Berlin Research Turbine (BeRT)

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

**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

Website: [http://fd.tu-berlin.de/](http://fd.tu-berlin.de/)
LabVIEW Contact: Dr. C. N. Nayeri, David Holst (CLD)
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™

Website: [http://fd.tu-berlin.de/](http://fd.tu-berlin.de/)
LabVIEW Contact: Dr. C. N. Nayeri, David Holst (CLD)

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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