

ROLLS-ROYCE SELETAR CAMPUS



Assembly Area

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The global power systems company, Rolls-Royce, officially opened its largest facility in Asia at the Seletar Aerospace Park in Singapore on 13 February 2012. Constructed on a 154,000-square-metre site, the facility is the first to bring advanced, high-value aerospace manufacturing technology to Singapore. The Rolls-Royce Seletar Campus includes an Assembly and Test Unit, a Wide Chord Fan Blade manufacturing facility, an Advanced Technology Centre and a Regional Training Centre.

As part of this prestigious project, Vossloh-Schwabe and Effion Technologies partnered to achieve dynamic lighting solutions. Since the project incorporated both a design and construction remit, Effion Technologies was responsible for ensuring the lighting design met all requirements with regard to functionality, the requisite "Greenmark" accreditation and the allocated budget. The systems supplied for the Rolls-Royce project included lighting for internal office areas, clean rooms, assembly area and the test cell as well as lighting for the external link to the car park. Two main contractors worked on a total of four buildings, all of which were awarded a Platinum Building and Construction Authority (BCA) Greenmark accreditation.

Vossloh-Schwabe's T5 electronic ballasts were teamed with GE T5 "Watt Miser" energy-saving lamps to achieve desirable office lighting results. For parameter lighting purposes, the selected GE HID lamps were combined with VS' magnetic ballasts (NAHJ150) due to their ability to



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VS LED LAMPS



ELECTRONIC BALLASTS



Test Cell office area

optimise light output, colour temperature and the service life of discharge lamps. Around two hundred and fifty pieces of high-efficiency VS LED lamps (PAR30 LED with an E27 base) were used to improve the overall efficiency of the lighting system throughout all back office areas. Over thousand pieces of Electronic ballasts for compact fluorescent lamps (warmstart ELXc & dimmable ELXd) were also used around office, lobby and corridor areas. As these ballasts enable brightness and lamp-wattage control of fluorescent lamps, they make a further contribution to saving energy. To provide constant and consistent light output, hundred pieces of VS/Universal constant wattage ballasts (type M1000) were used for all high-bay fixtures in the entire Rolls-Royce facility.

Effion Technologies Pte Ltd is a leading supplier of lighting products in Singapore. Effion has grown to become a well-known supplier of lighting products in the market providing a wide variety of products including lamps, lighting equipment, fittings, explosion-proof lighting accessories and equipment, lighting control gear such as ballasts and transformers, as well as equipment and fittings for offshore, marine, oil and gas lighting.

Customer: Rolls-Royce Seletar Campus
Builders: Boustead Projects and CENCO (The Achord and Test Cell facility)
Nylect Engineering (Electrical Con)
Sato Kogyo (The Regional HQ and SATU Assembly Line)
Hitachi Plant (Electrical Con)
Light planning: Effion Technologies Pte Ltd
Photos: Effion Technologies Pte Ltd & Vossloh-Schwabe Pte Ltd