



## Abstract

### Session 33: Design & Engineering II

#### Author

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#### Title

**33-2: Presentation of design versions of piston rods in reciprocating compressors**

#### Abstract

The piston rod is an essential part in a reciprocating compressor. It has to transmit the forces which are necessary for the compression of the gas and the forces which arise from the acceleration and deceleration of the piston. The connection between piston rod and piston as well as between piston rod and crosshead rank among the technically highly stressed connections within a compressor. At the same time, the existing pressure in the compression chamber is reduced at the surface of the piston rod to atmospheric or flare pressure.

The lecture shall present the calculation, design and various possibilities of fastenings at the crosshead and at the piston. In addition, the selection of materials and surface coatings will be discussed and practical experience with already applied coatings .