

# SURFACE PREP GUIDE

BEST PRACTICES. PROVEN RESULTS.



**JH NORTON**  
COMPANY INC. EST. 1973

# SURFACE PREPARATION: THE FOUNDATION OF COATING PERFORMANCE

## WHY SURFACE PREPARATION MATTERS

The success of any coating system begins long before the first coat is applied. Surface preparation is the critical first step that determines coating adhesion, longevity, and overall performance.

Even the highest-quality coating systems can fail prematurely when applied over contaminants, corrosion, mill scale, or improperly prepared substrates.

- ✓ Improve coating adhesion
- ✓ Extend coating service life
- ✓ Reduce maintenance & repair costs
- ✓ Prevent premature coating failure
- ✓ Improve corrosion protection
- ✓ Ensure compliance with project specifications

## COMMON SURFACE CONTAMINANTS



### RUST & CORROSION

Reduces adhesion & promotes coating failure



### MILL SCALE

Creates weak points beneath coatings



### OIL & GREASE

Prevents proper coating bonding



### DIRT & DUST

Causes contamination & coating defects



### EXISTING COATINGS

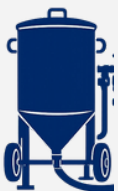
May require removal or compatibility testing



### SALT CONTAMINATION

Accelerates corrosion under coatings

## JH NORTON SURFACE PREPARATION



FEED UNITS



FIELD SUPPORT



RENTAL  
EQUIPMENT



ABRASIVE MEDIA



PPE &  
CONSUMABLES



TECHNICAL  
SUPPORT

“The quality of the coating is only as good as the quality of the surface beneath it.”

# Surface Preparation Standards at a Glance

## SSPC-SP 5 / NACE No. 1

### WHITE METAL BLAST CLEANING



Remove all visible rust, mill scale, coatings, oxides, & foreign matter.

- Immersion service
- Tank interiors
- Marine environments
- Critical coating applications
- Severe corrosion exposure

## SSPC-SP 10 / NACE No. 2

### NEAR-WHITE METAL BLAST CLEANING



Remove nearly all visible contaminants while allowing only slight staining or shadows.

- Industrial facilities
- Power generation
- Water & wastewater treatment
- Structural steel
- High-performance coating systems

## SSPC-SP 6 / NACE No. 3

### COMMERCIAL BLAST CLEANING



Remove the majority of rust, mill scale, & coatings while allowing limited staining.

- Industrial maintenance
- Manufacturing facilities
- General structural steel
- Equipment refurbishment
- Routine coating projects

## SSPC-SP 7 / NACE No. 4

### BRUSH-OFF BLAST CLEANING



Remove loose rust, scale, & loose coatings. Tightly adhered materials may remain.

- Maintenance painting
- Existing coated surfaces
- Surface preparation for recoating
- Light rust removal
- Cost-effective maintenance projects

## KEY CONSIDERATIONS

- Confirm project specifications before selecting a surface preparation method.
- Ensure the selected abrasive and equipment are appropriate for the substrate and required cleanliness standard.
- Verify environmental conditions prior to coating application.
- Consult coating manufacturer requirements for cleanliness and profile recommendations.
- Document inspection results throughout the preparation process.

### Commercial-Grade Power Tool Cleaning SSPC-SP15

Power Tool Cleaning  
SSPC-SP3; ISO 8501-1  
St 3

Surface Preparation  
of Concrete  
SSPC-SP-13

Hand Tool Cleaning  
SSPC-SP2; ISO  
8501-1 St 3

Solvent Cleaning  
SSPC-SP1

Power Tool  
Cleaning to Bare  
Metal  
SSPC-SP11

Waterjet Cleaning of  
Metals  
SSPC-SP WJ-  
1/NACE WJ-1  
through SSPC-SP  
WJ-4/NACE WJ-4



### WE'RE HERE TO HELP

Whether you're selecting abrasive media, evaluating equipment options, or working to meet project specifications, the JH Norton team is available to help you find the right solution for the job.



757 548 4842



WWW.JHNORTON.COM

