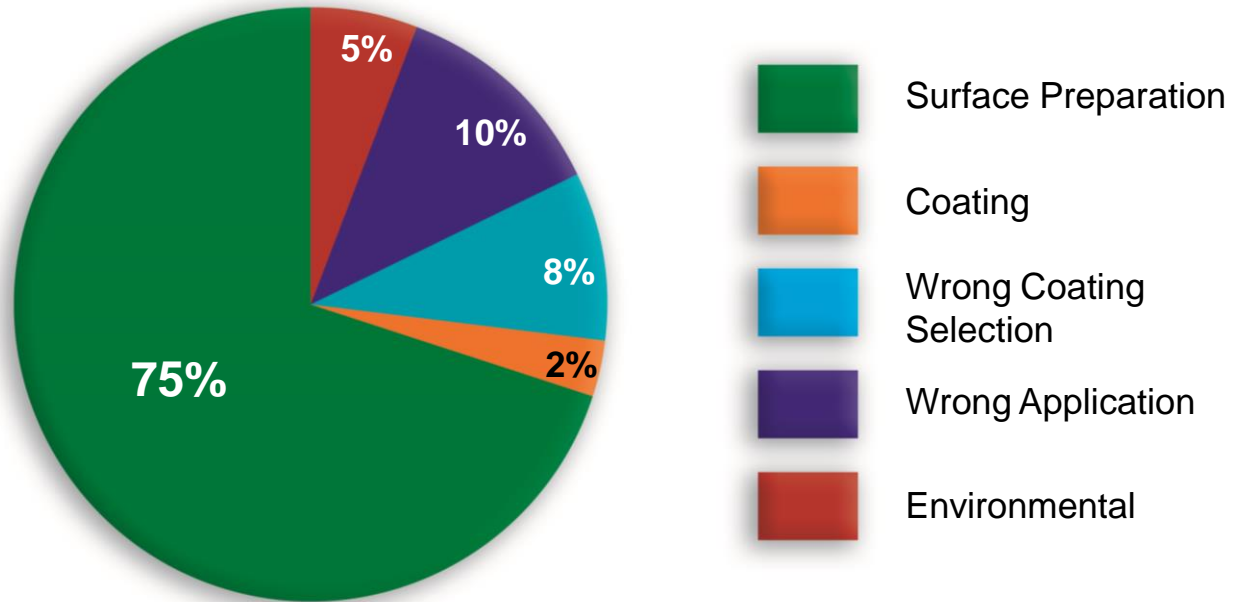


Improving Efficiency with Encapsulated Media Blasting

Presenter:

Protect What's Important

Why Do Coatings Fail?



Protect What's Important

Proper Surface Preparation:

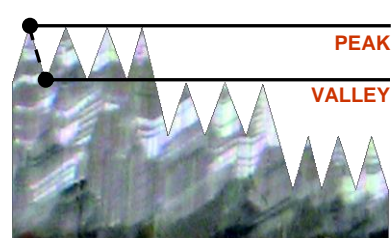
Cleanliness (Visual)



Decontamination (Invisible)

CHLORIDES & SULFATES
OIL RESIDUE
LEAD
ASBESTOS
PCBs
LOW-LEVEL RADIATION

Profile (Measurable)



“75% of coating failures are the result of poor surface preparation”

“It should be remembered that when defects are exposed by blast cleaning and subsequently removed by grinding, it is necessary to re-prepare the immediate area to retain the surface profile.”

