

## **Pros and cons of various coupling types for reciprocating compressor installations**

Various coupling types are used for reciprocating compressor installations like rubber-in-shear (high-flexible couplings), rubber-in-compression, metal-disc, diaphragm and rigid flange couplings. They all have their individual advantages - otherwise they would not exist - however, experience shows that some types bear much higher risks in terms of drive train vibration problems than others.

This report compares common coupling types on the basis of many years of experience. It evaluates different aspects but has a special focus on torsional vibration issues like height of natural frequencies, reliability of stiffness values and load capacity.

Klaus Hoff, Gerhard Knop, Neuman & Esser