



**WESTERN
OILFIELD
SPECIALTIES CORP.**

"Sales, Service and Reliability 24 hours a day – everyday"

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Are you having repeated sucker rod failures due to fatigue? It has been documented in an SPE paper, the DCI shock absorber can reduce the rod fatigue stress. This is done by decreasing the peak polished rod load and increasing the minimum polished rod load. It has also been documented the DCI shock absorber reduces energy consumption and gearbox torque. If additional production is desired, generally the pumping speed can be increased by 1 to 1.5 spm when using the DCI shock absorber. This device is simple to install and does not require a service rig for installation.

How it Works

Failures in the rod pumping system typically are due to the cyclic load stresses that occur during each stroke. During a stroke cycle, the system experiences a low peak polished rod load (PPRL) during the down stroke and a high PPRL during the up stroke. The shock absorber decreases the difference between the minimum and maximum polished rod loads and therefore reduces the metal fatigue. Each unit uses elastomer discs to carry the polished rod load. The discs are available in various durometer hardness and our qualified staff determine the combination of discs required to carry the PPRL load.

The assembly is installed over the polished rod between the polished rod clamp and the carrier bar. There are two sizes available. For PPRL up to 20,000 lb. the Four Disc unit is recommended. For PPRL over 20,000 lb. and up to 50,000 lb. the Five Disc unit is recommended.

These units are totally self contained and require no power to operate.

Applications

The shock absorber is ideal for use on wells that experience repeated rod failures due to rod fatigue, On/Off tool failures or wells where the pumping unit gearbox is overloaded. The shock can be used in conjunction with load cells and rod rotators. The shock absorber can operate in temperatures of -40°C to +50°C.



Four Disc



Five Disc

DCI SHOCK ABSORBER