

# UCI Probes

for MIC 10 and MIC 20 hardness testers.

## Key Features

- quick and easy hardness testing
- standardized according to ASTM A 1038
- on-site and in any direction
- versatile probes for extensive application area



## Typical Applications

- heat-treated parts and surfaces, especially at difficult to access positions
- ready-assembled machines
- heat-affected zone of a weld
- thin coatings or layers



## The UCI test method

The hardness testers of the MICRODUR family are characterized by their ease of use and extensive application possibilities. Hardness testing according to the UCI method enables quick and easy evaluation of on-site hardness indents without having to use a microscope for indentation evaluation: the probe is simply positioned and the reading is digitally displayed.

Using these small and handy probes you can carry out your measurements anywhere and in any direction: whether it be vertical or overhead there are no limitations.

## We have the right probe for you.

Your application determines the type of probe to be used.

We have developed a whole range of probes with different test loads covering an extensive application area: standard probes, motor probes and probes equipped with a long oscillation rod.

We can offer you the most suitable probe for various test object surfaces and geometries.

## Standard Probes

These manual UCI probes are available with test loads from 10N to 98N and suitable for all standard applications, especially for hardness tests on heat-treated materials.

## Motorized Probes

Using a motor the test load for the 1N, 3N or 8N probe is applied automatically. Therefore, the motorized probes are particularly suited for hardness testing on finished precision parts, thin coatings or layers e.g. rotogravure cylinders.



## Probes equipped with a long oscillation rod

The probes MIC 201-L and MIC 205-L are not only suitable for all standard applications but, due to their long oscillation rod, also for measurements in deep cavities on test objects geometries.

## Test method

With the standardized UCI method (ASTM A1038) the size of the hardness test indentation is detected electronically by determining the shift of ultrasonic frequency under load. This shift is proportional to the size of the indentation produced by the Vickers diamond in the material.

## Hardness testing instruments

The UCI probes are suitable for operation with all UCI instruments:

- MIC 10, MIC 10DL, MIC 10R/RS
- MIC 20, MIC 20TFT

If you require additional information please visit our website [www.ge.com/inspectiontechnologies](http://www.ge.com/inspectiontechnologies)

## UCI probe models:

Probe model	Type	Load (N)	Diameter (mm)	Length (mm)	Tip diameter (mm)
MIC 201-A	standard	10	19	143	2.4
MIC 205-A	standard	50	19	143	3
MIC 2010-A	standard	98	19	143	3
MIC 201-AL	long rod	10	19	169	3
MIC 205-AL	long rod	50	19	169	3
MIC 2101-A	motorized	1	40	190	3.7
MIC 2103-A	motorized	3	40	190	3.7
MIC 211-A	motorized	8	40	190	3.7

