

I-Wheel[®] Tandem Sub

Conveys perforating gun assemblies into highly deviated wellbores using friction-reducing I-Wheel technology

Applications

- Cased-hole
- Perforating

Features and Benefits

- Inline roller system assists conveyance, reducing modelled friction by up to 80% and enabling deployment of longer and heavier perforating gun assemblies in deviated wells
- Perforating gun threads compatible with industry standard perforating equipment and all industry standard gun systems, enabling multiple subs to be placed anywhere in gun string
- Optional port to access detonating cord and switch, ensuring low maintenance requirements

Tool Description

The Weatherford I-Wheel tandem sub is an inline conveyance solution designed to replace perforating tandem subs with a rollerized design that minimizes friction and allows explosives to reach further in deviated wells.

The custom engineered sub is specifically designed to facilitate the deployment of the patented I-Wheel tandem sub in perforating gun strings. It features perforating gun thread connections and a profile to suit the I-Wheel.

The I-Wheel tandem sub is efficient, consistent, and reliable in highly deviated wells up to 84°. It can be placed above, below, or between gun sections, with the detonating cord run through the mandrel. The entire gun assembly is lifted onto highly efficient rollers, eliminating modeled contact friction by up to 80% and allowing easier and deeper wellbore access without the need for wireline tractors.

When used in combination with an eccentric weight bar, the tandem sub significantly reduces the torque required to orient the string.

Tandem subs are available in a wide range of sizes and can be ordered with a choice of connection types.



I-Wheel[®] Tandem Sub

Environmental Specifications

Maximum temperature	450°F (232°C)
Maximum pressure	25,000 psi (172 MPa)
Material hub/wheel	17-4 PH/H1150 Stainless Steel

Mechanical Specifications

Tandem sub OD	2.75 in. (70 mm)	2.875 in. (73 mm)	3.125 in. (79 mm)	3.375 in. (86 mm)	4.500 in. (114 mm)
I-Wheel hub OD	2.875 in. (73 mm)			3.375 in. (86 mm)	4.500 in. (114 mm)
Wheel size	Wheel size and operation dependent on tool OD and tubing/casing restrictions				

Custom-engineered sizes and connections available upon request to suit customer requirements.

