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 of 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. The reference test block type 2 is rectangular in shape with dimensions of 155 x 50 x 2,5 mm. The base material is a stainless steel plated with a layer of nickel of 60 /lm thickness. The nickel layer is plated with a thin layer of hard chromium of 0,5 /-lm to 1,5 /-lm 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 rinsability the reference block got on the artificial defected side four adjacent areas of 25 x 35 mm dimension with a roughness of Ra = 2,5 µm, Ra = 5 µm, Ra= 10 µm and Ra = 15 µm. The smallest defect is located next to the area showing the smallest roughness.

APPLICATION:
The standard EN 571-1 has to be considered when 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 typ 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.

STORAGE:
Do not keep reference blocks in solvent. The test blocks may be stored in a protective envelop to prevent scratching, twisting, any mechanical or thermal shock. Do not regularly use an ultrasonic cleaning system.

CALIBRATION ACCORDING TO EN ISO 3452-2
As test blocks may deteriorate along the years, it is recommended to have them retested every year. The result of this test shall be reported by the manufacturer of the test block.