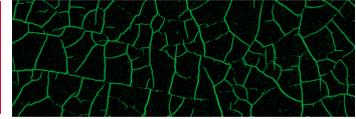




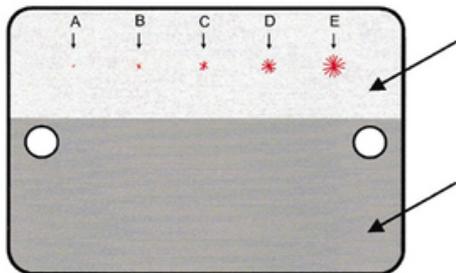
## TAM-Panels



### TAM-Panel type: "polished"

TAM 146040-1 polished chrome plate  
with certificate and photo

**Item number: 519**



**Ra = 0.15 micrometer**

Polished surface

Surface colour = silver

**Ra = 1.5 micrometre**

Rough surface

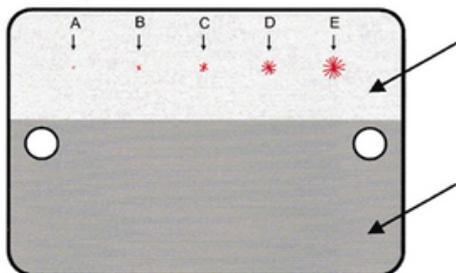
Sandblasted with aluminium

Grain size = 120, Pressure = 80 P.S.I.

### TAM-Panel type: "full grit"

TAM 146040-2 completely sandblasted  
with certificate and photo

**Item number: 319**



**Ra = 0.7 microns**

Sandblasted with aluminium oxide

Grain size = 220, pressure 80 P.S.I.

Surface colour = grey

**Ra = 1.5 micrometre**

Rough surface

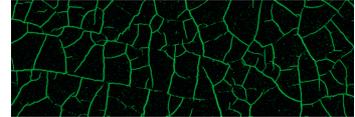
Sandblasted with aluminium

Grain size = 120, Pressure = 80 P.S.I.

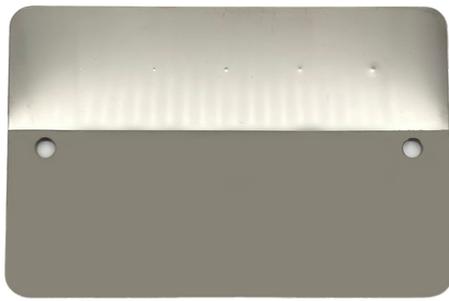
\*\*technical changes reserved!\*\*



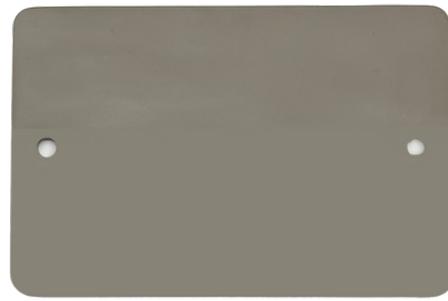
## TAM-Panels



### Product description - Application instructions



**polished**



**full grit**

#### **Intended use of the TAM panel:**

The TAM panel is used for functional control of the entire indentation process during indentation testing.

#### **Description:**

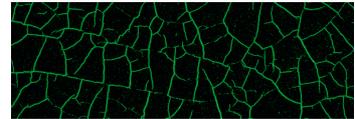
The TAM panel is made of a stainless steel lath. Half of the surface is hard-coated. Five crack indications are evenly distributed on the hard-coated side. The crack indicators are circular patterns, each forming a star.

The uncoated side of the TAM panel has been sandblasted to achieve an even surface roughness. This roughness is excellent for evaluating the penetrant residue  $Ra = 1.5 \mu m$ .

\*\*technical changes reserved!\*\*



## TAM-Panels



### **Application:**

The penetrant to be tested is applied to the entire surface of the TAM panel by dipping, spraying or brushing.

After the prescribed penetration time, the penetrant is washed off. The method of cleaning depends on the type of penetrant.

Rinsing with water, spraying with water or solvent or the use of an immersion bath or even other methods. Then the surface is dried. Finally, the developer is applied. As a rule, the evaluation is carried out after 5 to 10 minutes. The hard-coated area is evaluated by the number of visible defect indications (stars).

The uncoated part of the plate can be used to evaluate the remaining penetrant residue.

### **Cleaning and storage:**

For a correct display, the TAM panel must be free of dirt and residual penetrant from previous tests. The TAM panel should be carefully cleaned to remove penetrant and developer. The panel can be cleaned with acetone, methylated spirits, petrol, tap water and an ultrasonic cleaner.

Do not clean with a heat of more than 40°C. If the TAM panel is exposed to strong oxidising chemicals, discolouration (dark oxidation spots) may occur on the surface. Oxidation stains can be removed again.

After the panel has been cleaned and dried, it can be stored in the box or in a cleaning solvent such as acetone or isopropyl alcohol.

### **Recalibration at annual intervals:**

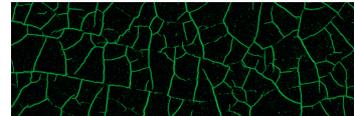
The star-shaped cracks of the TAM panel can change in size and display capability due to dirt, corrosion, high heat or mechanical stress.

The TAM panel should be recalibrated every 12 months. It is provided with a serial number. A corresponding photo documentation is included in the calibration certificate.

\*\*technical changes reserved!\*\*



## TAM-Panels



### Use stains - cleaning recommendation

Use stains on the roughness surfaces of TAM panels are quite normal and often occur after the panels have been used for the first time. Fingerprints left after panel cleaning, residues of evaporated acetone, water residues or stains on the roughness surfaces. This is normal and unavoidable with TAM panels. After the first use of the TAM panels, the roughness surfaces can often no longer be cleaned completely free of stains.

*Stains from use have no negative influence on the PT display capability of the TAM panel.  
Oxidation stains also have no negative influence on the PT display capability of the TAM panel.  
Oxidation stains have only a tiny thickness of approx. 1 micrometre, for comparison: the crack depth of all 5 crack displays is 76 micrometres each.*

#### **Advantages of the surface material:**

Better and more accurate star cracks, very narrow and very uniform crack widths.  
Very dimensionally accurate star diameters, very durable star cracks.  
The cracks are quick and easy to clean.

#### **Disadvantages of the surface material:**

Already after the first use, use stains form on the roughness surfaces.  
Oxidising cleaners must not be used.

#### **We recommend the following cleaning process after the PT tests:**

The cracks of the TAM panels can be cleaned particularly quickly with the following method: 60 seconds cleaning time in the ultrasonic unit with acetone is sufficient and all cracks in the panel are already clean.

(Place the TAM panel in the ultrasonic cleaner, fill in acetone up to approx. 5 mm above the panel is sufficient, do not use any heating on the ultrasonic cleaner. The acetone cleaner can be reused several times for panel cleaning).

**\*\*technical changes reserved!\*\***