Acktar Ltd. | 1 Leshem St., Entrance A,
P.O.Box 8643, Kiryat Gat 82000, ISRAEL
Tel:+972-8-6814213 | Fax:+972-8-6810198
www.acktar.com

Acktar's Black Optical Coating implemented in the NIRSpec 'Super-Eye' - for the James Webb Space Telescope.

Kiryat Gat, Israel | September 21, 2011:

Acktar Ltd. has successfully completed the black optical coating of the 'flight hardware' parts for the Near Infrared Spectrograph (NIRSpec) - 'super-eye' instrument for the James Webb Space Telescope (JWST). The parts were delivered to EADS-Astrium – the prime contractor for NIRSpec – and to numerous european sub-contractors in the consortium.

Acktar Ltd. was chosen in 2007 – after extensive testing - as the supplier of choice responsible for the design, manufacture, and testing of advanced black ir absorbing coatings for the NIRSpec.

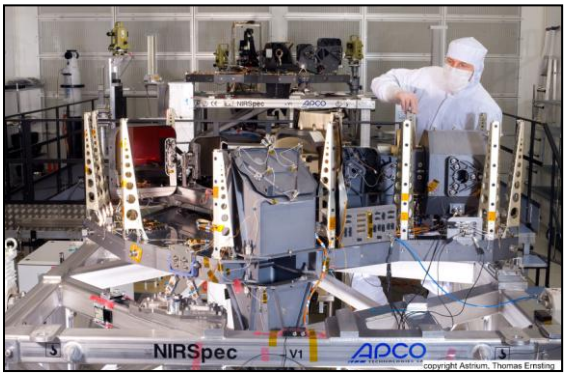
The JWST – scheduled for launch in 2018 – is the successor to the Hubble space telescope.

The European Space Agency (ESA) will provide the NIRSpec Instrument for the JWST program and EADS-Astrium was contracted by ESA to build the NIRSpec 'Super-Eye'. This 200 kg spectrograph will be able to detect the faintest radiation from the most distant galaxies and measure spectra of up to 100 objects simultaneously. In order to do this, the instrument must be able to operate at a temperature of –238 degree Celsius. The NIRSpec operates in the wavelength range of 0.6 to 5 microns. The study of galaxy formation, clustering, chemical abundances, star formation, and kinematics, as well as active galactic nuclei, young stellar clusters, and measurements of the initial mass function of stars (IMF) requires a near-infrared spectrograph.

###

About Acktar

Acktar Advanced Coatings was established in 1994 in Kiryat Gat, Israel with subsidiaries in Germany (ACM Coatings GmbH) and in Japan. Acktar's core competence is the development and manufacture of extremely black optical coatings using proprietary Physical Vapor Deposition (PVD) based processes. The optical coatings can be deposited on virtually any substrate material and can achieve absorptance (specular) of above 99% in the UV, VIS and IR spectra. Acktar's coating processes are totally environmentally friendly and are in use by leading companies throughout the world in applications such as optical equipment, IR sensors / systems, aerospace systems and solar thermal absorbers.



NIRSpec Instrument

Courtesy of EADS Astrium GmbH

RUAG Space GmbH

MSSL

Acktar Vacuum

Coating Department