FLEXIBILITY
CUPINTEK MANUAL DISPENSER

Adhesion and crack resistance testing of coatings.

STANDARDS

UNE EN ISO 1520

The CUPINTEK Manual Indenter from NK by NEURTEK is a precision instrument designed to assess the resistance of organic and inorganic coatings to plastic deformation, cracking and loss of adhesion to the substrate. The equipment operates in accordance with the UNE EN ISO 1520 standard, which is mandatory in Qualicoat-accredited laboratories.

Its low-effort feed mechanism and integrated digital micrometer (resolution 0.01 mm) enable the test to be carried out simply, conveniently and with complete reproducibility, guaranteeing reliable results in both quality control and research and development environments.

APPLICATION

The test involves progressively indenting a coated metal specimen using a polished sphere 20 mm in diameter, applying a controlled plastic deformation until the first cracking or loss of coating adhesion is detected. The indentation depth is measured directly with the digital micrometer in increments of 0.001 mm.

The result is expressed in millimetres of indentation depth and allows for an objective comparison of the ductility and adhesion of different coatings or application processes.

- **Quality control:** verification of coatings on the production line or upon receipt of materials.
- **Qualicoat accreditation**: mandatory test for laboratories certified in aluminium coating.
- **Corrosion protection**: evaluation of paints and coatings on galvanised steel.
- **Architectural aluminium**: testing the flexibility of finishes on profiles and sheet metal.
- **Materials R&D**: development and validation of new coating formulations.

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BY NEURTEK

GENERAL FEATURES

- Low-effort manual operation thanks to the precise feed system of 0.25 mm per revolution.
- Integrated digital micrometer with a resolution of 0.001 mm for direct reading of the indentation depth.
- Polished test sphere, 20 mm in diameter, ensuring uniform and reproducible deformation.
- Compact, ergonomic and robust design, suitable for continuous use in the laboratory.
- Testing in accordance with UNE EN ISO 1520, with the option of certified calibration (national traceability).
- Supplied complete with a user manual in Spanish.

TECHNICAL SPECIFICATIONS

Parameter	Value
Test specimen material	Aluminium or steel
Maximum sample thickness	1.2 mm
Maximum specimen width	120 mm
Test sphere diameter	20 mm
Feed per revolution	0.25 mm/rev
Micrometer resolution	0.001 mm
Measurement display	Digital display
Weight of the unit	10 kg
Applicable standard	UNE EN ISO 1520

REGULATIONS AND CERTIFICATION

The equipment is designed and verified to comply with the UNE EN ISO 1520 standard (Paints and varnishes — Indentation test), which sets out the requirements for geometry, procedure and evaluation criteria. It is also compatible with the test requirements established by Qualicoat for the accreditation of architectural coating laboratories.

MODELS

Reference	Description
NK-CUPINTEK	CUPINTEK Manual Filling Machine, compliant with UNE EN ISO 1520, includes a for zero adjustment, with a manual in Spanish.

Optional calibration	Code	Description
✓	SER-CT005	Calibration certificate for indenter (points: 1, 3, 5, 7 and 10 mm)