

# **FLAW & CRACK DETECTOR SYSTEM**

Spanjaard Flaw & Crack Detector 3-Part non-destructive testing (NDT) system for locating defects on the surfaces of metals. A fast, economical and reliable method of visual detection. It is essential that all three packs are used: No.1 Cleaner, No.2 Penetrant and No.3 Developer. Suitable for use on all metals including aluminium, nickel, stainless steel and titanium. System shows up cracks as red lines and porous areas as pinpoints. Typical uses include weld inspection, incoming materials inspection and general engineering.

## **APPLICATIONS**

- Inspection of incoming tools or materials for defects.
- · Checking for potential fatigue cracks during maintenance where parts are under heavy stress.
- Inspection of welded parts for any flaws.
- Vessel/tanker fabrication precision welding leak inspection.
- Not suitable for use on coated/painted surfaces or plastics.

#### **DIRECTIONS FOR USE**

## **CLEANER (Pack No.1)**

Remove all surface contamination such as oil, grease, dust and rust. Shake well before use. Spray surface with CLEANER (Pack No.1) and clean thoroughly with absorbent cloth until no further contamination is evident on the cloth. Proceed with PENETRANT (Pack No.2).

#### **PENETRANT (Pack No.2)**

Shake well before use. Parts must be at ambient temperature before liberally spraying the area with PENETRANT (Pack No.2) and allowing 5 minutes contact time (allow up to 20 minutes for very fine cracks). Spray CLEANER (Pack No.1) onto an absorbent lint-free cloth and wipe off excess from surface until no further PENETRANT (Pack No.2) is evident on the cloth. **This step is vital to ensure cracks and flaws are detected**. Proceed with DEVELOPER (Pack No.3).

# **DEVELOPER (Pack No.3)**

Shake well before use. Apply a thin, even film of DEVELOPER (Pack No.3) and leave for 10 minutes before inspecting for fine flaws and cracks. Reveals cracks as continuous red lines and porous parts as red pinpoints. After use, invert can and spray for 3 seconds to clear the nozzle.

# **PROPERTIES**

	CLEANER (Pack No.1)	PENETRANT (Pack No.2)	DEVELOPER (Pack No.3)
Colour:	Colourless	Red	White
Features:	• Fast-drying. • Leaves no residue.	Easily visible under natural or artificial light.	Detects larger flaws immediately.      Takes up to + 10 min for finer flave.
	For pre-cleaning and easy removal of dye and developer.		<ul> <li>Takes up to ± 10 min for finer flaws.</li> <li>Only a thin film of developer is required as too much developer may</li> </ul>
	• Contains no chlorinated solvents.	initially unnoticeable.	mask the smaller flaws.

## PACKAGING

3-Part aerosol system:

CLEANER (Pack No.1) 350 ml aerosol
PENETRANT (Pack No.2) 300 ml aerosol
DEVELOPER (Pack No.3) 350 ml aerosol

Revision: 090522

For safety and storage information, please refer to the safety data sheet (SDS).

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