Sidewall and Catwalk Restoration on Harper’s Ferry Class Dock Landing Ship

Project 819

- Sasebo Naval Base used by Japanese Maritime Self Defense Force and the United States Seventh Fleet
- Sidewall and catwalk restoration on vehicle deck on USS Carter Hall (LSD-50) Dock Landing Ship
- Problems with power tool surface preparation – missing deadlines

Application: removing military coatings

Project Size: 1,000m² (10,764ft²)
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• Sidewalls

186m (610 ft)

150m (490 ft)

• Catwalk

1.8m (6ft)

0.6m (2ft)

1m (3.2ft)
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Specified:
• SP10 / SA 2.5 / NACE 2
  Near-White Blast Cleaning

Deadline: 6 wks (9 hour days)

Used: Cup wire / disk grinders
• 20 workers scheduled
• Tight work area (could not fully accommodate enough grinders)
• Dark and dusty environment (in sidewall location)
• Power tooling was too slow .5m² (5.5ft²) per hour with three grinders

4 weeks in ⇒ hand grinding only completed 1/3 of the total job
Could not finish job on time and on budget - with 20 workers
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• To finish job (two options)...
• More grinders = more cost
• Change tool = what type?
• Sponge-Jet was selected to complete the project

Used:
(1) 100-HP Feed Unit
(1) 35-P Recycler
(1) #6 SaberBlast™ Nozzle
(1) 50 H.P. air compressor
(90 bags) Silver 30 Sponge Media™ abrasives recycled 7 times

Deadline: 2 wks (9 hour days)
Size: 700m² (7,535ft²)
• 5 workers scheduled
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Project completed on time and with savings using Sponge-Jet...

Comparing \((500m^2 [5,400ft^2])\) Power Tools Sponge-Jet

<table>
<thead>
<tr>
<th></th>
<th>Power Tools</th>
<th>Sponge-Jet</th>
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<tbody>
<tr>
<td>Workers</td>
<td>20@$200/7days/6wks</td>
<td>5@$200/6day/2wks</td>
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<tr>
<td></td>
<td>20x200x7x6= $168,000</td>
<td>5x200x7x2=$14,000</td>
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<tr>
<td>Equipment</td>
<td>n/a</td>
<td>Rental $250/7days/2wks</td>
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<td></td>
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<td>250x7x2=$3,500</td>
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<tr>
<td>Media</td>
<td>n/a</td>
<td>180 bags@$90/bag</td>
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<td>$16,200</td>
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<tr>
<td>Total</td>
<td>$168,000</td>
<td>$33,700</td>
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Sponge-Jet Saved \$134,300
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Outcome:

• Saved $134,300

• The Japan Coast Guard and Ministry of Defense adopted Sponge-Jet for all non-skid coatings
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New Sponge-Jet non-skid applications resulting from this project…