BSTG

BRNO SPACE TECHNOLOGY GROUP
(406 PEOPLE, 24,2 MIL EUR TURNOVER)

The whole is greater than
the sum of its parts.

- Aristotle

CZECH SPACE ALLIANCE

Czech Republic, Brno area
130 km north from Vienna, Direct flights from Munich Airport

BSTG

BRNO SPACE TECHNOLOGY GROUP

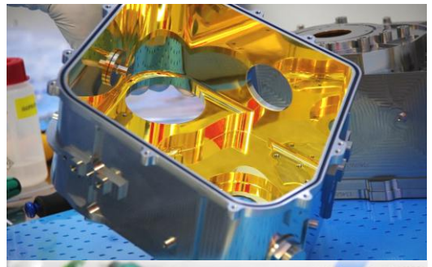
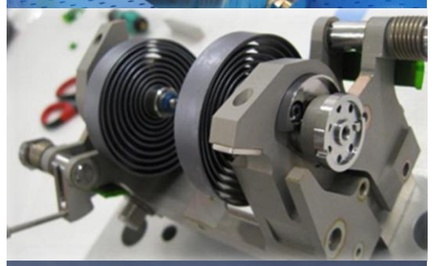
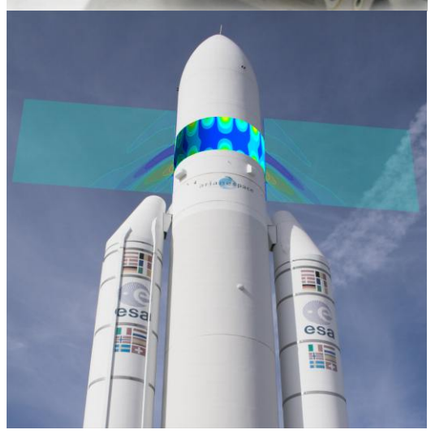
www.bstg.space

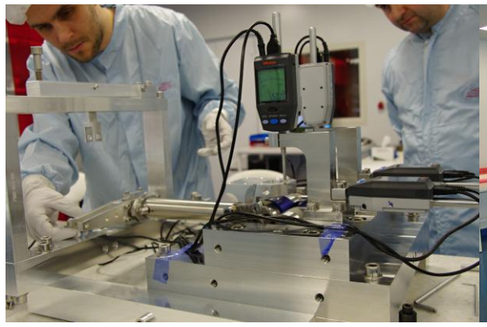
RELIABLE PARTNER FOR YOUR COMPLEX SPACE SYSTEM DEVELOPMENT, PRODUCTION & TESTING

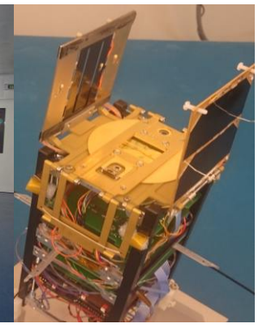
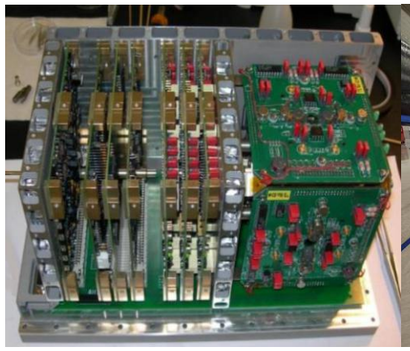
COMPONENTS / ASSEMBLIES / SUBSYSTEMS / SYSTEMS

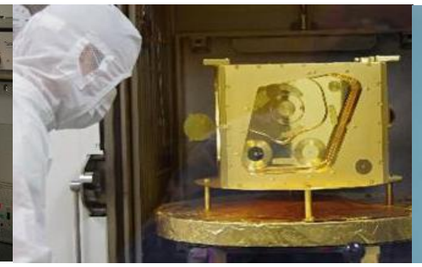
REFERENCES

- NEOSAT - EGSE / Test Benches for Thermal-vacuum
- ISS / ACES - FM European Laser Timing Instrument
- METOP SG - 3MI Instrument, Filter Wheel Controller
- SOLAR ORBITER – RPW & STIX Instruments
- JUICE - APME
- MagBoom - CFRP components
- VEGA - Dispenser
- MTG - Cryostat structures
- IRIDIUM NEXT - Deployment mechanism
- EXOMARS 2016/2020 - Hepafilters / Canister for parachute
- ARIANE 5 - Turbopump components
- ONE WEB - Mechanical components
- PHOOTPRINT LANDING GEAR SYSTEM - Test setup
- VEGA PLF lift-off - flight Acoustics
- PLF Aeroheating - jettisoning shock simulation, test rig
- EUCLID PLM- Thermal analysis
- LUNAR LANDER - spacecraft structure
- PHOBOS SAMPLER - Sampling Test rig
- JUICE RIME - HDRM design
- ...





