Project 872

Overview:
- National Railway Equipment Company (NREC); largest independent locomotive manufacturer, remanufacturer and repair company in the world
- Searching for a cleaner, faster, cheaper way to abrasive blast locomotives

Objective:
- Remove decals, paint and corrosion
- Profile and achieve blast cleanliness level to specification
Sponge-Jet Replaces Coal Slag for Locomotive Restoration at National Railway Equipment Company

Size: 232m² (2,500ft²)
Substrate: Steel
Surface Condition: Rust, old worn labels and multiple layers of paint
Specified:
• Commercial Blast Cleaning NACE 3 / SSPC SP-6 / Sa2
Profile: 37.5micron(1.5mil)
Formerly Used:
• Coal slag
Used: 30 bags of Silver 80 Sponge Media™ abrasives, (2)100-HP Feed Unit™, (1) 35-E Sponge-Jet Recycler™
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Reasons for Using Sponge-Jet:
• Despite same blast time:
  (1) saves 1-day of labor
  (2) Sponge Media disposed in dumpster vs. dump-truck removal of coal slag

Coal Slag Process:
• Abrasive blast, move locomotive to new site; remove coal slag and dust
• Two workers, 1-day cleaning blast facility in preparation for next locomotive

Sponge-Jet Process:
• Sponge blast, 1-hour removing Sponge Media from locomotive
• Two workers spend additional hour, preparing blast facility for next locomotive
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REMOVAL RATE:
11-14m²/hour (120-150ft²/hour)
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TWO SPONGE-JET BLASTERS WORK CLOSELY TOGETHER

NEW SAFE-MAN™ PRODUCTIVITY SYSTEM
Sponge-Jet Replaces Coal Slag for Locomotive Restoration at National Railway Equipment Company

AFTER SPONGE-JET BLASTING
Sponge-Jet Replaces Coal Slag for Locomotive Restoration at National Railway Equipment Company

AFTER COAL SLAG BLASTING;
NOTE NECESSARY REWORK
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• **Result:**
  - Using Sponge Media abrasives decreased the total time in the blast facility by one day
  - Holding production consistent with coal slag, blasters exceed the specification (from Commercial Blast Cleaning to Near-White Blast Cleaning)
  - Reduction disposal cost

• **Outcome:** NREC has adopted the use of Sponge-Jet on all future locomotive repairs, remanufactures and new builds