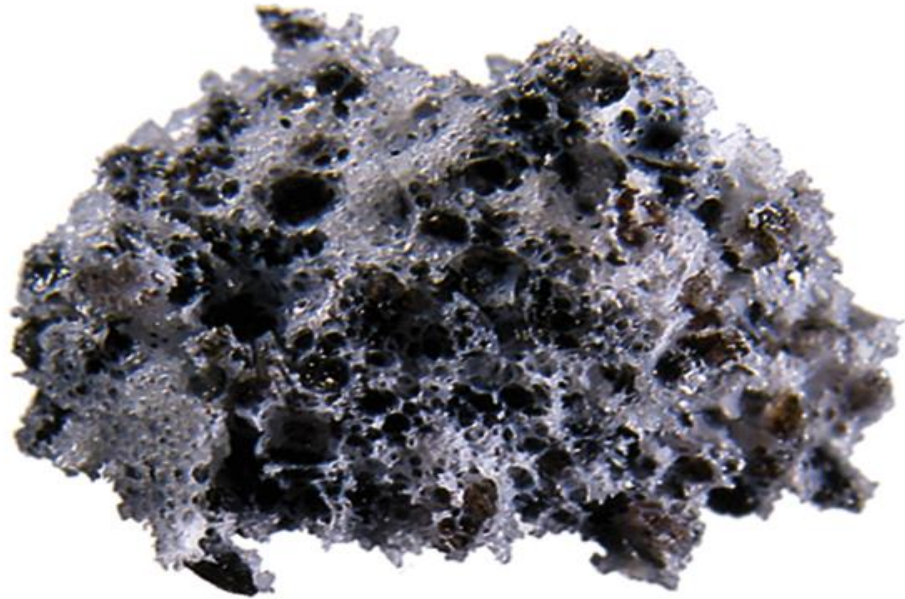
“All coating systems will perform better on properly cleaned surfaces with a good surface profile”



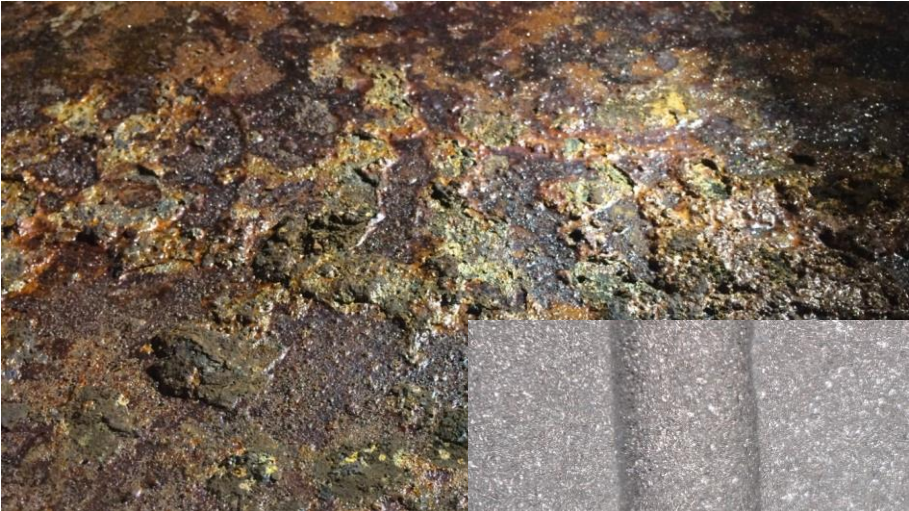
SOURCE: NACE Coating Inspector Program (Level

1)

