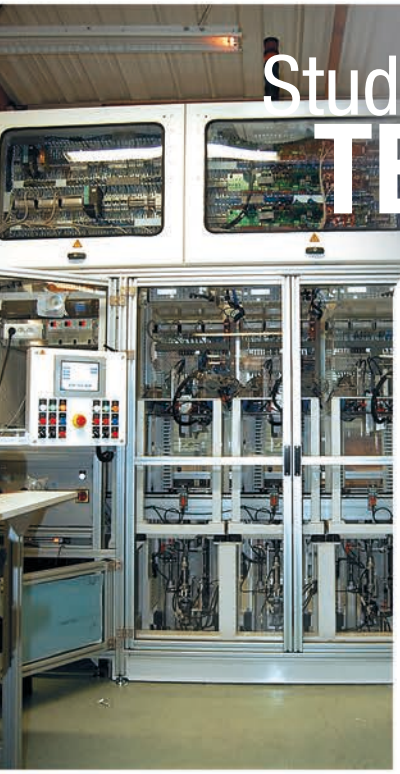
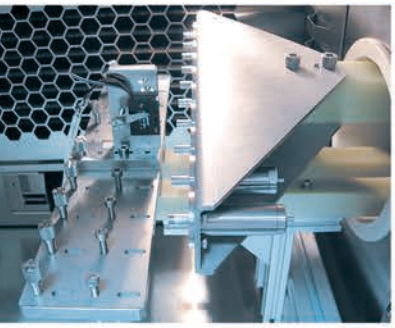
Study and manufacture of TEST BENCHES

QUASAR CONCEPT





FIELDS

→ PRODUCTION BENCHES :

- Functional test
- Calibration, programming
- Burn-in
- Assembly and wiring inspection
- Charging rack

→ LABORATORY BENCHES :

- Durability, Fatigue, Ageing
- Qualification tests
- Environmental tests
- Specific instrumentation
- Standard tests

SKILLS

Flow, pressure, force, torque, displacement, speed, mass, noise, vibration, electromagnetic radiation, current, voltage, power, frequency, magnetic field, temperature, sealing, dimensions, etc.

→ ACQUISITION AND MEASUREMENT :

- Definition and choice of sensors and instruments
- Architecture of the measurement systems
- Signal processing
- Uncertainty calculations, differences, R&R, Capability

→ ELECTRONICS :

- Analog, Digital, power, HF
- Design of specific boards for tests

→ INDUSTRIAL VISION :

- Assembly, appearance and sizing inspection

→ TEST INTERFACES AND TOOLS :

- Referencing, clamping, mechanical coupling
- Specific connectors
- Bed of nails

→ ELECTRICAL SAFETY :

- Control of continuity, insulation, dielectric strength

→ MECHANICAL – PNEUMATIC - HYDRAULIC :

- Design of specific machines and mechanical sub-assemblies
- Calculations and simulation in dynamics, kinematics, RDM, fluid mechanics

→ THERMAL :

- Calculations and modelling of phenomena
- Choice of materials, ovens and climatic chambers

→ AUTOMATIC CONTROL – ELECTRICAL ENGINEERING :

- Industrial PLC
- Servo controls, regulation
- Design of power cabinets and control rack

→ STANDARDS AND REGULATIONS :

- Ergonomics, machine safety, electrical safety, ATEX, EMC, CE marking
- Military, aeronautics standards

→ INDUSTRIAL INFORMATION TECHNOLOGY :

- Windows/Linux
- Real time (µcos, LabVIEW RT)
- LabVIEW, LabWindows/CVI, TestSTAND, C++, VB, etc.
- PCI, PXI, LXI, etc. architecture
- Fieldbus (MODBUS, CAN, LIN, ASI, FlexRay, ARINC, etc.)
- Database, Networks, Supervision, SPC

SERVICES

- Specifications, advice, preliminary draft, feasibility study
- Study and design
- FMECA
- Software development
- Complete manufacture (assembly, wiring, integration)
- Adjustment, validation, normative control
- On-site installation and commissioning (France and overseas)
- Definition and operation document
- Training
- Maintenance

MAIN RESOURCES

- CAD and simulation software: SolidWorks, SEE-Expert, Cadence, etc.
- Software development tools
- PLC programming tools
- Electronics laboratory
- EMC test and measurement methods
- Electrical safety testers
- Wide range of measuring instruments for all types of physical quantities
- Mechanical workshop
- Integration, wiring and adjustment workshop