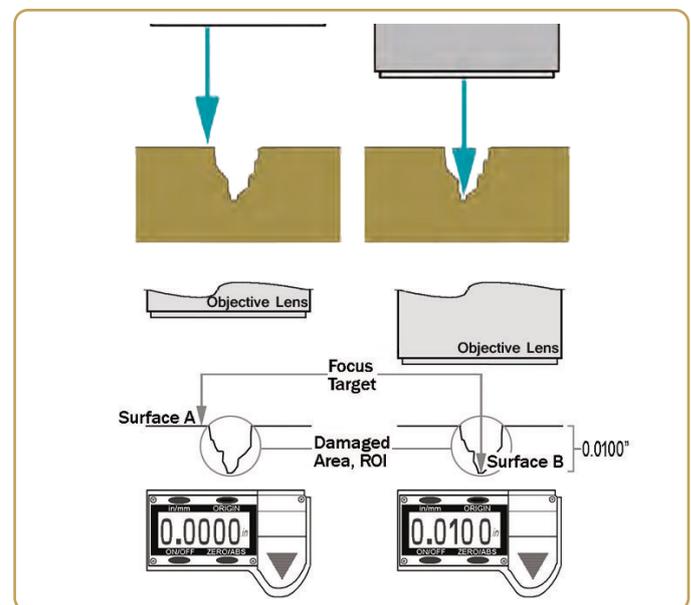
Straightforward operation

The 8400K measures reproducibly and completely free of manual calculations. Measurement results are displayed in inches or millimeters. Optionally, the measured values can be exported.

Kit Content

8400-0	Optical Micrometer
8400-7	3-Leg Stand
8400-8	4-Leg Stand
8400-9	V-Block Stand
8400-14	20-X Eyepiece
8400-15	10-X Eyepiece
8400-16	10-X Objective
8400-17	4-X Objective
9400-23	LED Flashlight
8400-15	Suitcase
8400-32	Scratch Sample plate

Allen key, spare batteries, operating instructions, Test certificate



Further sources:

