

Saft battery specially developed for CNES prepares ESA's Philae Lander for Churyumov-Gerasimenko comet touchdown

After the Rosetta mission's 10-year space journey from Earth, Saft's primary lithium battery has woken ESA's robotic Philae Lander to prepare for its touchdown on a comet nucleus

Paris, November 12, 2014 – Saft, the world's leading designer and manufacturer of advanced technology batteries for industry, is celebrating the achievement of the mission-critical primary lithium battery supplied to the CNES (Centre National d'Etudes Spatiales) for the Philae lander, the key payload of the Rosetta mission under European Space Agency (ESA) responsibility. The Philae Lander, carried onboard the spacecraft, has woken successfully from its deep space hibernation and is now preparing to be the first ever craft to make a controlled touchdown on a comet nucleus.

The Rosetta spacecraft was launched in March 2004 and has now travelled more than forty times Earth's distance from the Sun, including 31 months in deep space hibernation when most of its systems were powered down. It was woken up in early 2014 and is now in orbit around the comet 67P/Churyumov-Gerasimenko.

Saft's LSH20 primary lithium battery is part of the 100 kg Philae Lander craft, which is a key part of the Rosetta mission. The lander will touchdown onto the surface of the comet on November 12 2014. Its goal is to study the composition of the comet dust and ice structure for around 4 months as it travels towards the warmer inner reaches of the solar system. 10 instruments on board Philae will obtain the first images from a comet's surface and make the first in-situ analysis of a comet's composition. As the comet is believed to contain the basic ingredients for life, it may shed light on how life started on Earth.

The batteries on board the Philae Lander are central to the entire mission's success. They power its on-board systems including scientific equipment as well as supporting the transmission of experimental results to Earth.

Saft's primary lithium technology has a very low rate of self-discharge, which is invaluable to the mission as it ensured that maximum power is available for the mission-critical operations even after the 10-year voyage from Earth. Furthermore, the cells have a robust design that ensures reliable operation even when subjected the extreme shocks, accelerations and temperatures experienced in spaceflight.

'Saft is delighted with the performance of our lithium battery on the Rosetta mission,' said Yannick Borthomieu, Satellite and Lander Battery Product Manager for Saft's Specialty Battery Group. 'As the first craft to make a controlled touchdown on a comet, Philae is the latest in a long list of Saft's space firsts.'



About Saft

Saft (Euronext: Saft) is a world leading designer and manufacturer of advanced technology batteries for industry. The Group is the world's leading manufacturer of nickel batteries and primary lithium batteries for the industrial infrastructure and processes, transportation, civil and military electronics' markets. Saft is the world leader in space and defence batteries with its Li-ion technologies which are also deployed in the energy storage, transportation and telecommunication network markets. More than 3,800 employees in 18 countries, 14 manufacturing sites and an extensive sales network all contribute to accelerating the Group's growth for the future. Saft batteries. Designed for industry

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