VISION AIR TRONICS

Next Level Safety

PRODUCT BRIEF

Propulsion System Test Cell

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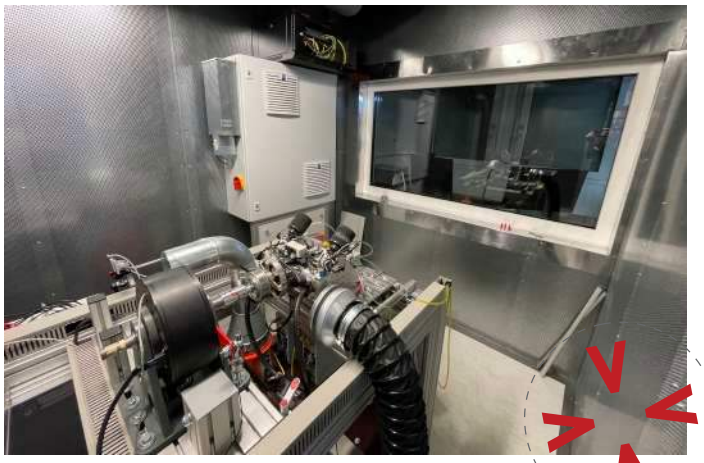
VISION AIR TRONICS

PSTC
PRODUCT BRIEF

The VISIONAIR Propulsion System Test Cell is designed to push combustion engines and their ancillaries to their limits. It is not only meant for short performance evaluations, but for long endurance tests with full control over every test cycle of a propulsion package.

The PSTC (propulsion system test cell) has a minimum set of features in its basic variant. It is designed around an ISO-668 container for easy transport and can be deployed at customers premises or where needed at any specific time. Additional options can be choosen from to add testing capabilities or adopt for higher power, therefore providing a modular system for various sizes, propulsion systems and functionalities.



Test Room

FEATURES

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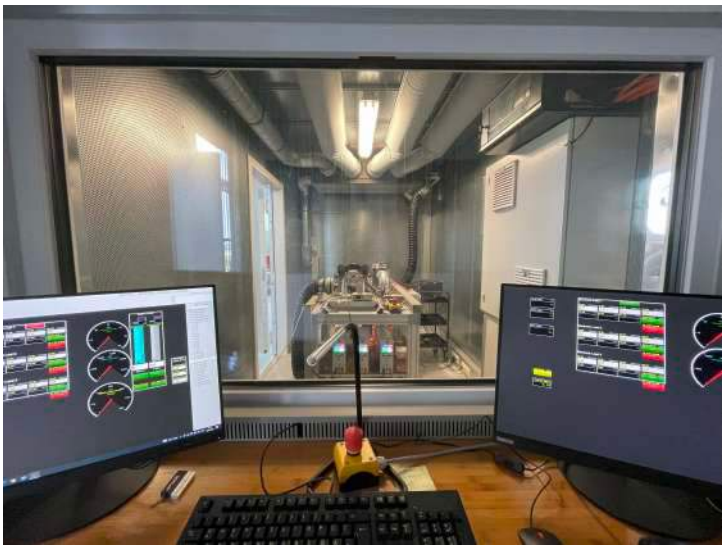
- Separate test and and analysis rooms
- Noise dampening walls
- High precision and calibrateable data aquisition tools
- Water-cooled brake system
- Siemens PLC
- Exhaust suction system
- Test room cooling system
- Engine/radiator cooling system
- Modular user interface for flexibility
- Automations user-configurable
- Remote control of tests from analysis room
- test bench rig with slideable brake table
- Internal IP network
- Webcam

MEASUREMENTS

- Standard
  - Power and torque (10kW)
  - RPM
  - Various temperatures
  - Airspeed simulation
  - Various voltages
- Optional
  - El. power, electric loads.
  - Fuel Consumption.
  - 20kW or 40kW upgrade (brake).
  - Brake cooling upgrade.
  - Generator-only testing up to 9kW.
  - Acoustic camera.
  - Vibration.

BASIC SYSTEM

The basic variant is designed for engines up to 10kW continuous power. Two additional increments enable for 20kW or 40kW.



Analysis Room

SPECIFICATIONS

SPECIFICATIONS IN BRIEF

Electrical

Power input	230VAC, 16A/32A (64A special version)
External interfaces	LAN RJ45, WIFI

Mechanical

Measurements	ISO-668 container, L x W x H - 6.06m x 2.44m x 2.6m
Weight	3.7 - 4 tons, depening on capabilities

Miscellaneous

Heating	Yes, via el. radiator in analysis room. Yes, via A/C in test room
Cooling	In connection with test room via A/C
Altitude rating	1,000m MSL
Safety	Emergency stop; optional CO2 extinguishing system
Additional features	Ability to include remote experts