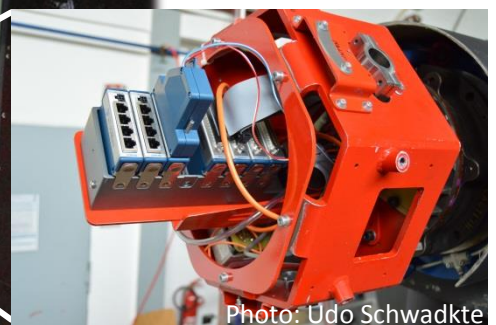
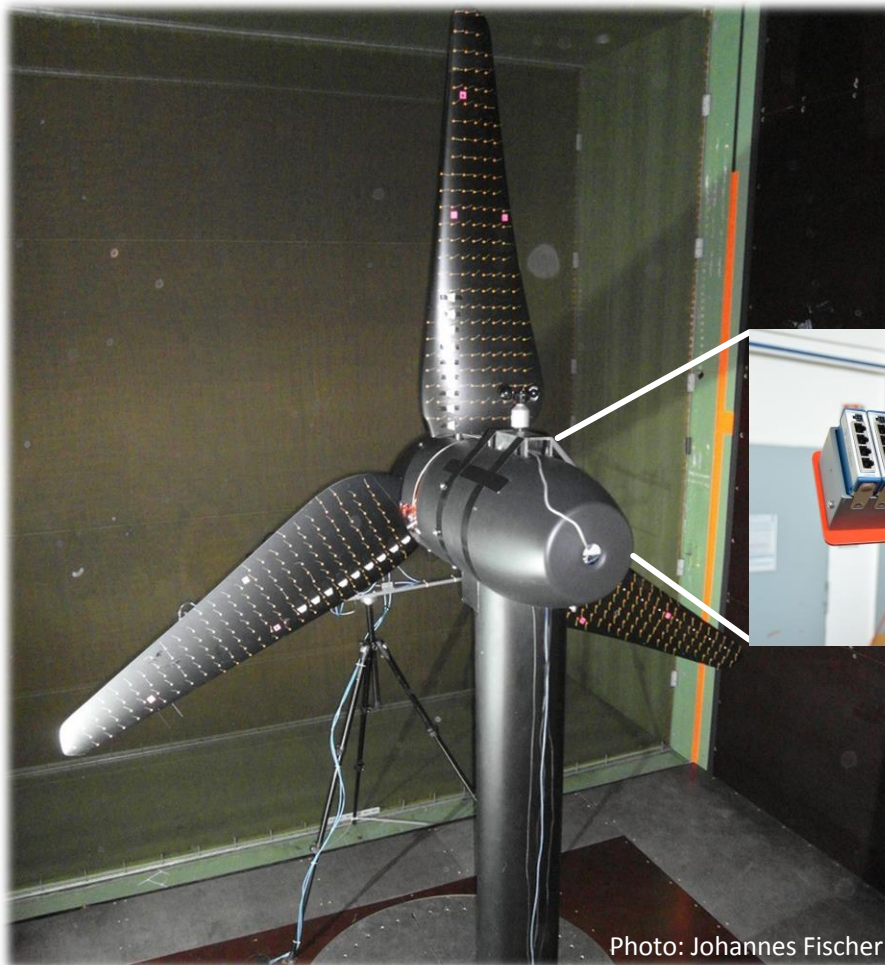


Berlin Research Turbine (BeRT)



SMART BLADE[®]

DFG

Hardware components:

