

MERSEN DELIVERS THE FIFTH BLANK MIRROR FOR THE EUROPEAN SPACE OBSERVATORY'S EXTREMELY LARGE TELESCOPE

PARIS, MAY 21, 2024 – Mersen (Euronext FR0000039620 – MRN), a global expert in electrical power and advanced materials, has achieved a world first with the delivery to Safran Reosc of the fifth and final blank mirror for the European Southern Observatory's (ESO) Extremely Large Telescope (ELT).

The ELT will be the world's most powerful giant telescope, with a primary mirror measuring 39 meters in diameter. It is being built on the Cerro Armazones mountain in northern Chile, at an altitude of over 3,000 meters, and will usher in significant progress in astronomy (stellar archeology, exoplanet detection and characterization, etc.). Mersen has been contributing to astronomy for more than 25 years, working on such prestigious ESA space missions as Rosetta, Herschel, GAIA and Euclid, as well as NASA's James Webb Space Telescope.

The M5 blank mirror supplied by Mersen consists of six silicon carbide (Boostec® SiC) petals coated with Mersen SiC CVD. The six SiC CVD-coated petals have been brazed together in a feat of technological prowess by Mersen. The optical face of the finished piece is smooth across its entire surface so that it can be polished to the required optical quality.

The use of SiC, a lightweight, highly stiff material with exceptional thermomechanical properties, is essential to correct the vibrations of the telescope's immense structure and stabilize the image that will be obtained.

The mirror, once mounted on actuators, will vibrate continuously to offset disturbances caused by wind and atmospheric turbulence. At 2.7 meters long, it will be the world's largest tip-tilt mirror.

Luc Themelin, Chief Executive Officer of Mersen, said: *"I'm very pleased and proud to see our expertise and the collaboration between different technical teams within the Group contributing to projects that push back the boundaries of knowledge to better understand the evolution of galaxies and the universe."*



The Mersen Boostec team around the M5 mirror ready for delivery.

Find out more

<https://elt.eso.org/mirror/M5/>

ABOUT MERSEN

Mersen is a **global expert in electrical power and advanced materials** for high-tech industries. With more than 50 industrial sites and 18 R&D centers in 33 countries around the world, Mersen develops **custom-built solutions** and delivers key products for clients in order to meet the new technological challenges shaping tomorrow's world. **For over 130 years, Mersen's teams have focused tirelessly on innovation** to accompany its clients and meet their needs. Be it in solar power, electronics, electric vehicles, aerospace or other sectors, wherever technology is progressing, you will always find a bit of Mersen. We work to constantly contribute to progress, striving daily to improve people's lives and protect the planet. This **corporate commitment** has been recognized by external rating agencies, Ecovadis (Gold Medal) and MSCI (AA rating).

MERSEN IS PART OF THE SBF 120 INDEX (EURONEXT PARIS – COMPARTMENT B)

CONTACTS

MERSEN CONTACT

Véronique Boca
Mersen
Tel.: +33 (0)1 46 91 54 40
dri@mersen.com

MERSEN MEDIA CONTACT

Guillaume Maujean/Alexia Gachet
Brunswick
Tel.: +33 (0)6 33 06 55 93
Email: mersen@brunswickgroup.com