



Directions for use

DIFFU-THERM[®]

Method for non-destructive testing
Red-White penetrant method

Test medium System C 200 (for high temperature)

Product family to DIN 54 152 part 1 = **BCB**

Sensitivity level 2 - 3 to DIN 54 152 part 3

Free of chlorine, fluorine and sulphur of ASTM - Code Section V

Scope

DIFFU-THERM is a nondestructive method, used for the detection of faults such as cracks, flaws, pores, lap joints, micro-contractions, bonding-faults and similar defects, which have an opening to the material's surface.

Examination of weld seams and components within a temperature range between 50° C and 200° C.

Sequence of operations

1. Pre-cleaning
2. Penetration
3. Intermediate cleaning (removal of penetrant)
4. Drying
5. Developing
6. Inspection

Durchführung

1. Pre-cleaning

Before testing the surface must be cleaned from all residues.
Grease, dirt and scale have to be removed.

2. Penetration

Diffusions-Red should be applied to the test surface by spraying, dipping or brushing.
The temperature range between 50°C to 200°C.
Penetration-time 1 und 3 minutes.

3. Intermediate cleaning (removal of penetrant)

All surplus penetrant that remains on the surface should be completely removed by rinsing or douching with **Cleaner CRE**.

4. Drying

No drying, Cleaner evaporates.

5. Developing

Immediately after drying the developer is applied evenly in a thin layer.
Appropriate for this are spray cans or spray guns.

6. Inspection

Defects are showing at ca. 30 sec.
Cracks and bonding-faults are seen as red lines on a white background.
After long developing time defects can fade.

Note:

On the basis of the colour indication the assessment of defect depths can only be approximate.