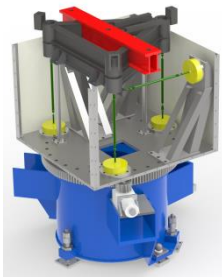
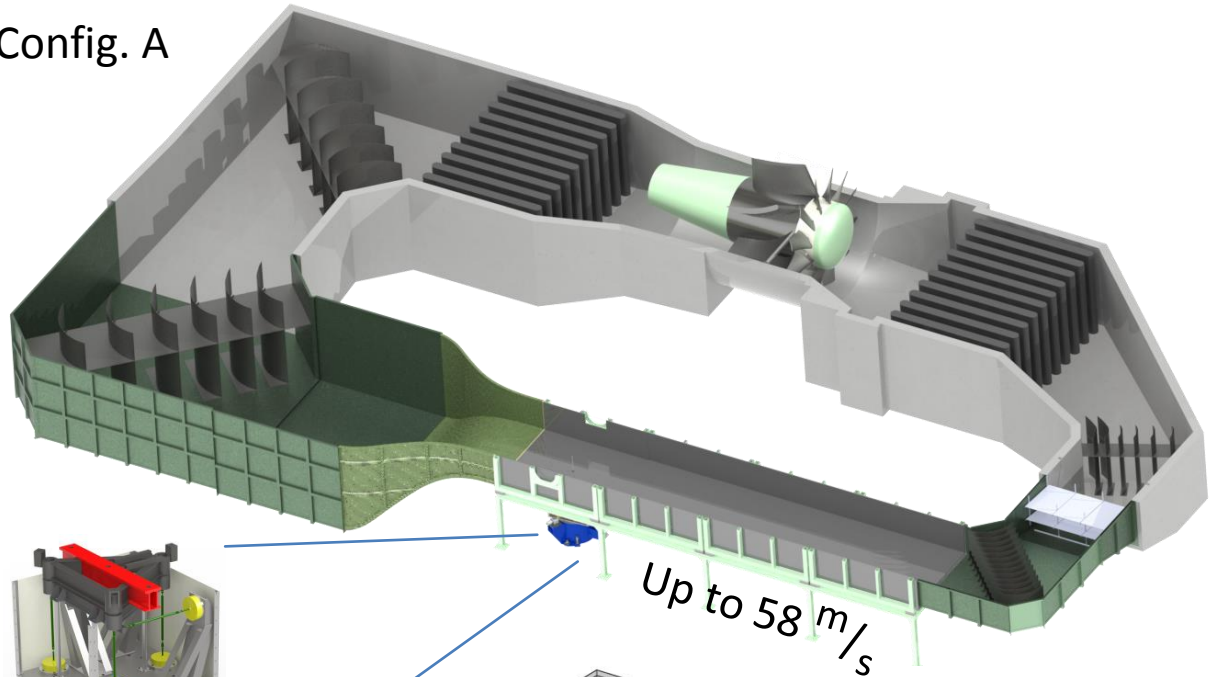
- cRIO-9068
- cDAQ-9188
- AI, AO, DIO, PWM, strain gages

Setup is based on:

- NI LabVIEW™
- NI LabVIEW™ Real-Time Module
- NI LabVIEW™ FPGA Module

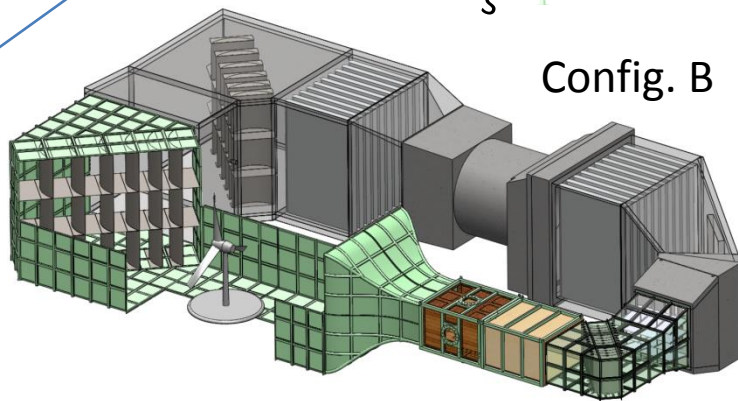
GroWiKa Wind Tunnel

Config. A



6 component
balance

Config. B



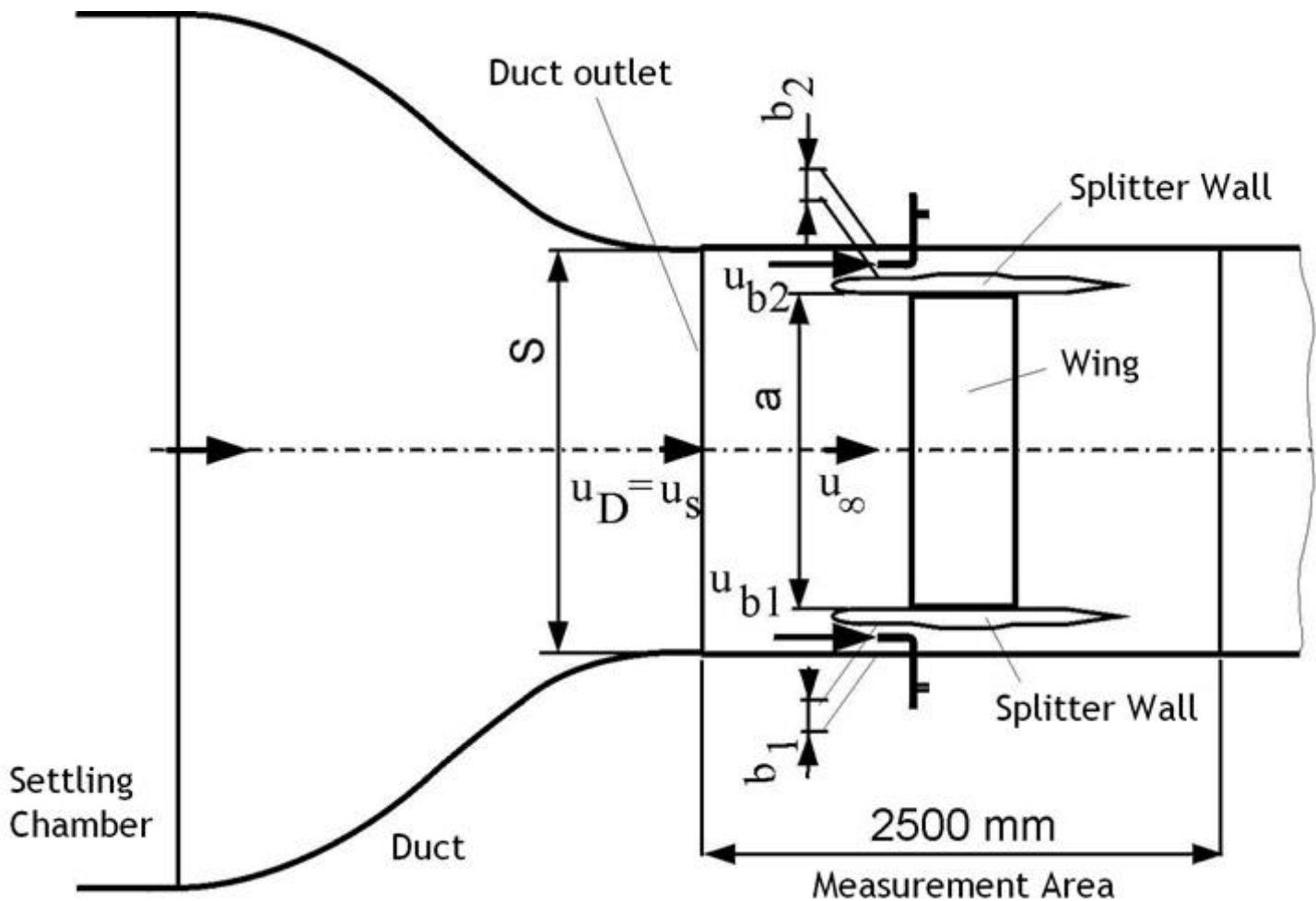
Hardware components:

