

The T750 Sub-Surface Release (SSR) cementing plug system is a dual plug, dart released wiper plug system that gives operators a method of carrying out cementing operations from the surface with plugs installed at the seafloor or below surface. The T750 cementing plug set is installed into the top joint of a casing string, with the hanger and connected to the drill pipe connection. The assembly is lowered by drill pipe until the correct depth is reached. The well can now be circulated before cementing operations.

The bottom plug is released ahead of the cement by a wiper dart pumped down the drill string. The dart lands in the bottom plug and shears the bottom plug from the top plug allowing it to be pumped down the casing string. Once bumped on the float collar, pressure is increased to create a flow path to allow cementing operations to continue. After all the cement has been pumped, the top wiper dart is launched from the surface to wipe the drill pipe ID and release the top plug.

The drill pipe dart lands in the top plug and shears it away from the hanger and it is pumped down the casing while wiping the casing until it lands on top of the bottom plug, sealing off the casing string

Features & Customer Benefits

- For sizes 9-5/8" and larger
- Integrated Non-Rotating profile allows the plug to land on any flat surface and create a mechanical lock between plug and casing ID
- Bore through plugs reduces surge pressures when run in conjunction with Large-Bore Auto-Fill float equipment
- Pressure-equalization valves prevent premature plug release due to pressure buildup
- Collet provides additional mechanism to prevent premature plug release
- Patent Pending internal cementing sleeve provides cementation through the Bottom Plug



PRODUCT LINE

Well Construction | Cementing Plugs

PRODUCT

Sub-Surface Release Cementing Plug System



T750 - SSR (Sub-Surface Release Plug System)

| Plug Size (inches) | 9-5/8 | 9-7/8* | 10-3/4 | 11-3/4 | 11-7/8** | 12-3/4 | 13-3/8 | 13-5/8*** | 14*** | 16 |
|--|---|---------------|----------------|-----------------|----------|-----------------|-----------------|-----------|-----------------|-----------------|
| Casing Weight (lbs/ft) | 36.0 - 53.5 | 62.8 - 68.8 | 32.75 - 51.0 | 42.0 - 60.0 | 71.8 | 43.0 - 51.15 | 48.0 - 72.0 | 88.2 | 94.8 - 114.0 | 65.0 - 95.0 |
| Plug Set OD (In) | 9.52 | 9.52 | 10.25 | 11.34 | 11.34 | 12.38 | 12.80 | 12.80 | 12.80 | 15.55 |
| Wiping Range (Casing ID - In) | 8.921 - 8.535 | 8.625 - 8.475 | 10.192 - 9.850 | 11.084 - 10.772 | 10.711 | 12.130 - 12.000 | 12.715 - 12.347 | 12.375 | 12.688 - 12.382 | 15.250 - 14.868 |
| Wiper Dart Size (Drill pipe Size) | 5" - 6-5/8" | | | | | | | | | |
| Bottom Plug Launch Pressure (psi) | 1,000 - 1,200 | | | | | | | | | |
| Cementing Sleeve Shear Pressure (psi) | 1,800 - 2,000 | | | | | | | | | |
| Top Plug Launch Pressure (psi) | 1,600 - 2,000 | | | | | | | | | |
| Max Plug Bump Pressure (psi) | 6,500 @ 250°F | | | | | | | | | |
| Minimum Plug ID (in) | 2.300 | | | | | | | | | |
| Minimum Flow Area (in ²) | 4.153 | | | | | | | | | |
| Maximum Rigid-dart Diameter (in) | 2.43 | | | | | | | | | |
| Flow Endurance (bbl/min) | 18 for 16hrs (Prior to Plug Functioning) **** | | | | | | | | | |
| Max Operating Temperature (°F) | 400° | | | | | | | | | |
| Equalizer Valve Crack Pressure (psi) | 60-100 | | | | | | | | | |
| Equalizer/Crossover Max OD (In) | 6.375 | | | | | | | | | |

* Utilize 9-5/8" Plug

** Utilize 11-3/4" Plug

*** Utilize 13-3/8" Plug

**** 12.0-12.5 ppg mud w/ 2-4% sand content