Abrasive Sponge Blast Media



Change of Service blasting in as little as 30 minutes of blast time



Lining Removal One Shift



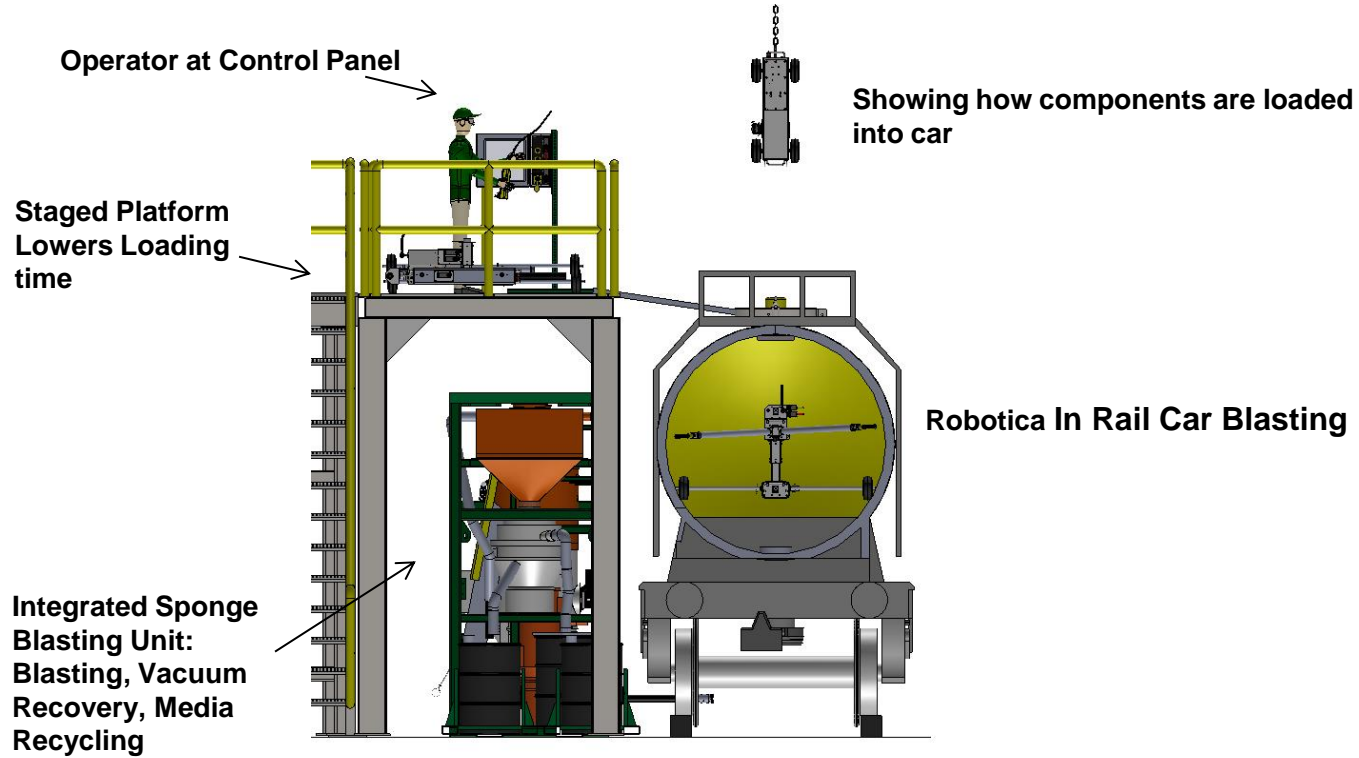
228 mils (nearly 1/4 ") of Soft rubber removed efficiently



Commodity does not sweat out after blasting



System Overview



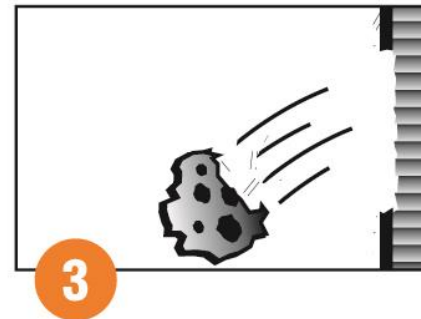
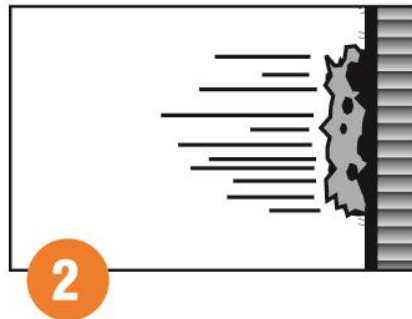
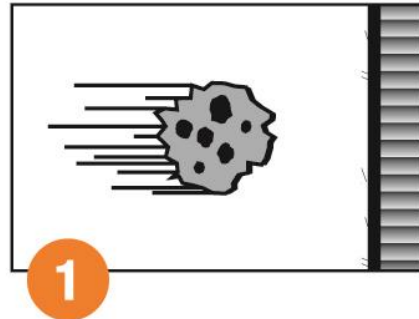
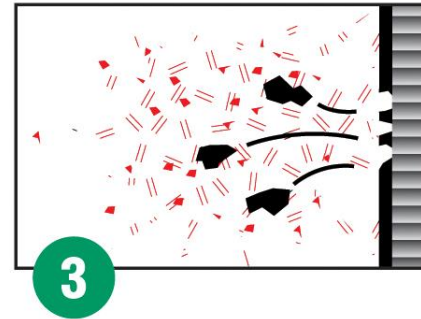
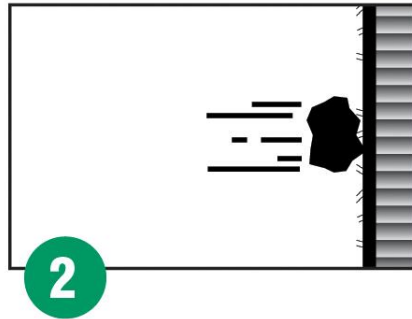
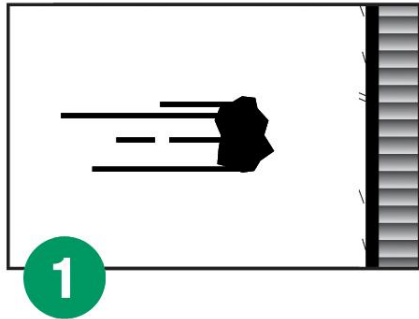
Robot is Loaded in sections and Assembled in as little as 17 Minutes.