- cDAQ-9178
- 500 kW fan motor
- 6 component balance
- AI, temperature, strain gages

Setup is based on:

- NI LabVIEW™
- TCP/IP, GBIP
- RS232, ModBus

2D Airfoil Testing



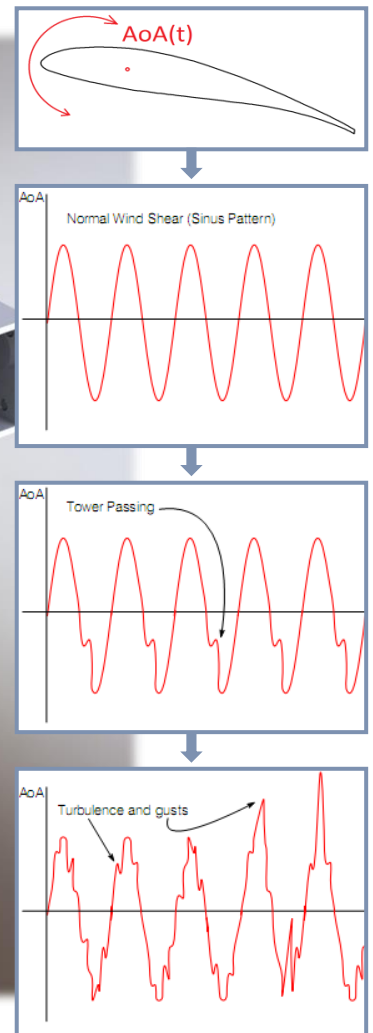
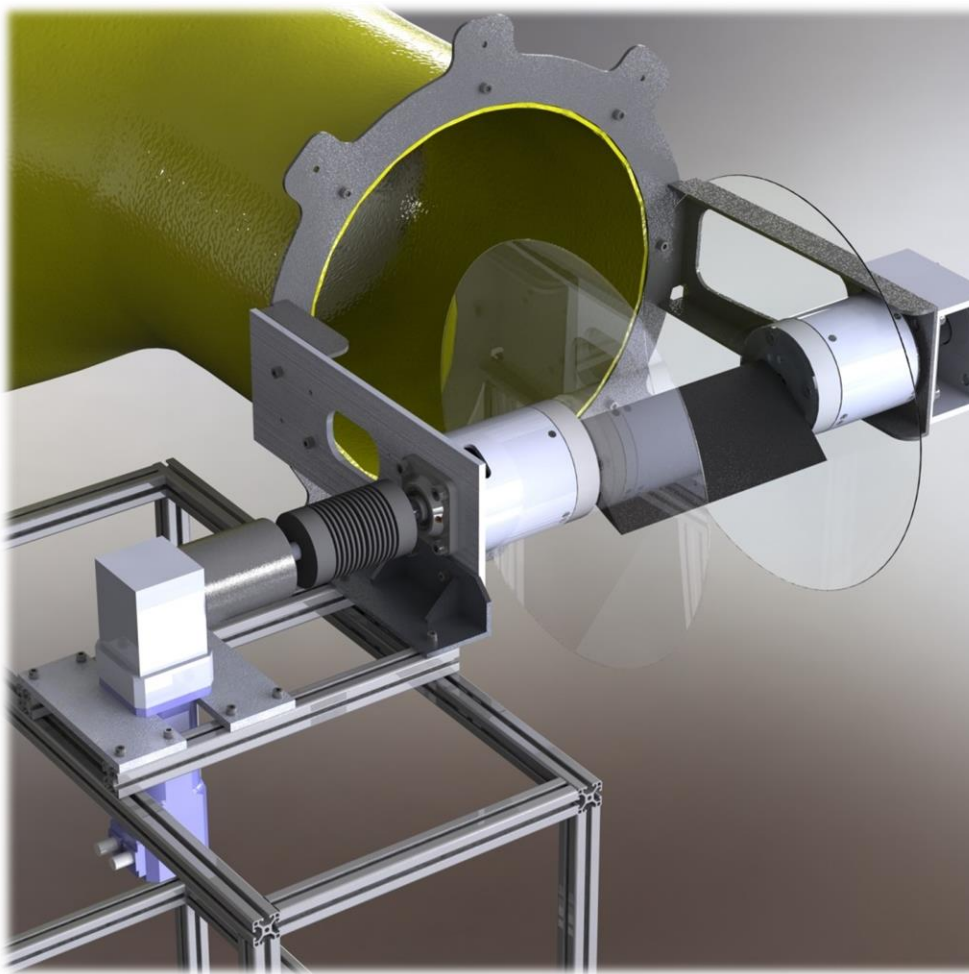
Hardware components:

