Clamp On Anti-Vibration System (CAVS)

Increase the rigidity of your PC Pump with CAVS to dramatically reduce vibrations

- Dangerous vibrations are caused by operating near the natural frequency of the pump system or any of its harmonics. These vibrations lead to tubing breaks resulting in costly workover, tubing replacement and lost production.
- Evolution has developed technology to eliminate the majority of vibration at the pump by firmly supporting the stator against the casing using the new CAVS.
- Evolution can calculate the natural frequency of a pumping system to determine the number of CAVS required on the pump to ensure the natural frequency is above the maximum rod speed (500 rpm as default). Pump OD, ID and length are required.

Recommended Setup

EOT E-Swivel **3 or more NEW CAVS** **EOT Advanced Torque Anchor (ATA)**

- The table below is an example based on a 4” diameter stator 37 feet long.
- Two supports using an AVS on top and a CATA below the pump works well for shorter or stiffer pumps but is inadequate for this pump model. With so many harmonics, it’s inevitable that operating speed will be close to a harmonic. To keep natural frequency safely above a maximum pump speed of 500 rpm requires 5 CAVS.

Number of Supports	2 Legacy	3	4	5 Recommended
Rod Speed at Natural Frequency (rpm)	55	200	420	655
Operating Speeds of Concern (rpm)	55, 110, 165, 220, 275, 330, 385, 440, 495	200, 400	420	None

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Patent Pending

June 2024 – Rev. E1