

# **Equipment**

Product information Reference test block 2



## Reference test block 2 acc. to EN ISO 3452-3:2013

for penetrant testing according to EN ISO 3452-1:2013

### Field of application:

Reference test block type 2 is being used for routine assessment of the system performance of both fluorescent and colour contrast penetrant facilities and open containers.

The difference between the state of action compared to the state of delivery will be shown. The test is carried out at the start of each work period.

#### Structure of the test block:

The reference test block type 2 is rectangular in shape with dimensions of 155 x 50 x 2,5 mm. The base material is stainless steel plated with a layer of nickel of 60  $\mu$ m thickness.

The nickel layer is plated with a thin layer of hard chromium of 0,5  $\mu$ m to 1,5  $\mu$ m thickness. Five star-shaped defects of 3,0 to 5,5 mm diameter have been artificially produced in this layer.

The five defects are uniformly placed according to their sizes. In order to check washability (visual assessment of excess penetrant removal) the test panel got on the artificial defected side four adjacent areas of 25 x 35 mm dimension with a roughness of  $R_a{=}2.5~\mu m,\,R_a{=}5~\mu m,\,R_a{=}10~\mu m,\,R_a{=}15~\mu m.$ 

The smallest defect is located next to the area showing the smallest roughness.



### **Application**

The standard EN ISO 3452-1:2013 has to be considered while doing the test. The penetrant has to be applied all over the test surface of the reference block. The area to be tested is the one with four fields of roughness and five artificially produced defects. The excess penetrant removal depends on the type of penetrant. The reference block is used in the same conditions as the pieces to be tested. Developer will be applied uniformly and thinly after drying the testing area.



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### Post cleaning:

- a) Penetrant residues have to be removed
- b) Developer has to be removed by rinsing with water
- c) Dry test block
- d) The block can be cleaned by solvent or other remover between the tests provided this will not lead to an alteration oft he crack areas

### Storage:

The test block may be stored in a protective envelop to prevent scratching, twisting and may any mechanical of thermal shock. Reference test blocks must not be stored in solvents. We advise against the regular use of ultrasonic cleaning equipment.

### **Control test in annual intervals:**

Depending on the use, the indicator ability of the reference test block is subject to change executes this control test. After successful control test a new test report will be issued.

#### **Further remarks**

For cleaning we recommend the use of MR® 70 Developer: Spray MR® 70 on the reference test block and allow time for any penetrant to pass from the faults to the surface. Then clean the reference test block with water. Repeat the procedure until no penetrant can be seen on the surface.

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