- cDAQ-9188
- Motor controlled angle
- 3 component balance
- AI, temperature, strain gages

Setup is based on:

- NI LabVIEW™
- TCP/IP, GBIP, ModBus
- RS 232, RS 485

Dynamic Airfoil Testing



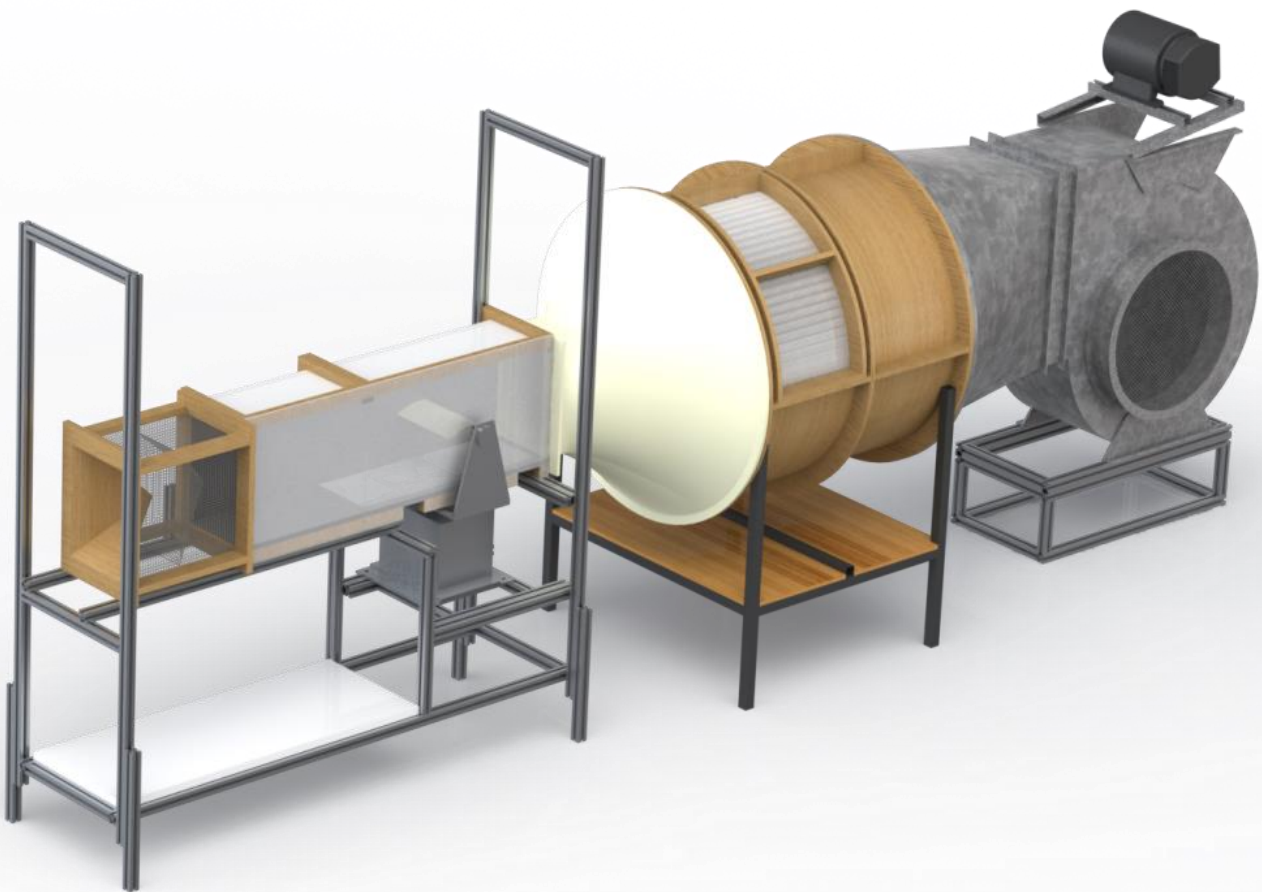
Hardware components:

- cRIO-9068
- cDAQ-9188
- AI, AO, RTD
- High Speed DIO

Setup is based on:

- NI LabVIEW™
- NI LabVIEW™ Real-Time Module
- NI LabVIEW™ FPGA Module
- CAN, TCP/IP, RS232

Eiffel Type Wind Tunnel



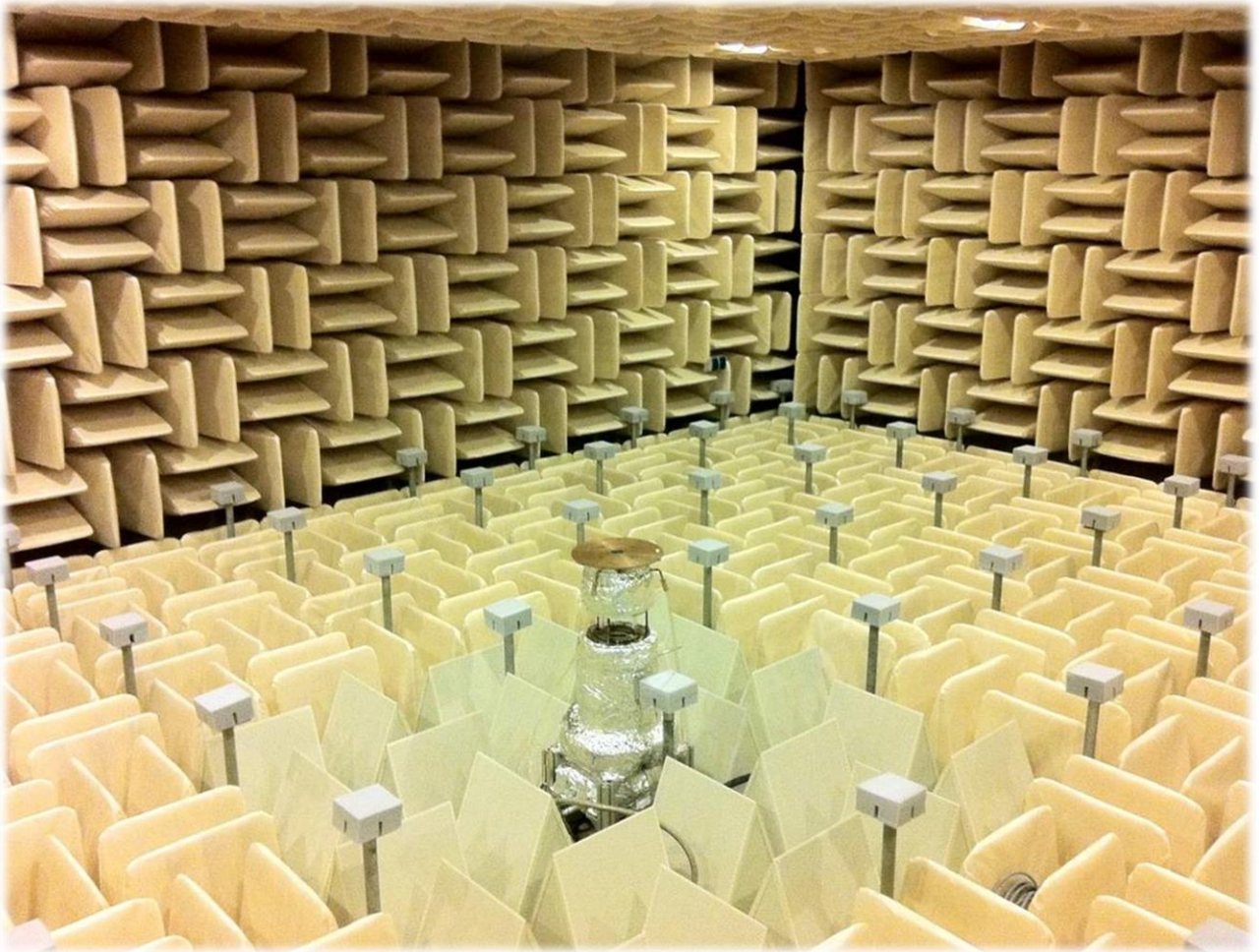
Hardware components:

- cDAQ-9188
- 3 kW fan motor
- 3 component balance
- AI, temperature, strain gages

Setup is based on:

- NI LabVIEW™
- TCP/IP, GBIP
- RS232, ModBus

Flame Acoustics



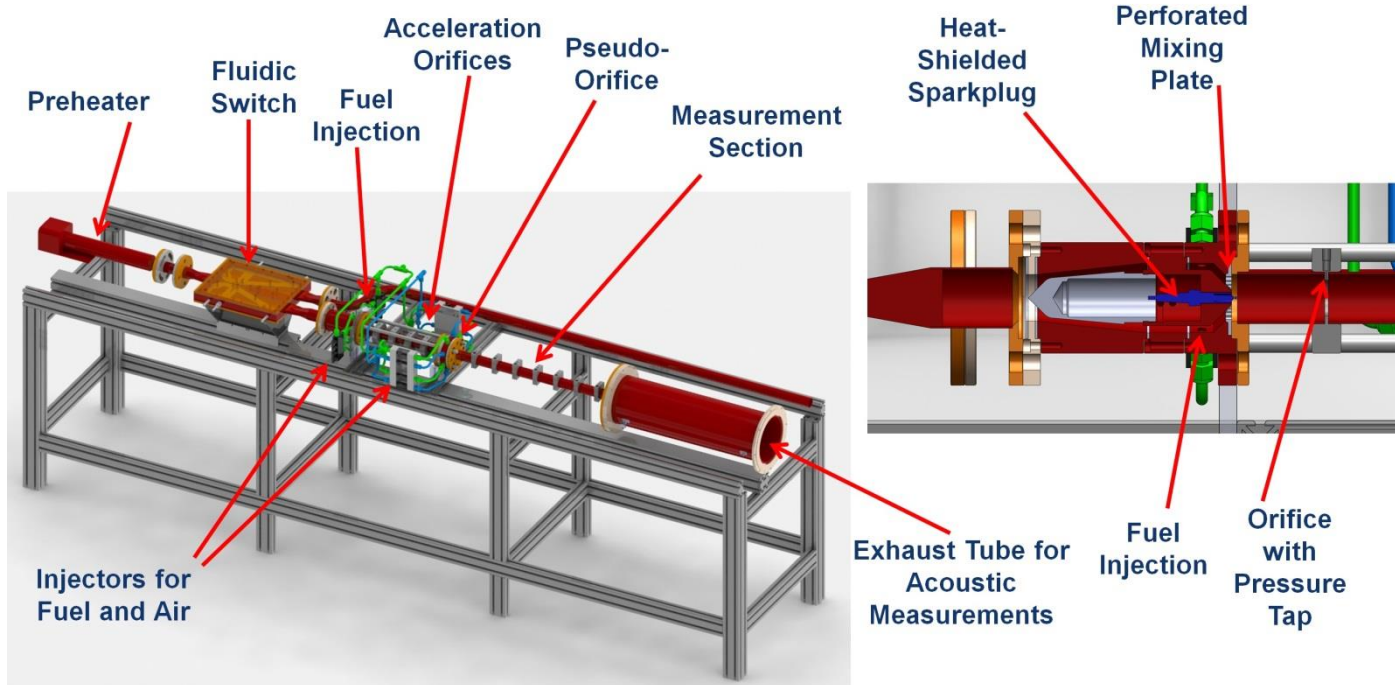
Hardware components:

- cDAQ-9188
- TCP/IP, RS232
- AI, Temperature, AO, DIO

Setup is based on:

