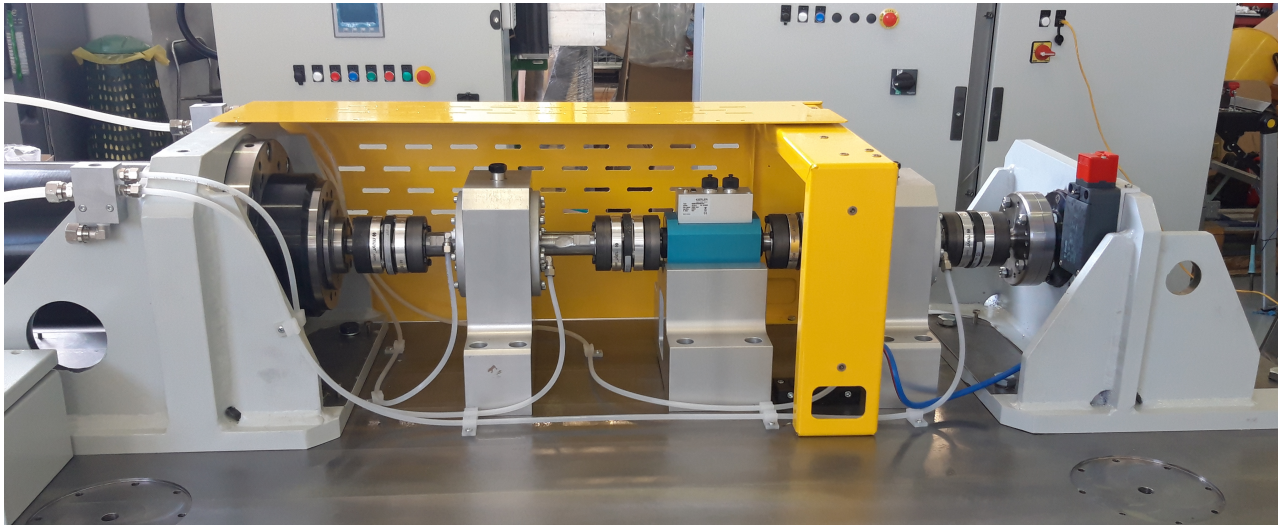


GenTest Test Benches for Alternators



General features

- Testing of synchronous and asynchronous alternators from 25 to 2000 KVA
- Frequencies: 50 and 60 Hz – Voltages: 400 and 480 Vac
- Purely inductive load ($\cos\phi = 0$)
- Manual or automatic control via PC and GenTEST software
- Automatic or manual load selection
- Digital and analog instrumentation
- Bench with variable speed asynchronous motor via inverter
- Low power thanks to $\cos\phi$ load = 0

Supported alternator types

- Voltages: 400 Vac at 50/60 Hz – 480 Vac at 60 Hz
- Power: from 25 KVA to 500 KVA (inductive load)
- Speed: 1500, 1800, 3000, 3600 RPM
- Continuous regulation from 0 to 3800 RPM via potentiometer
- Sag: $\pm 5\%$

Mechanics and protections

- Painted iron structure
- Vector asynchronous motor
- Engine-alternator coupling with adapters for B3/B5, MD35
- Safety protection in aluminum and polycarbonate

Load

- Inductive load only ($\cos\phi=0$)
- Consisting of a structure with inductors and branch selection panel
- Selection via manual selectors or from PC
- Utilization factor: 50% or 100%

Command pulpit

- Lectern and riser structure – Dimensions: 1200 × 900 × 1500 mm
- 25mm green LED display
- Simultaneous display: V1–V3, A1–A3, KW, KVAR, Hz
- Programming measuring groups
- TA and TV configuration
- Max voltage: 500 Vac (phase-neutral), 866 Vac (phase-phase)
- Frequency: 45–65 Hz – Accuracy class: 0.5

Instrumentation

- 3 analog voltmeters class 1.5 – 96x96 mm – 500 Vac
- 3 analog ammeters class 1.5 – 96x96 mm
- 3 double analog CTs class 1.5 – 96x96 mm
- 1 phase rotation sequencer with relay output
- 1 x Engine RPM Tachometer (Dynamo Tacho) – 96x96 mm – 4000 RPM
- 1 excitation voltmeter with RC filter – 48x96 mm – 50 Vdc

Selectors and buttons

- Power selector KVAR x1 and x1
- Start/stop button, emergency
- Auto/Manual Selector
- Load and maximum time alarm light
- 2 or 4 pole selector – Frequency 50/60 Hz
- RPM adjustment potentiometer $\pm 5\%$ – Range 0–3600 RPM

Control and Software

- PLC and PC control system
- Automatic load and mechanical management
- Automatic power/voltage regulation
- GenTEST Software (LabVIEW): control, acquisition, bulletin printing
- Test archive management

Automatic functions

- Automatic measurement group sequence
- Check centering
- RPM correction when load is applied
- Statism calibration
- Protections: phase rotation, frequency, overload
- No-load / load / parallel tests
- Carbon transfer printing of bulletins and labels