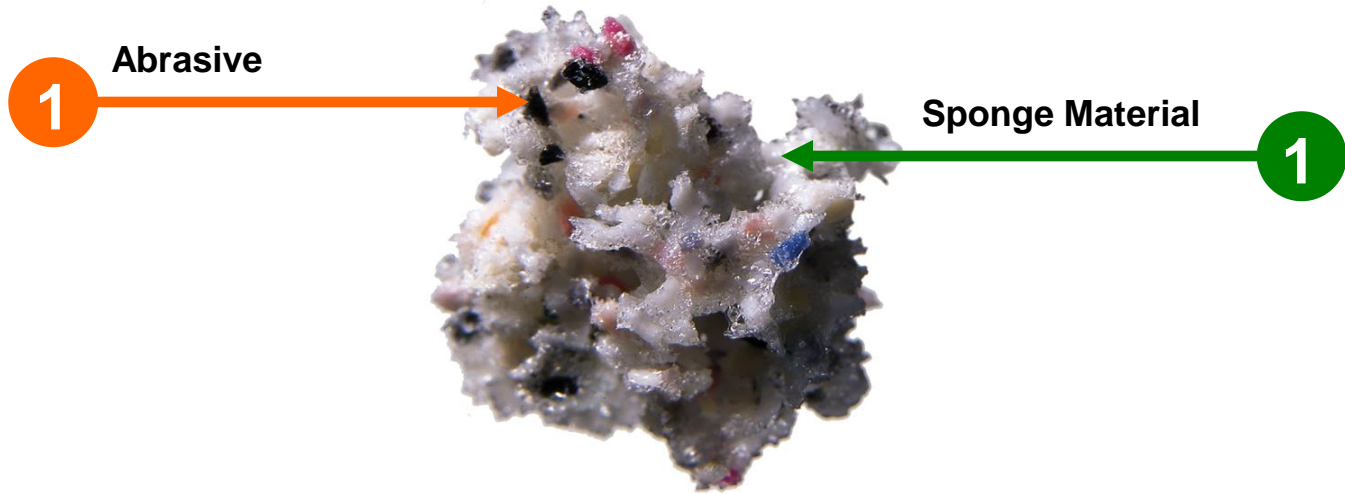
Comparison of Steel Grit, Steel Shot and Sponge

STEEL GRIT	STEEL SHOT	SPONGE
<p>Powerful Ricochet creates injuries and can drive fine metallic particles into Electrical components and other sensitive items.</p>	<p>Powerful Ricochet and the rolling balls creates both impact and worker slip injuries. Fine metallic shot creates conductive dust in Electrical components.</p>	<p>Bounce, soft rebound is safe for workers, no slip issue and minimizes likelihood of contamination or other damage of nearby equipment.</p>
<p>Metallic residue is cathodic to substrates and can lower coating Performance.</p>	<p>Metallic residue is cathodic to substrates and can lower coating Performance.</p>	<p>Ceramic abrasive and Urethane leave no cathodic residues on surfaces.</p>
<p>Angular finish but QC on managing break down of abrasive to insure consistent peak to valley profile.</p>	<p>Non Angular Profile. Compromises coating adhesion.</p>	<p>Angular finish with consistent peak to valley profile due to the continuous exposure of new virgin abrasives as the urethane breaks down.</p>
<p>Significant clean up time and weight to remove.</p>	<p>Significant clean up time and weight to remove.</p>	<p>Easily contained and removed via vacuum or blowing to collection points.</p>

Ordinary Blasting versus Sponge Media Blasting



Sponge Media Technology



Dramatically Reduce Airborne Emissions

Sponge Blasting




Ordinary Blasting





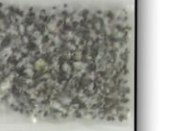







Sponge Blasting can reduce dust levels as much as 98% compared to ordinary abrasives