- NI LabVIEW™

Pulsed Detonation Combustion



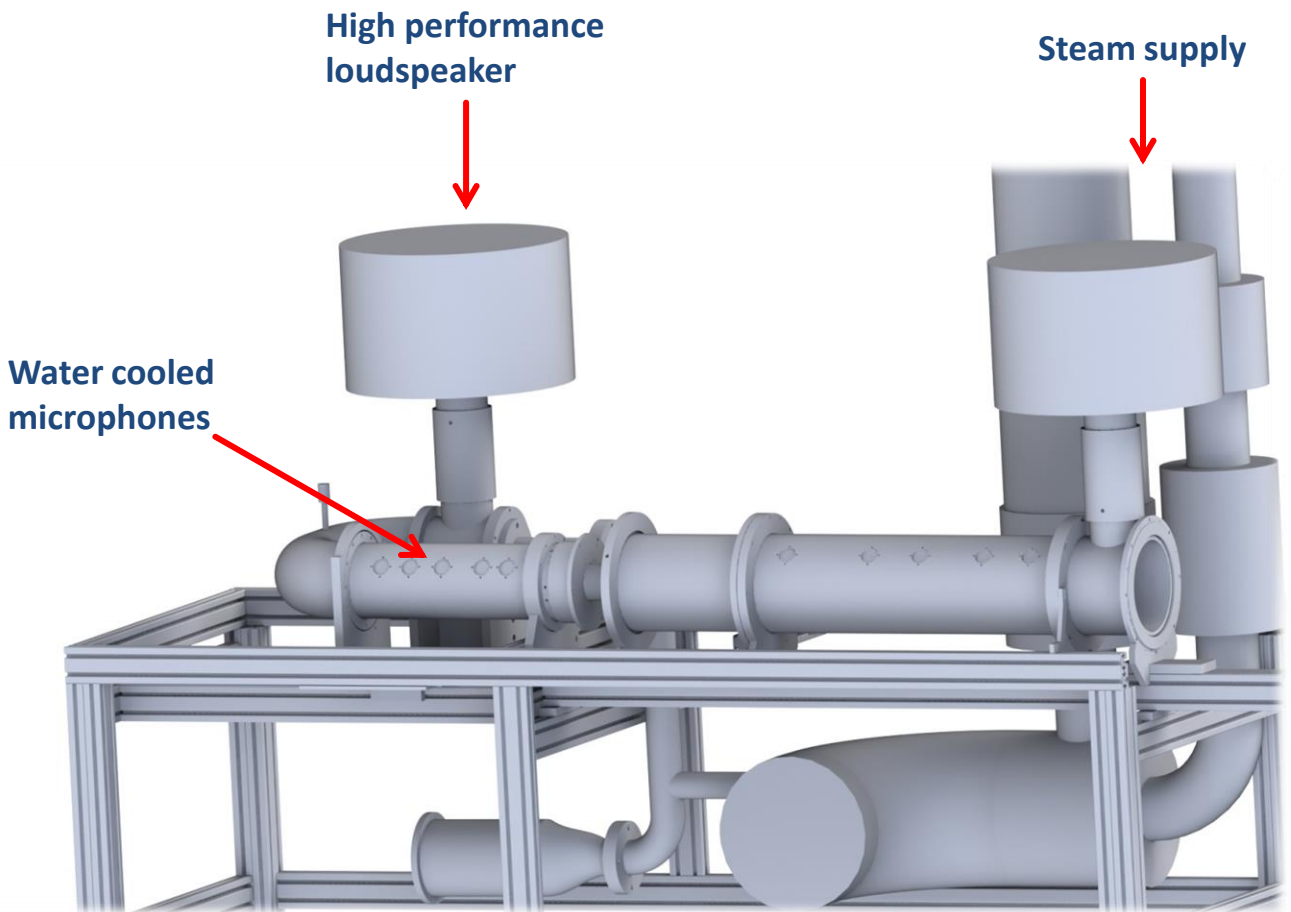
Hardware components:

- cRIO-9074
- MXI-Express RIO
- AI with 1 MS/s

Setup is based on:

- NI LabVIEW™
- NI LabVIEW™ Real-Time Module
- NI LabVIEW™ FPGA Module

Wet Combustion



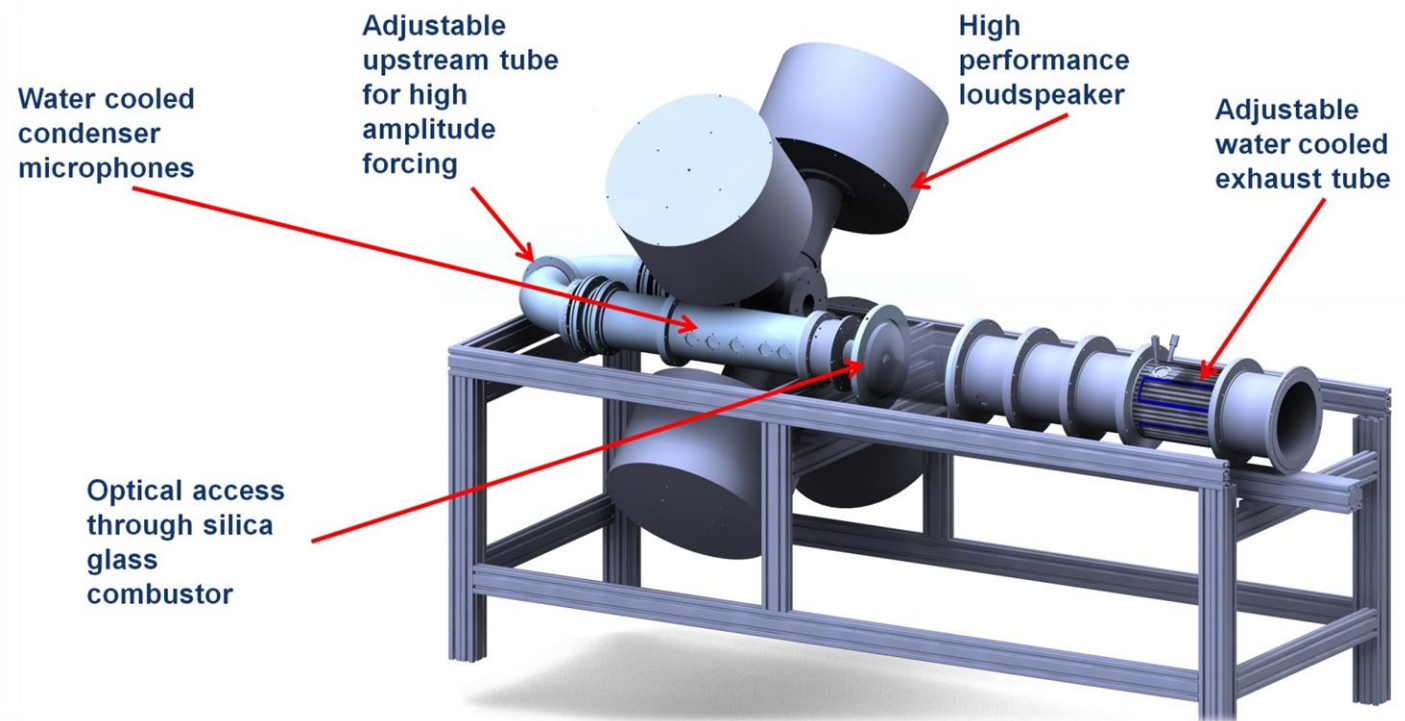
Hardware components:

