



PENETRANT TESTING

acc. to EN ISO 3452

Red/White with daylight

Fluorescent with UV light



1. Pre-Cleaning

MR® Cleaner

Mechanic or chemical preparation and pre-cleaning:
Clean the test area (remove tinder, rust, other contaminations like oil, fat, etc.).
Cracks must be open to the surface.



Drying



2. Penetrant

MR® Penetrant red

Water washable and / or solvent removable penetrant
penetration time between 5 and 60 minutes

Application: spraying, brushing, flooding, dipping.

MR® Penetrant fluorescent

Water washable penetrant
penetration time between 5 and 60 minutes

Application: spraying, brushing, flooding, dipping.



3. Excess penetrant removal

Remove with water
and/or

Remove with solvents (e.g. MR® 79, 85, 88): Generally, the excess penetrant shall be removed first by using a clean free cloth. Subsequent cleaning with a clean lint-free cloth lightly moistened with solvent shall then be carried out.



Control of excess penetrant removal regarding penetrant residues



Daylight ≥ 350 lx

UV light ≥ 1 W/m² and ≤ 100 lx

Drying



4. Developing

MR® Wet developer solvent based
or wet developer water based

MR® Dry developer powder
or MR® Wet developer solvent based
or MR® Wet developer water based

Drying when using wet developers



Monitoring the developing process (duration 10 to 30 minutes)



Daylight

Daylight or synthetic light
illumination on surface min. 500 lx

UV light

illumination on surface min. 10 to 50 W/cm²
darkened room with max. 20 lx



5. Inspection

Recording, if necessary: post-cleaning and protection

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