PENETRANT TESTING
MR® System „HOT“

MR® CHEMIE
NDT-MATERIALS

MR® System „HOT“
for temperatures between **+ 50 °C und + 200 °C** for Penetrant Testing according to **DIN EN ISO 3452-5**

Das MR®-System „HOT“ consists of:

MR® 68 H Penetrant red and fluorescent, system „HOT“
- solvent removable penetrant red • without AZO-dye-stuff

MR® 91 H Remover, system „HOT“
- special remover for „HOT“-Testing • mixture of hydrocarbons with special additives

MR® 70 H Developer white, system „HOT“
- special developer for „Hot“-testing, hydrocarbon based carrier medium with special, modified solid components
- The system is suitable for work piece temperatures between **+ 50°C und + 200 °C**

Approvals and Specifications:
- Sample testing acc. to EN ISO 3452-2 and EN ISO 3452-5 Sensitivity class 2, System IIICe
  Penetrant: MR® 68 H • Remover: MR® 91 H • Developer: MR® 70 H
- Low content of halogens and sulphur according to DIN EN ISO 3452-2 and ASME Code V, Section V, Article 6

Application:
1. Check work piece temperature, e.g. by using our MR® Infrared-Thermometer.
2. Remove tinder, rust and other contaminations from surface in a suitable manner.
3. Apply MR® 68 H Penetrant red and fluorescent to the part to be tested either by spraying or brushing.
4. Remove access penetrant from surface with a lint-free cloth witch is soaked in MR® 91 H Remover.
5. Spray MR® 70 H Developer white, system „hot“ from a distance of approx. 20 cm on the dry surface, achieving a thin, uniform layer. Discontinuities will appear as red indications. Please note: If the developer layer is too thick tiny discontinuities will not appear through the developer.

Reference points

Penetration	> 50 °C – 180 s	> 100 °C – 60 s	200 °C – 30-40 s
Developing:	> 50 °C – 90 s	> 100 °C – 30 s	200 °C – 15-20 s

The test equipment shall be selected by specifying a reasonable reference to the manufactures recommendations on the process parameters according to the type of application.

Safety precautions:
On use in higher temperature ranges, the risks associated with this should be adequately considered. Burns to the skin and vapour build up of substances may mean corresponding dangers. The work area must always be suitably ventilated and personnel exposure carefully assessed.

Minimum shelf life: 2 years at room temperature

Delivery form:
- MR® 68 H Penetrant: aerosols, 500 ml (1 box contains 12 aerosols), 1 L, 5 L
- MR® 91 H Remover: aerosols, 500 ml (1 box contains 12 aerosols), 5 L
- MR® 70 H Developer: aerosols, 500 ml (1 box contains 12 aerosols), 1 L, 5 L

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