- cRIO-9074
- Steam generator
- AI, AO, DIO, RTD, Thermocouple
- Individual controllable gas composition

Setup is based on:

- NI LabVIEW™
- NI LabVIEW™ Real-Time Module
- NI LabVIEW™ FPGA Module

Thermodynamic Stability



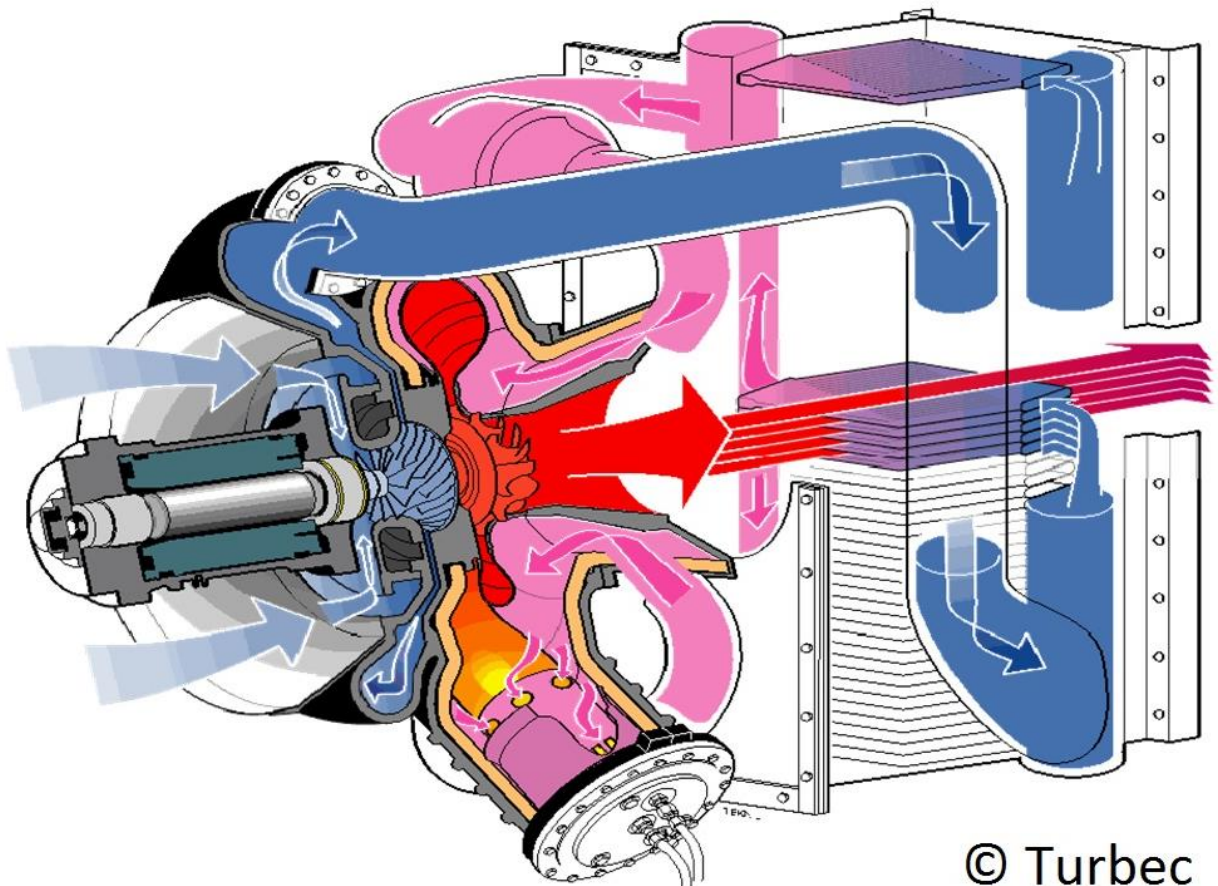
Hardware components:

- cRIO-9074
- Acoustic stimulation
- AI, AO, DIO, RTD, Thermocouple
- Individual controllable gas composition

Setup is based on:

- NI LabVIEW™
- NI LabVIEW™ Real-Time Module
- NI LabVIEW™ FPGA Module

Thermodynamic Cycle Analysis



Hardware components:

- cRIO-9074
- AI, AO, DIO
- RTD, Thermocouple

Setup is based on:

- NI LabVIEW™
- NI LabVIEW™ Real-Time Module
- NI LabVIEW™ FPGA Module