



COUGAR SHOCK TOOL PRODUCT TECHNICAL SHEET



ST5 Shock Tool

The Cougar Drilling Solutions ST5 Shock Tool is designed for a wide range of drilling conditions. Deep, hot and deviated wells can all be drilled efficiently – from spud to T.D.

ST5 Benefits

- Increased bit life
- Increased penetration rate, by ensuring optimum bit weight and RPM
- Minimization of hole deviation by dampening transient loads and controlling net forces at the bit
- Lengthened drill string component life by reducing cyclic loading
- Reduced rig floor maintenance costs by reducing vibrations at the surface

ST5 Shock Tool placement

For optimal tool performance, the Cougar DS ST5 Shock Tool should be placed just above the bit to minimize the amount of un-sprung mass below the tool. Please note: Improper location in the bottom hole assembly can cause severe damage to the shock tool. The Cougar DS ST5 Shock Tool should be placed where it is exposed to minimum side loading or bending stress. The shock tool should have the equivalent amount of stabilization on either end. If it is stabilized at the lower connection, there should be stabilization within 30 ft. of the upper connection.

Operating Features

The Cougar DS Shock Tool's unique Belleville spring arrangement allows for spring rates tailored to specific applications. The shock tool is supplied with a standard spring configuration to ensure optimum performance with typical tool placement, and drill bit configurations. The Cougar DS ST5 Shock Tool can be supplied with a spring arrangement specifically tailored to PDC bit usage. A PDC bit spring configuration is a special arrangement of the Belleville spring at the time of tool service, but can be supplied in any size of Cougar DS shock tools.





COUGAR SHOCK TOOL PRODUCT TECHNICAL SHEET



Quality

The Cougar DS ST5 Shock Tool is designed and constructed to withstand high temperatures, high torques, H2S, CO2 and other corrosive materials and environments.

- Tool joints and API body connections are relieved of stress using a modified API relief groove on pin connections. All threads are treated with an anti-corrosion and anti-galling coating.
- The use of Computer Aided Design (CAD), Finite Element Analysis (FEA) and Computer Aided Manufacturing (CAM) enhance the performance of the ST5. CAD and FEA provide the highest standards of design geometry and accuracy. CAM ensures the high quality and repeatability of precision manufacturing required for today's extreme drilling applications.

Get the Job Done Right

When drilling gets rough, you need a tool that isolates the drill string and keeps the bit on the bottom. You need the Cougar DS ST5 Steel Spring Shock Tool. Whether you're running the ST5 in deep, hot, deviated or normal wells, the shock tool's innovative spring design dampens vibration in even the harshest conditions.

Premium Tools for Tough Jobs

We use the highest-grade steel available. Every Cougar DS tool passes magnetic particle inspection, and performance tests before leaving our shop. We ensure complete traceability by documenting and logging all manufacturing, testing and inspection processes.

OD (in.)	ID (in.)	Approx. Shipping Weight (lb.)	Length (ft.)	Piston Area (in.)	Ported Piston Area (in.)	Max Torque (ft. lb.)	Stroke (in.)
4 3/4"	1.422	550	12	11	1.9	17,000	3
6 1/2"	2.281	1,000	12	18.6	2.3	40,000	3
8"	2 1/2"	1,500	12	30.7	5	68,000	3.125
9 1/2"	2 13/16"	1,900	12.5	41.3	7.7	93,000	3.125
12"	3	4,500	15.75	70.9	15.9	175,000	4

The information on this specification sheet is provided for illustration purposes only and has been extracted from information available from the manufacturer and other public domain sources. TASMAN accepts no responsibility or liability to any party for the accuracy of the technical information provided or any error, omission or misstatement. The reader is fully expected to make independent enquiry and to rely on their own skill and judgment in evaluating whether any particular equipment is suitable. TASMAN OIL TOOLS

