

# CRACK DEPTH METER 281M

## ELECTRO POTENTIAL

High-precision instrument for measuring the depth of cracks exposed on various metals and alloys (incl. stainless steel, duraluminum), previously detected by other methods.

The operating principle of the Crack Depth Meter – AC electro potential measuring that provides prompt and precise depth test (in comparison to traditional methods).

The device is the most efficient in combination with other crack-revealing methods: magnetic particle, capillary or eddy-current.



Ergonomic control panel



### OPERATIONAL ADVANTAGES

- Control of ferromagnetic and non-ferromagnetic materials (stainless steel, aluminum alloys, etc.)
- Wide measuring range - from 0.2 to 100.0 mm.
- Low impact of the material electromagnetic properties on the measurement result.
- The device is equipped with various design sensors to control products of irregular shape.
- Mobile spring-loaded contact electrodes of the sensor enable the user to perform measurements on curved surfaces.
- Crack Depth Meter works successfully in field, workshop and laboratory conditions.

### TYPICAL CONTROL OBJECTS:

- Shafts, rolls, rolling mills, details of constructions, machines and mechanisms;
- Pipes, tubes, oil-and-gas pipelines;
- Pressure vessels;
- Energy industry devices.



## STAGES OF CRACK DEPTH MEASURING

- Setting of the "0" - measuring on flawless location of the object.
- Measuring of crack depth – contact electrodes are located on the opposite sides of the crack, measurement result in mm is shown on the screen.

## REQUIREMENTS FOR CONTROL OBJECTS

- Surface roughness – below or equal to 40 Rz (10 Ra)
- Stable electric contact with the sensor electrodes

## MAIN TECHNICAL PARAMETERS

Measuring range (crack depth)	0 - 30 mm
Estimating range (device can approximately estimate the crack of such depth)	30 - 100 mm
Measuring accuracy	20 %
Maximum crack width (depending on the sensor design)	up to 3,5 mm
Minimum crack length	5 crack depths, no less than 3 mm
Power supply	accumulator (it is possible to use small batteries)
Display lighting	yes
Automatic switch off	yes
Electronic unit dimensions	160x85x30 mm
Weight	400 g
Operating temperature range	+5 ... +40 °C
Warranty period	12 months

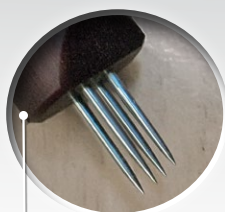


## BASIC DELIVERY SET

1. Electronic unit – 1 piece
2. Accumulator - 1 piece
3. Sensor "1x4" - 1 piece
4. Test block with 2 mm crack – 1 piece
5. Charger – 1 piece

## ACCESSORIES

- Sensor "2x2" for hard-to-reach areas (fillets etc.)
- Sensor "3+1" for cracks deeper than 30 mm (with external electrode)

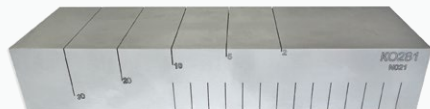


Sensor 2x2



Sensor 1x4

Test block



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