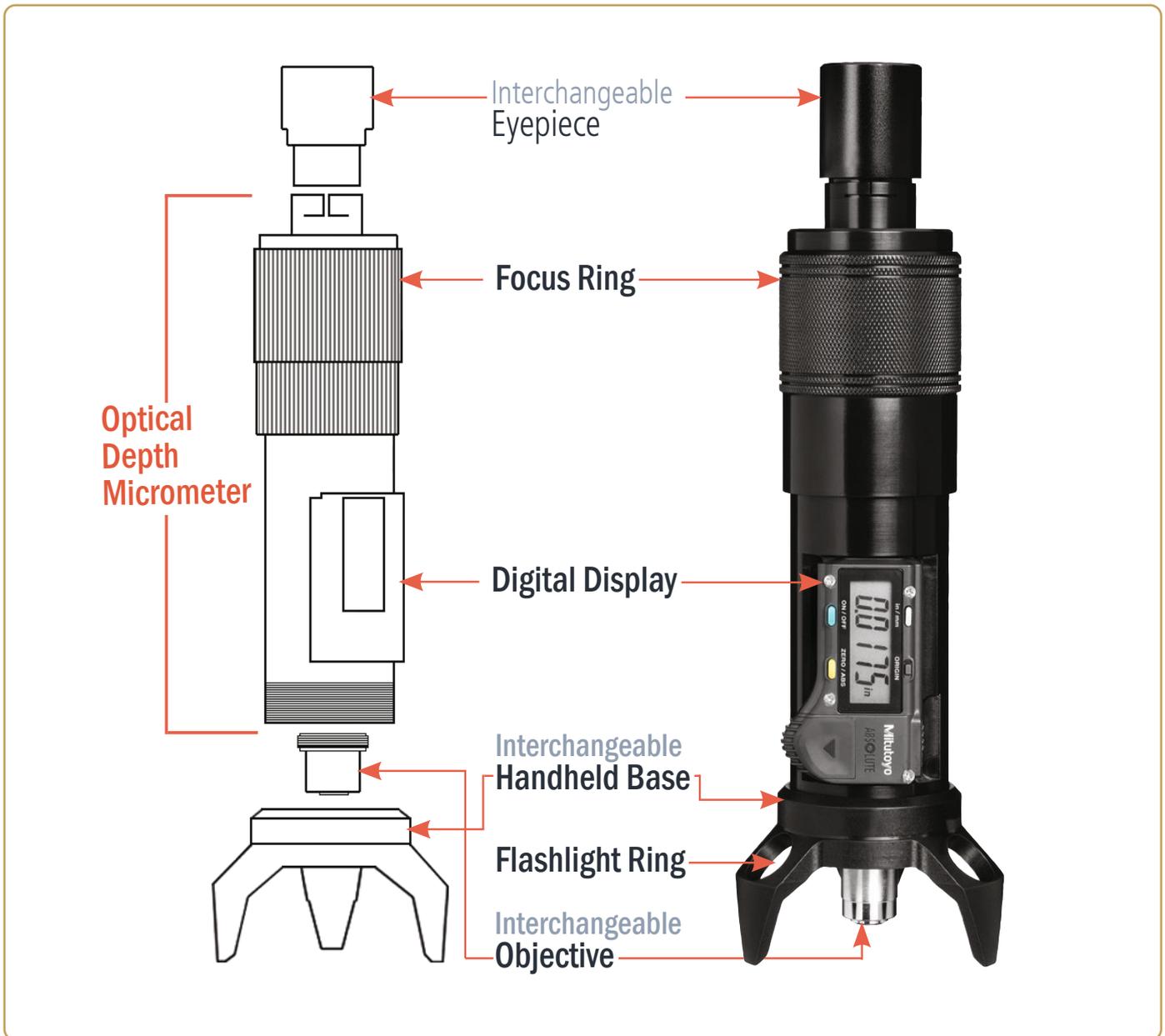
NSN/Ins.No.: 6650-01-220-8942

CCR & ORCA registered, Duns Nr.: 130329030

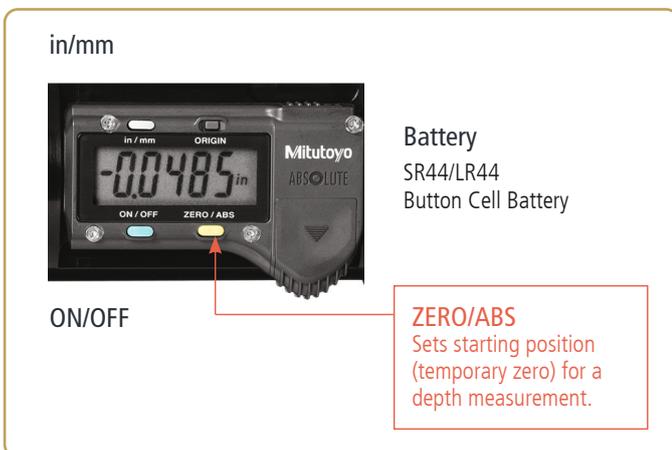
GSA Contract No.: GS-24F-0043N



Construction of the Optical Micrometer



Digital Display Details



Useful Accessories



4400M Surface Replication Kit

With our Surface Replication Kit you can create high-quality negative impressions of difficult-to-reach measuring points using the dosing gun and the Mircoset® 1010 Replicating Compounds.



5500L Lab Stand Kit

For situations where the subject's surface geometry prevents using the hand-held Micrometer on a standard base.



3300C Dino-Eye USB Eyepiece Camera

The Dino-Eye converts the Optical Micrometer into an advanced digital inspection system.

Bases (Available as a Kit!)



8400-71

3-Leg Base for sensitive surfaces



8400-12

Offset 3-Legs base for measurements on corners or edges



8400-35

2-Leg base for measuring inside angles



8400-27

Large tripod base for inspections of replicas made with the Surface Replication Kit.



8400-91

8400-91 Base, clear, V-Block / * **Included in the 8400K Set!**

