

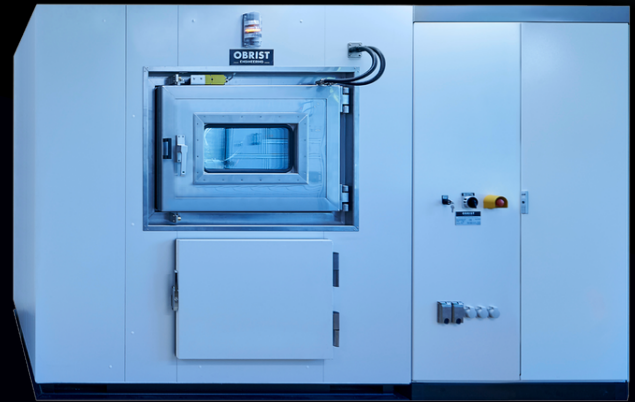
# Test Rigs

## AUTOMATED TESTING SOLUTIONS FOR COMPRESSOR DEVELOPMENT

### Efficient Compressor Testing

Our Test Rigs are fully automated systems designed to support the development and testing of A/C and heat pump compressors. Durability testing, and performance benchmarking, providing high dynamic simulation through their integrated hot gas cycle.

They accommodate a variety of refrigerants, including R744 (CO<sub>2</sub>), R290 (Propane), R1234yf & R134a, along with customer-specific requirements.



### Benefits

#### Versatility

Compatible with multiple refrigerants

#### Dynamic Testing

The hot gas cycle simulates realistic conditions

#### Comprehensive Data

Offers reliable data for both engineering optimization and durability validation

#### Efficiency

Automated operations, minimal human intervention, reducing labor costs

#### Reduced Costs

By renting our testing capability avoid the high initial costs of purchasing and maintaining your own

### Technical Specifications

#### Pressure Range

- High pressure : 40 to 150bar
- Low pressure: 10 to 50bar
- Superheat: 0 to 50 K
- Refrigerant massflow: 20 to 500 kg/h

#### Compressor Environment

- Air Speed: 2 to 8 m/s (VDA standard 6 m/s)
- Temperature : -30°C to 125°C

#### Mechanical drivetrain

- Magnetic clutch :12 V / 24 V
- Rotation Speed: 0 to 12000 rpm

#### Software

Labview

#### Electrical Supply

Power Unit 0 - 500 V / 0-60 A / mx. 15kW

#### Infrastructure

- Brine volume flow: 20-40 l/min
- Brine temperature: 3 - 9° C
- Brine cycle T° stability: ± 0,5 K
- Main supply: 2 x 32 A, 380 VAC / 60 Hz