Potassium Ferricyanide Test

The Potassium Ferricyanide Test will enable detection of any water-soluble iron salts that form at the bottom of rust pits after blast-cleaning. If these salts are present, they rapidly induce corrosion.

The test involves the reaction of soluble ferrous iron salts with potassium ferricyanide to form ferric hexacyano ferrate, which is commonly known as Prussian blue. The relatively high tinting strength of Prussian blue enables the reaction to be used as a very sensitive test on ferrous irons.

Simply spray a film of deionised water on an area of the blast-cleaned steel. The test paper is then held against the surface for about 10 seconds. Any soluble iron salts present are drawn out of the rust pits by capillary action and react with the potassium ferricyanide to form blue spots. The presence of blue spots on the test paper indicates that the surface should be re-blasted.

Supplied with 100 Potassium Ferricyanide Test Papers, Deionised Water Spray Bottle, Plastic Gloves and Carrying Case.

<table>
<thead>
<tr>
<th>Part No</th>
<th>Papers Supplied</th>
<th>Paper Diameter</th>
<th>Conformance Cert Part No</th>
</tr>
</thead>
<tbody>
<tr>
<td>P3001</td>
<td>100</td>
<td>95mm</td>
<td>NPC04</td>
</tr>
<tr>
<td>PS102</td>
<td>Spare Test Papers</td>
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<td>NPC04</td>
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Operation

**Testing**
Spray a fine mist of deionized water droplets onto a small area of blast-cleaned surface using the Spray Bottle.

Allow the deionized water droplets to evaporate and at the moment that they have disappeared but the surface is just perceptibly wet, using the protective gloves supplied, apply the Potassium Ferricyanide Test Paper and press onto the surface for 2 to 5 seconds. If soluble salts remain, these will be drawn by capillary action into the test paper and will react and give a Prussian blue dot effect on the paper corresponding to the contaminated pits on the blast-cleaned steel.

It is important that the wetting of the surface has to be completed to the right degree in order to dissolve the salts. Too little deionized water and this will not be achieved. Too much deionized water and there is an overall blue colouration over the Test Paper.

The Spray Bottle can be refilled using deionized water.

**Health and Safety**
The Potassium Ferricyanide Test Papers consist of 90mm-diameter cellulose, impregnated with a low concentration of potassium ferricyanide. May produce toxic fumes on burning.

Wear gloves when handling the Test Papers. After using the Test Papers, wash hands with soap and water.

**Shelf Life**
Do not expose the Potassium Ferricyanide Test Papers to any extremes of temperature and ensure that they are retained in their light protective bag.

We would recommend that the papers are used within a 6-month period from date of purchase.