Profile 0 to 150+microns (0 to 6+mils)

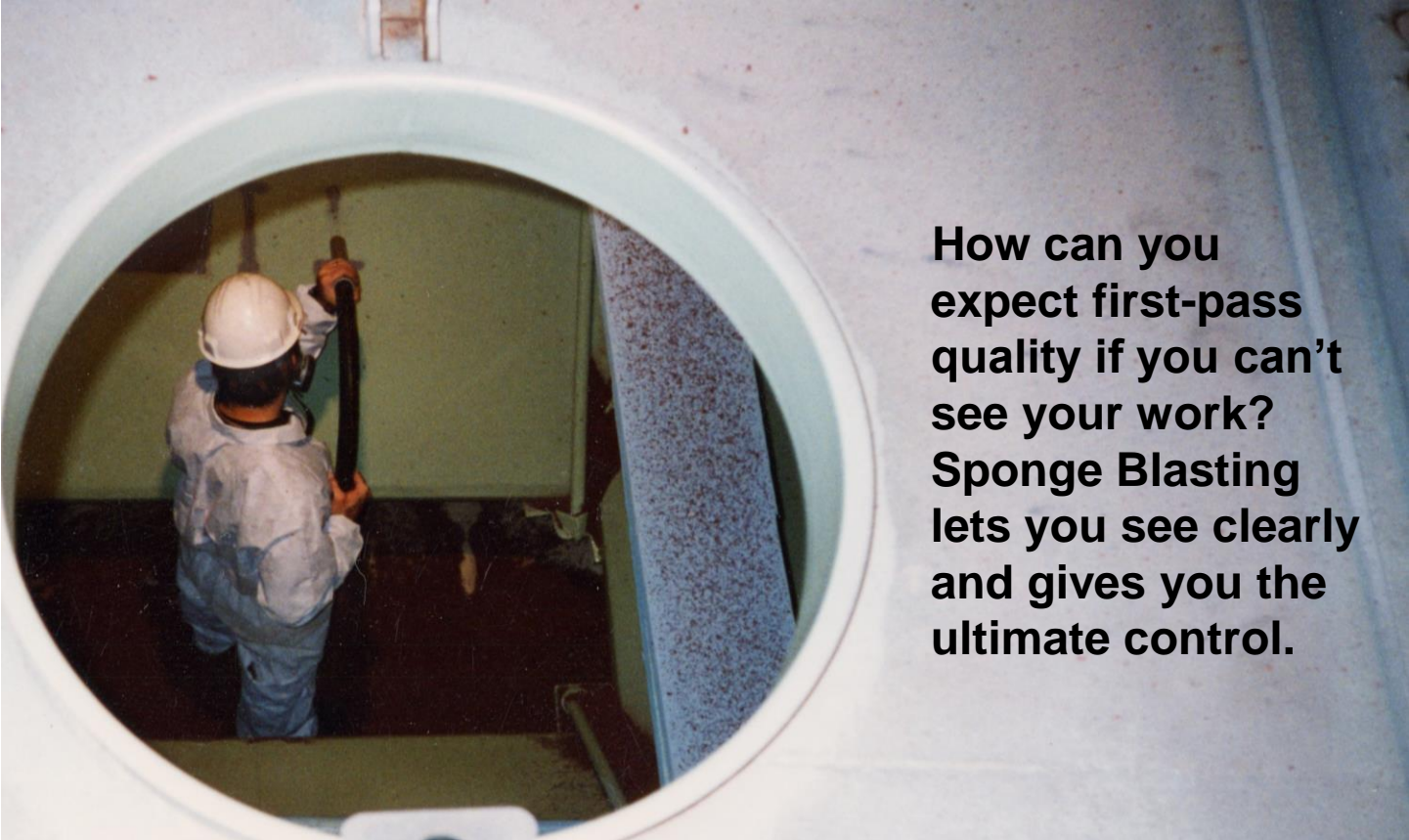
The Many Profiles of Sponge Media™



Silver 80 Sponge Media™	Silver Aero-Alox™ 320 Sponge Media™	Silver 60 Sponge Media™	Silver 30 Sponge Media™	Silver 16 Sponge Media™
				
