

## Summaries of Surface Preparation Standards

Following are short summaries of the requirements of the surface preparation standards that are referenced in ZRC's technical data. For further, more detailed information, please contact the authoring bodies as follows:

Steel Structures Painting Council  
40 24th Street, 6th Floor  
Pittsburgh, PA 15222 USA  
Tel: 412-281-2331  
Website: <http://www.sspc.org>

International Organization  
for Standardization  
1 Rue De Varembe, Case Postale  
CH-1211, Geneva 201  
Switzerland  
Tel: 412-234-1240

National Association of Corrosion Engineers  
1440 South Creek Drive  
P.O. Box 218340  
Houston, TX 77218  
Tel: 713-492-0535

Swedish Standards Institution  
Box 3295, Stockholm 3  
Sweden

### **1. SSPC-SP 1, Surface Preparation Specification No. 1, Solvent Cleaning**

Specifies use of solvent to obtain a steel surface free of visible foreign matter such as oil, grease, soil, drawing and cutting compounds, or other soluble contaminants.

### **2. SSPC-SP 3, Surface Preparation Specification No. 3, Power Tool Cleaning**

Specifies the use of power assisted hand tools to obtain a steel surface free of all loose mill scale, loose rust, loose paint (although in ZRC's case, we require complete removal of all paint), and other loose detrimental foreign matter. It is not intended that adherent mill scale and rust be removed by this process. Mill scale and rust are considered adherent if they cannot be removed by lifting with a dull putty knife.

### **3. SSPC-SP 6/NACE No. 3 Joint Surface Preparation Standard, Commercial Blast Cleaning ISO 8501 1-1: 1988(E)(SIS 05 59 00) Sa 2**

Specifies the use of abrasives for commercial blast cleaning of steel surfaces to obtain a steel surface with complete removal of visible oil, grease, dust, dirt, mill scale, rust, coating, oxides, corrosion products, and other foreign matter except for slight shadows, streaks, or discolorations from at least two-thirds of each square inch of surface area. Slight residues of rust or paint may be found in the bottoms of the pits.

### **4. SSPC-SP 10/NACE No. 2 Joint Surface Preparation Standard, Near-White Blast Cleaning ISO 85011-1:1988 (E) (SIS 05 59 00) Sa 2 1/2**

Specifies the use of abrasives for near-white blast cleaning of steel surfaces to obtain a surface with complete removal of all visible oil, grease, dust, dirt, mill scale, rust, coating, oxides, corrosion products, and other foreign matter. Radon staining is limited to no more than 5% of the prepared surface area.

## **5. SSPC-SP 11, Surface Preparation Specification No. 11, Power Tool Cleaning to Bare Metal**

Specifies the use of power tools to produce a bare metal surface and to retain or produce a surface profile. This specification is suitable where a roughened, clean, bare metal surface is required, but where abrasive blasting is not feasible or permissible. Once cleaned, the surface will be free of visible oil, grease, dirt, dust, mill scale, rust, paint, oxide, corrosion products, and other foreign matter. Slight residue of rust and paint may be left in the lower portion of pits if the original surface is pitted. Surface shall have a degree of roughness (profile) of no less than 1 mil (25 microns).



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