



## Abstract

### Session 31: Design & Engineering I

#### Author

Lau Koop  
Thomassen Compression Systems B.V.  
Rheden. The Netherlands

#### Title

**31-1: The erection of very heavy 4- and 6-cylinder reciprocating compressors**

#### Summary

The tendency in the application of Hydrogen compressors is that the drive power is increasing to values more than 10,000 kW. The expectation is that it can rise to even 20,000kW. The total weight inclusive driver can be around 200 tons.

The compressors used for these applications have physical dimensions and weights, where in the installation and alignment phase special know how is required to obtain a stable and well aligned drive train.

In this paper the following points of special interest will be highlighted

The foundation loads:

- Static and dynamic, weights and free forces and moments
- Compressor and driver starting torques
- Erection of the compressor and driver
- Sole plates
- Hoisting
- Alignment
- Commissioning
- Vibrations
- Vibration measurements frame
- Vibration measurements cross head guide