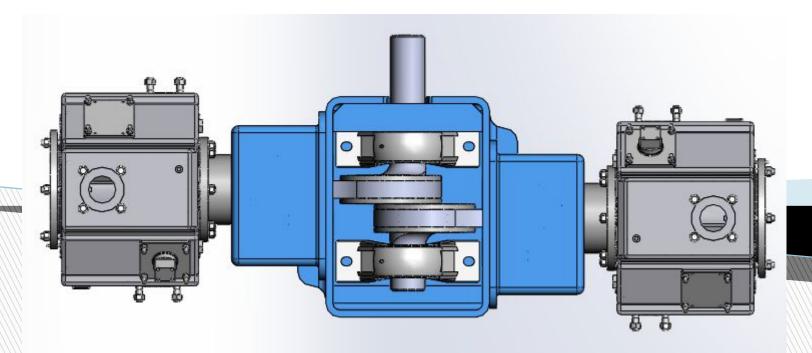


COMPRESSOR FUNCTIONAL DESIGN PREVIEW





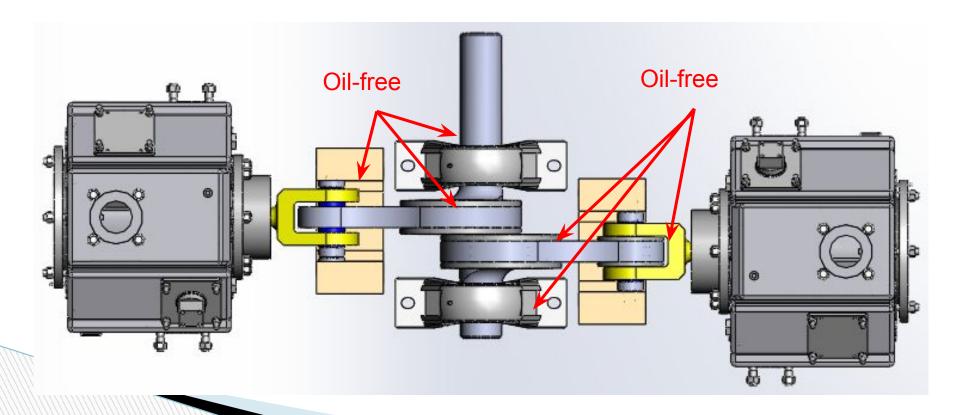
Functional design

- ? This document illustrates the key features of the compressor
- ? The following slides shows the most innovative elements of the compressor design.
- ? Note that this is a functional representation of the compressor components. The detailed constructive design will be provided.



Key features

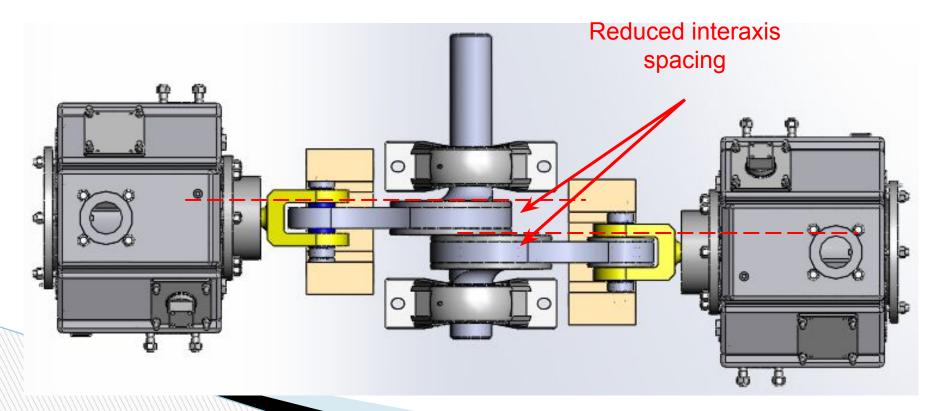
- ? The key features of the architecture are the following:
 - 1. Oil free main bearings, connecting rod and crosshead





Key features

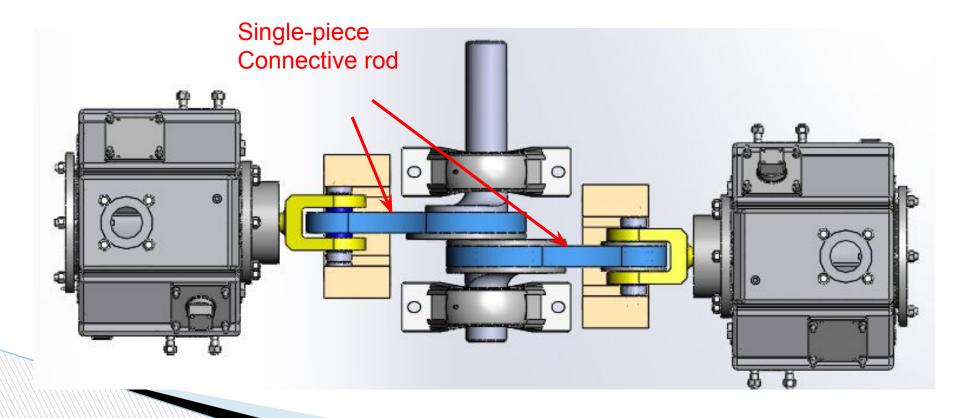
- ? The key features of the architecture are the following:
 - 2. Compact lobe-based crankshaft
 - 3. Considerable reduction of cylinders' center to center distance.





Key features

- ? The key features of the architecture are the following:
 - 4. Single-piece connecting rod with no tie-rods.





Overall performances

- ? Details of the crankshaft
 - Stroke: 100 mm
 - Connecting rod length: 305mm
- ? The main performances of the compressor at a rotation speed of 1800 rpm are the following:
 - Mean power per cylinder: 250 kW
 - Maximum piston speed: 9,5 m/s
 - Maximum rod load: 90000 kN



Thanks for your attention

