

Launchers  
Satellites  
Transversal competencies



ASB AEROSPATIALE BATTERIES is the unique company in Europe to master research, design and production of Thermal Batteries. Mainly integrated in missiles and ammunition in general, ASB Thermal Batteries are also equipping the latest space launchers ARIANE 6 and VEGA-C. As well, our Thermal Batteries are currently used as emergency power systems in aircrafts, in case of landing without engine service. The satellites to be placed in and out of their orbits can also use Thermal Batteries technology.

## COMPETENCIES & CAPABILITIES

ASB develops Thermal Batteries which are top class performances, with the highest level of reliability:

- specific power over 5.5 kW/kg,
- without variation of performances from -50 to over +70°C,
- without any maintenance for 15 years,
- from some Watts up to 70 kW per battery, corresponding to some grams up to over 20 kg.



# ASB AEROSPATIALE BATTERIES

## PRODUCTS & SERVICES

ASB group is world n°1 of the thermal batteries. ASB headquarters and electrochemistry center of excellence is based in Bourges, France. The group has autonomous subsidiaries in UK/MSB, in USA/ATB and in India/APS & VAR. We are able to address all kind of requirements concerning thermal batteries.

ASB capabilities includes prototypes & big series, with the largest dimensions and performances all over the world. ASB Group has a capability of over 120,000 batteries a year.

Each customer specification leads to a specific optimized definition for Defense security reason. ASB is covering the largest portfolio (over 100 different types of Thermal Batteries are currently under production inside the Group).

## MAJOR SPACE PROJECTS & REFERENCES

The ASB thermal batteries are used for Thrust Vector Actuator electrical power, as well as to bring power to satellites exit motor from the launchers, and other power supplies integrated inside the space launchers.

Small ASB thermal batteries can be used for any single action needed by satellites: e.g. to deploy solar cells, or to get out of the orbit at the end of life, etc. A small thermal battery is sufficient as its specific power is high.

Ariane 5 & 6, VEGA-C, use and will use ASB thermal batteries.

Other launchers programs are interested and under advanced discussions in Asia.

Our US subsidiary ATB is involved in US space programs.

## POINT OF CONTACT

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**TURNOVER**

**WORK FORCE** 350 employees in the Group

**SPACE TURNOVER**

**SPACE WORK FORCE**