



TORQUE SAVER

TORSIONAL DAMPENER

The Torque Saver is a unique downhole tool designed to mitigate torsional shocks. Unlike traditional shock tools, both axial and torsional, the Torque Saver doesn't utilize metal springs. It uses fluid chambers to mechanically decouple the transmission of torque thru the tool. In practice, this hydrodynamic coupling acts a dampener, where the tool absorbs the torsional spikes, and slowly allows the steady state to return, without any harsh metal to metal shocks.

When the tool receives a torsional spike, it contracts axially, slightly reducing effective WOB, allowing the Bit to unload to match the available energy at the bit. This instantaneous matching of loads acts to reduce both stick slip and torsional oscillations and shocks derived from the Bit to Rock interface. This tool can be used in conjunction with the Drill Saver to minimize axial vibrations and shocks.

SPECIFICATIONS:

TOOL OD	5.25"
TOOL ID	1.9"
RECOMMENDED OPERATING RANGE	3,500 –13,000 Ft-lbs
MAX OPERATING TORQUE	15,000 Ft-lbs