GripTight MAX® Test Plugs vs. Welded End Caps

Welding End Caps to Perform Pressure Testing of Piping Systems is a Costly Endeavor

GripTight MAX High Pressure Test Plugs cut down time and man-hours needed to perform pressure testing by eliminating the need to weld on/cut off end caps, allowing operators to self-perform pressure tests significantly faster.

- **Save Time & Money** — complete tests in 85-95% less time vs. welded end cap procedures, no hot work permitting required
- **Reduce Labor Costs** — No welding required, frees up welders to work on profitable projects
- **Increase Productivity** — complete six times more test packages weekly
- **Efficient** — GripTight MAX plugs are reusable, further extending return on investment

### Equipment Required to Install Test Plugs

- **Scaffolding**
- 1 - Crane (8” plugs and up)
- 1 - Forklift/Bobcat
- 1 - Fitter

### Equipment Required to Install Welded Test Caps

- **Scaffolding** (hoarding and heat may be required based on ambient temp)
- Pre-heat and PWHT equipment
- Cold cut equipment
- 1 - Crane (8” caps c/w 2’ pipe and up)
- 1 - Forklift/bobcat
- 1 - Clamshell (1 required for each pipe size)
- 1 - Welder (2 required on larger pipe sizes & wall thicknesses - 12” and up)
- 1 - Fitter/helper

### Typical Installation & Removal Times

<table>
<thead>
<tr>
<th>NPS (DN)</th>
<th>Schedule</th>
<th>GripTight Test Plugs</th>
<th>Welded Caps</th>
<th>Labor Hours Saved per Pipe End</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Personnel Required, Installation &amp; Removal Labor Hours, Total Labor Hours</td>
<td>Personnel Required (Welders &amp; Fitters), Installation &amp; Removal Labor Hours, Total Labor Hours</td>
<td></td>
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<tr>
<td>10” (DN250)</td>
<td>Std</td>
<td>1 fitter, 0.4, 0.4, 0.8</td>
<td>1-2, 5.6, 1.2</td>
<td>6.8, 6.0</td>
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<tr>
<td></td>
<td>Sch 120</td>
<td>1 fitter, 0.4, 0.4, 0.8</td>
<td>1-2, 16.6, 2.4</td>
<td>19.0, 18.2</td>
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<tr>
<td>20” (DN500)</td>
<td>Std</td>
<td>1 fitter, 0.7, 0.7, 1.4</td>
<td>2-3, 11.8, 3.2</td>
<td>15.0, 13.6</td>
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<tr>
<td></td>
<td>Sch 120</td>
<td>1 fitter, 0.7, 0.7, 1.4</td>
<td>2-3, 44.6, 6.2</td>
<td>50.8, 49.4</td>
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<tr>
<td>36” (DN900)</td>
<td>Std</td>
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<td>2-3, 26.6, 12.9</td>
<td>39.4, 37.4</td>
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<tr>
<td></td>
<td>Sch 40</td>
<td>1 fitter, 1, 1, 2</td>
<td>2-3, 30.7, 16.5</td>
<td>47.2, 45.2</td>
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