Your expert in thermal solutions and temperature measurement

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THERMOCOAX Group Through the World

300 employees
50 M€ of revenues
2 M € in Space domains

Offices and factories

Main factory in France
Production in Germany
Production in USA
Our Core Business

Mineral Insulated cable manufacturer

Ø 0.5 to 3mm
Core Business

Thermocouples up to 2000°C

Heating devices up to 1000°C, exposed up to 1400°C

Transmission Cables
Up to 1000°C

THERMOCOAX
Spacecraft Thermal Management Systems

- Heating Devices for:
  - Loop Heat Pipes
  - > 5000 devices in orbit with E3000 satcom
  - 50 and 100 volt version

- For Mechanically Pumped Loop System (MPLs)
  - Accumulator
  - Serpentines
  - Pump
  - Under qualification on NEOSAT new Platform

- Compatible with ammonia, propylene, ethane, Freon R134a..
Chemical Propulsion -Catalyst Bed Heater –

Pre-heating device for: 100mN up to 400N chemical thrusters

Qualified with:
- Bradford ECAPS
- NAMMO ISP
- Arianegroup
- Rafael Israel
- Hanwha South Korea
- CTA Brazil
Electrical Propulsion

- **Magnetic coils:**
  - Qualified on Safran PPS thrusters
  - First flight with SMART 1 probe 2003
  - In orbit with Alphabus
  - In Orbit soon with:
    - Airbus E3000e
    - Boeing 702
    - SSL1300

- **Preheating ring:**
  - In orbit with Fakel engine on E3000e sat
  - Qualified on Safran PPS. In orbit very soon
Shape Memory Alloy technology

- To replace Pyrotechnic actuator
- Single one time use valve
- Solar panel deployment
- Hold Down&Relieve System (HBRS)
Others

- VENUS Satellite: multispectral camera heating cylinder

- Shunt Resistor Bank
**Last Events**

- EXOMARS 2020: Delivered to Lavochkine Russia heating system for Lander propulsion fuel system

- Ongoing ESA qualification for pressure regulator Heating system

- NASA Lunar Surface Mission: Heating system qualified for neutron spectrometer on Resource Prospector Rover

- Development of Hollow Cathode heater for electrical thrusters, already tested over 1800°C