The Citadel Casing Solutions Stalwart™ Stage Tool is the go-to stage tool for multi-stage cementing. The DEVGRU team at Citadel focused on reliability, drillability, and cost-effectiveness when developing the tool. Available in plug operated (shown) or hydraulically operated configurations.

- **INDUSTRY FIRST:** API coupling OD stage tool – eliminating annular restriction concerns and impact on ECD
- **NO CLEAN OUT TRIP:** Same drift ID as the casing and PDC friendly internals eliminate a dedicated clean out trip
- **FASTER DRILLOUT:** Short overall length and minimized seat/plug material accelerate drillout
- **ENHANCED SAFETY:** Short length and reduced weight improves handling efficiency and safety on location
- **HD EDITION:** slightly larger OD and redundant seals to exceed casing burst, collapse, and tensile strength and is suitable for exposure to hydraulic fracturing operations

The DEVGRU team at Citadel Casing Solutions is ready and able to customize the exact solution for your unique operation.

For more information, contact Citadel Casing Solutions at:
info@casingequipment.com or sales@casingequipment.com

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**SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Standard Sizes</th>
<th>5.500, 7.000, 9.625</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opening Pressure</td>
<td>500 psi</td>
</tr>
<tr>
<td>Closing Pressure</td>
<td>1,000 psi</td>
</tr>
<tr>
<td>Total Port Flow Area</td>
<td>3.14 in² for 5.500, 4.91 in² for 7.000 – 9.625</td>
</tr>
</tbody>
</table>

1. Other sizes available at request
2. Approximations, actual pressures will vary slightly based on size.