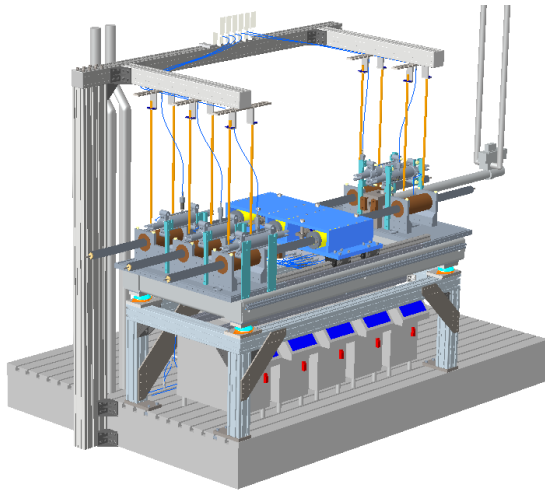
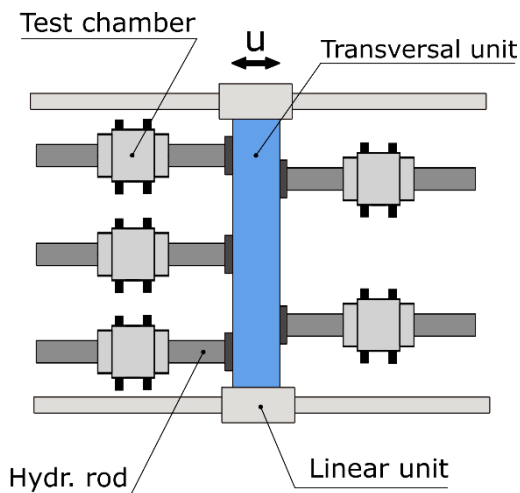


# Endurance Test Bench for Hydraulic Rod Seals

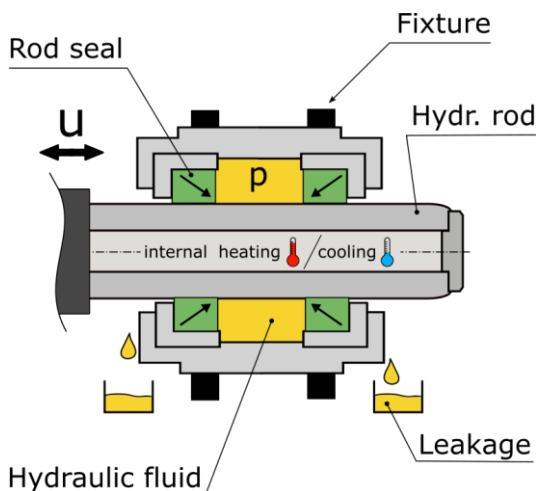
IMA-TechSheet #101100 V3



*Schematic of the test bench*



*Arrangement of the test chambers*



*Schematic of a single test chamber*

## Description:

- Multi-chamber test bench for the investigation of hydraulic rod seals
- Modular design with up to 5 hydraulic rods and 10 seals
- Short-term tests and endurance tests with individual operating conditions
- Analysis of ...
  - Friction
  - Leakage
  - Pumping rate
  - Wear
  - Pressure between sealing rings
- Use of different sealing rings and sealing systems with or without wipers
- Use of different hydraulic oils (mineral oil, ester, water-glycol, silicone oil)
- Use of hydraulic rods with different coatings, surface roughness and according various specifications
- Adjustable temperatures of the rod and oil

## Technical Data:

Rod speed:	0 ... 1000	mm/s
Operating pressure:	0 ... 450	bar
Rod diameter:	∅ 50	mm
Stroke length:	0 ... 1000	mm
Temperature:	15 ... 100	°C
Hydraulic rods:	as required	
Hydraulic fluid:	as required	

## Available Test Methods:

- Analysis of the influence of a rod's surface roughness on leakage, friction and wear
- Comparison of leakage, friction and wear of different sealing rings at certain operating conditions
- Compatibility tests for different seal-fluid combinations at high temperatures and practical relevant operating conditions