Sobriety s.r.o. **5M s.r.o.** **Frentech Aerospace s.r.o.** **L.K. Engineering, s.r.o.** **CSRC, spol. s r.o.**

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SOBRIETY 5M Frentech Aerospace member of Czech Aerospace Systems LKE CSRC

INDUSTRIAL GROUP COOPERATING ON COMPLEX SPACE PROJECTS

EXPERTIZE

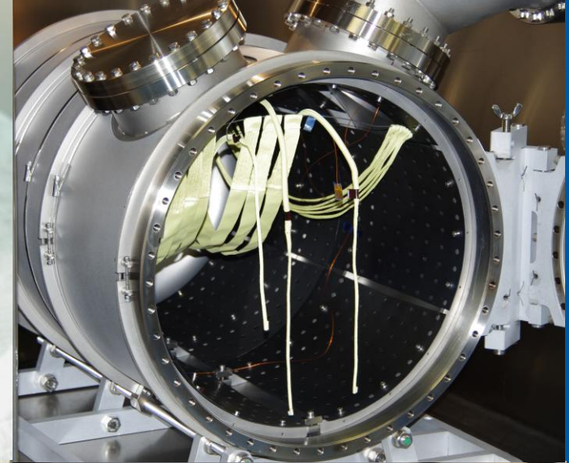
- Development
- Design
- Manufacture
- Assembly
- Inspection
- Testing
- Qualification
- Quality assurance
- Delivery
- Service

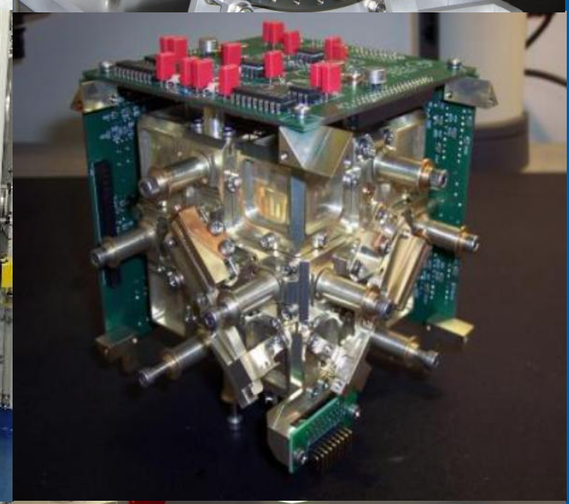
DESIGN AND DEVELOPMENT

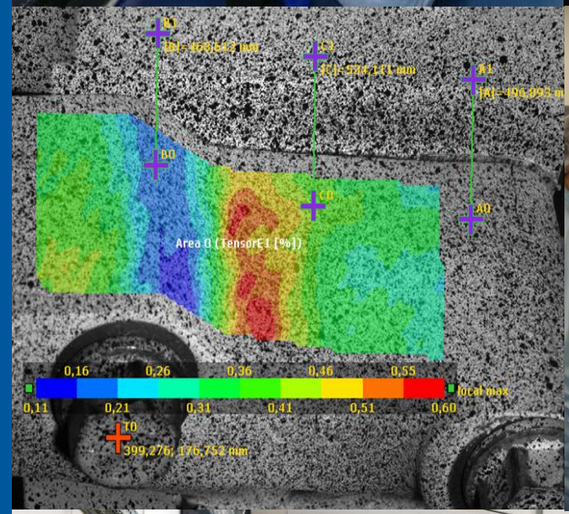
- Components
- Mechanisms
- Machines
- High reliability electronics
- Complex systems
- MGSE / EGSE
- High speed machines
- Special bearings
- Test set-ups
- Adhesives
- Composite materials and technologies

ANALYSES AND SIMULATIONS

- Analytical
- Thermodynamics
- Thermomechanics
- Mechanics
- Dynamics and rotordynamics
- Optical
- Dynamic system identification
- Electromagnetic
- Radiation
- Systems
- Reliability (FMEA, WCA, FTA…)
- Chemical (composite materials)







CAPABILITIES

- Manufacturing
  (Space quality mechanical components, assemblies and parts inspection)
- CFRP components production
  (pultrusion, out of autoclave processes)
- Electroforming
- Adhesives and composite raw material production
- Assembly areas (ISO7 & ISO5)
- Electronics manufacturing ISO8
- Control laboratories
  (geometry, leak, clean lines)
- Thermal and thermal vacuum cycling
  (+200°C / -180°C)
- Microgravity test set up to
  1 500 kg @ 6 x 6 x 4 m
- Large system assembly and testing shop
  12 x 10 x 6 m / max 12 000 kg
- Pumps / Compressors / Turbines production
- Special electric drives production
  (up to 350 krpm)

MEASUREMENTS

- 3D optical
  (Deformation, Speed, Acceleration, Temperature, Modal, ODS, mechanical parameters, validations)
- Mechanical testing
  (temperature range -60 to 250°C)
- Geometry inspection 3D
- Contaminantion controll - particular & molecular
- Contact
  (Displacements, Accelerometers, Strain gauges, Thermocouples, High speed balancing, A/DCPD)
- Complex systems
- Electric
  (General circuit, Power converters, Small signals)
- Custom measurement electronics