

## Description

**WS 1825 S Crack 4** is a spray to be applied on ferritic welded parts to find a discontinuity in the magnetic field and thus find the crack in the part.

Due to the very small particle size and magnetic fields, it allows very accurate detection of defects.

## Features

- High detection sensitivity.
- 2 micron particle size.
- Easy to remove.

## Applications

All types of welded parts of a ferritic nature which can be magnetised.

## Instructions for use

1.

### CLEANING

#### **1.1 Surface Cleaning with WS 3050 S Crack 3.**

For the development of any liquid penetrant examination procedure it is very important that the adjacent surface and possible discontinuities are free of any liquid or solid contaminants that may interfere with the process. All parts or areas of the part to be examined must be clean and dry before applying the penetrant. If only a section of the part, such as a weld, including the ZAT zone is to be examined, any possible contaminants must be removed, the surface must be free of rust, scale, dirt, oil, weld flux, spatter, grease, paint or any contaminant that could interfere with the process. These types of contaminants can prevent the penetrant from entering the discontinuities.

#### **1.2 Drying after cleaning.**

It is essential that the surfaces of the parts are completely dry, drying can be done by heating the parts in drying ovens, with infrared lamps, forced air or exposed to room temperature.

Demo  
1825  
S



## **2. MAGNETISE THE AREA TO BE INSPECTED**

The area to be tested must be magnetised by one of the following types of magnetisation:

- Magnetisation with Yugo.
- Pin magnetisation.
- Indirect Magnetisation with Spiral or Central Conductor.
- Magnet current.

## **3. APPLICATION OF BLACK MAGNETIC PARTICLES WS 1825 S Crack 4**

The test can be performed in two ways depending on the colour of the test piece.

### **3.1 Magnetic Particles WS 1825 S Crack 4.**

In case the surface is light coloured and black particles can be identified, **WS 1825 S Crack 4** is applied on the area to be inspected.

### **3.2 Contrast Lacquer WS 1826 S Crack 5 and Magnetic Particles WS 1825 S Crack 4.**

If the surface is dark in colour and the black particles cannot be identified, first apply **WS 1826 Crack 5** contrast lacquer to the area to be inspected and allow it to dry. Then apply **WS 1825 S Crack 4** on the area to be inspected.

## **4. PERSONNEL QUALIFICATION, PROCEDURE, AGENCY**

It may be required in a user/provider agreement that all examination personnel are qualified/certified in accordance with a written procedure according to the applicable edition of the practice, depending on the country/continent there are different certification systems SNT-TC-1st, ANSI/ ASNT CP-189, NAS 410, MIL-STD-410, etc.

Also, if the examination requires a Non-Destructive Testing Agency Qualification, the agency shall comply with E543.

## **5. EXPIRY**

The shelf life of this product is 5 years\* from the date of manufacture, this information can be found on the packaging.

\*observing the recommendations on Proper Storage Conditions.

**Certifications/Specifications**

Meets and exceeds the standards of the following specifications:

- ASTM E 709
- ASTM E 1444
- ASME Sec V Art.7
- ISO 9934
- ISO 10893-5
- NAVSEA 250-1500-1
- BS 4069
- MIL-STD-271
- MIL-STD-1949
- AMS-3042
- DIN 54132

**Technical Data**

Property	Specification/Method	Value
Reference	- - - - -	WS 1825 S
Aspect	- - - - -	Liquid
Colour	- - - - -	Black