				
<p>PROFILE (on Aluminum): ±62.5micron (±2.5mil) Blast Pressure: 3.4bar(50psi) ABRASIVE AGENT: 80-Grit Aluminum Oxide</p>	<p>PROFILE (on Steel): <12micron (<.5 mil) Blast Pressure: 5.5bar(80psi) ABRASIVE AGENT: 320-Grit Aluminum Oxide</p>	<p>PROFILE (on Steel): ±62.5micron (±2.5mil) Blast Pressure: 5.5bar(80psi) ABRASIVE AGENT: 60-Grit Aluminum Oxide</p>	<p>PROFILE (on Steel): ±75micron (±3 mil) Blast Pressure: 5.5bar(80psi) ABRASIVE AGENT: 30-Grit Aluminum Oxide</p>	<p>PROFILE (on Steel): ±100micron (±4 mil) Blast Pressure: 5.5bar(80psi) ABRASIVE AGENT: 16-Grit Aluminum Oxide</p>

To learn more visit [Sponge-Jet, Inc. at www.spongejet.com](http://www.spongejet.com); call 603-610-7950 or in Europe call +44-1253-390731

Virtually Eliminate Rework



How can you expect first-pass quality if you can't see your work? Sponge Blasting lets you see clearly and gives you the ultimate control.

Clean Abrasive Blasting Process

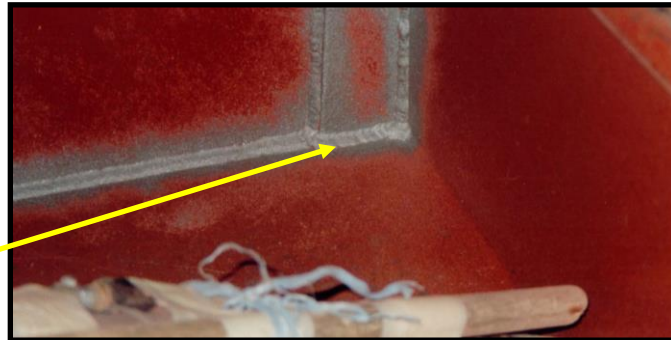
- Simplify surface preparation
- Blast in sensitive surroundings
- Reduce fatigue on the blaster
- Enjoy fast, easy clean-up



No Collateral Damage

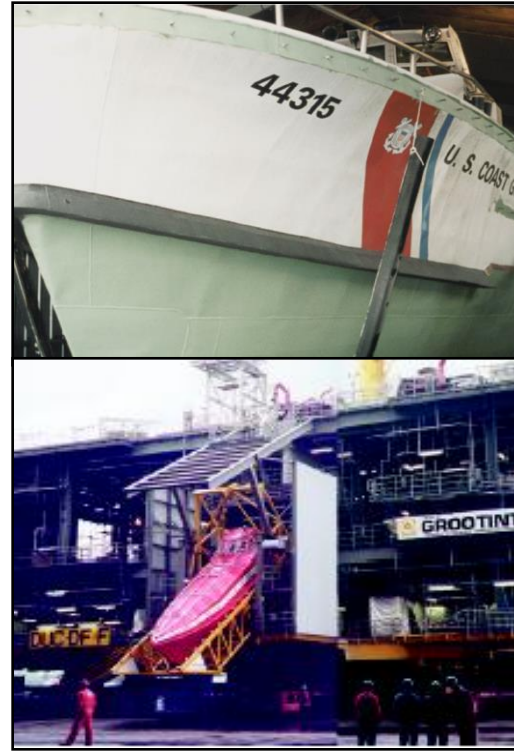
- ✓ Prepare weld seams and repair coating blisters
- ✓ Remove corrosion and coating products
- ✓ Clean the surface
- ✓ Produce the required profile
- ✓ Provide a smooth coating transition (*feathering*) without cracking or fracturing the surrounding intact coatings
- ✓ Blast around rotating equipment, electrical boxes, other trades
- ✓ Ergonomically sound

***White Metal Prep
Feathered into primer***



Potential Efficiency Gained with Sponge Blasting

- Cost Savings
- Improved Worker Safety
- Environmentally Proactive
- Reduced Manufacturing Time
- Reduced Labor Content
- Achieves “Best Practices” Status
- Technically Better Solution
- Controllable Production Tool
- Quality: Best in Class



Conclusion

Blast Where You Want...When You Want

For more information please contact
Sponge-Jet at 630-610-7950

Sponge-Jet, Inc.
14 Patterson Lane
Newington, NH 03801

Sjadmin@spongjet.com