

Speed is fundamental to gain competitive advantage in the ultra-competitive world of science and technology. In fields such as communications technology, genetics, biosciences and pharmaceuticals, bringing innovations to the market in the shortest possible time is of primary importance. Equally important however, is the need to operate within environments serviced to provide optimum conditions for research, development, manufacturing and testing







and electrical services to offices, restaurant, gym and production areas. 40 weeks contract duration







consisted of the upgrading of services within Building 18; provision of services to new laboratory areas and an upgrading of services within Building 27. All works carried out within occupied facilities, maintaining 'business as usual' at all times over an 86-week programme period













Phase 3 of the works at BAT consisted of the auditorium, development studio, pallet store and 18/27 reception. The auditorium has approximately 300 seats. This is served by an air handling unit located on the roof with a system of ductwork to provide conditioned air to maintain 22°C within the space. The air enters the room via floor diffusers located under the seats with additional air being supplied by 2no low velocity supply units. Acoustic treatment has been provided to achieve 25nr BRITISH AMERICAN TOBACCO - PROJECT HORIZON, PHASE 3 Project Value: £951,655 over 30 weeks



BRITISH AMERICAN TOBACCO – BUILDING 17 DATA CENTRE

Project Value: £502,000



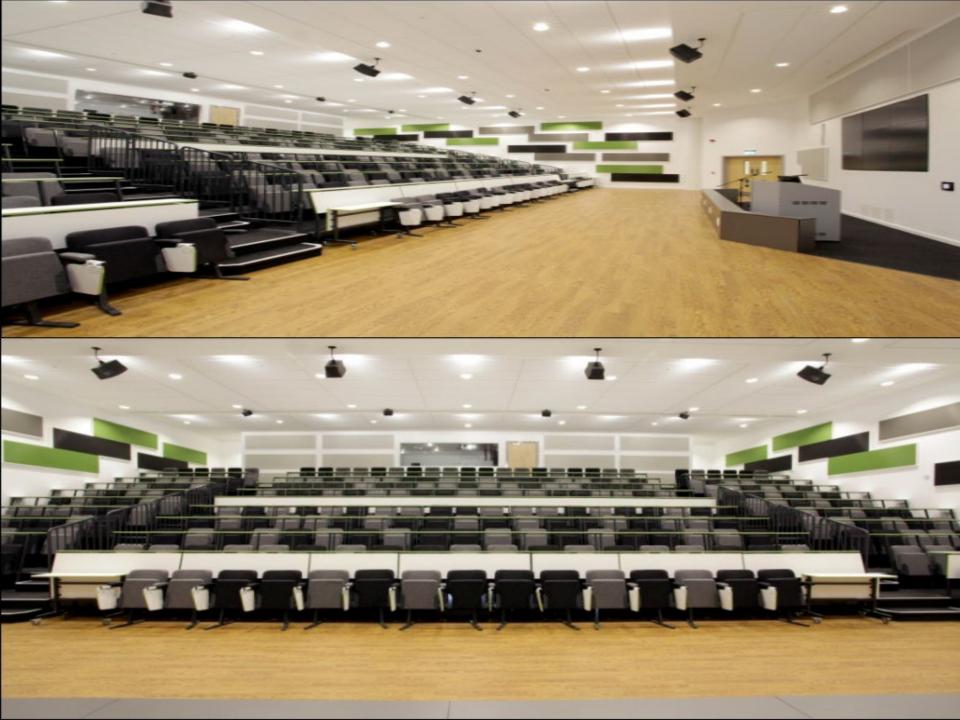








We installed a new chiller on the roof which is linked via a pump to the new Data Centre, where it will be passed through the HACs. HACs are data cabinets which are fed directly through the frame of the unit with chilled water, therefore cooling the units rather than cooling the surrounding air. We installed new power supplies to the Data Centre via a generator backed UPS system. The system will auto changeover in the event of power loss





New build state of the art technology centre, wind turbine manufacturing facility, located on the River Medina, Isle of Wight. 12,000m2 steel frame purpose-built manufacturing area, with 1,200m2 office complex constructed on green field site. The internal areas consist of blade mould and finishing shop, blade tip shop, machine workshop, wood shop and foam shop. Full welfare facilities with two storey office complex, all to manufacture multiple length blades up to 70m long. The factor is complemented with an internal RANDD testing facility workshop.

We provided the complete mechanical services including the design and installation of the following: displacement supply and extract air ventilation and general air ventilation to the factory and non-process areas, vacuum, resin and compressed air system for their processes. Dedicated dust extraction to central plant, wood shop dust extraction to central plant, industrial gas and process water and wash downs, LTHW heating and CHW cooling system, refrigerant, air conditioning, domestic hot and cold-water system, waste systems and building energy management system





Project Star was the refurbishment of an existing production factory facility, a new specialist test rig and full mechanical and electrical fit out of a new 2 storey office block for Cobham Plc, a market leader in the production of in-flight refuelling equipment. This development enabled the client to vacate their existing facilities to a refurbished, modern, environmentally friendly and energy efficient facilities, representative of their market standing





fitting out two new experimental hatches. The mechanical services installation included process plant and ventilation to clean room and experimental hatch. Particular care and coordination was required as existing hazardous plant had to be incorporated into our experimental hatch. Ground floor extension to the existing "Donut" building for new experimental laboratory space for tap off of the beamline. Services consist of the installation of mains distribution panel, PIRs, external lighting, VESDA fire alarm panel, small power and lightning protection

EUROPEAN CENTRE FOR MEDIUM RANGE WEATHER FORECASTS, READING Project Value: £923,833



The European Centre for medium weather forecasts operates a large multivendor computing environment which uses chilled water to cool the computing equipment 24/7/365. The project comprised of the installation of a steel platform, energy efficient dry coolers, 2 no. PHE/pump packaged plantrooms, controls, pipework and electrics. Following commissioning the new equipment provides 'free-cooling' for approximately 70% of the year



An existing two storey office, research and development and distribution facilities building located in Hedge End Southampton. The project involved the refurbishment of part of the building; upgrading existing services and the installation of additional services, with the fit out of an already built two storey extension including all new services with separate circuits from the existing and to be upgraded mechanical plantroom and main electrical switchroom



services throughout the building included the Mechanical Services - Heating, chilled water, domestic hot and cold-water services, cold water mains, gas services, VRV air conditioning, close control cooling, supply and extract ventilation, dedicated extract systems, toilet ventilation, leak detection systems and building management controls system. Electrical Services - Small power, mechanical services power, switchroom upgrades, lighting, lighting control and data cabling installation





area. To compliment this there are general laboratory areas, propulsion laboratories, flight assembly areas, a mission control area for control and monitoring of orbiting satellites and control bridge areas which overlook the production bays, various meeting rooms and welfare facilities. The majority of the satellite production and lab areas are built to clean room ISO8 standard



following: supply and extract air distribution systems to the clean rooms and general areas, LTHW heating system, CHW cooling system, air conditioning to mission control and comms rooms, compressed air system, nitrogen distribution system, domestic hot, cold and waste pipework system, HV power installation, LV power and sub-main installation, general power, lighting, data installation, fire alarm system to name a few



UNIVERSITY OF SURREY, NEW TECHNOLOGY CENTRE





consisted of the removal of existing services from Building 17 and the installation of new mechanical and electrical services to offices, restaurant, gym and production areas; the upgrading of services within Building 18; provision of services to new laboratory areas and an upgrading of services within Building 27. The overall value for Project Horizon (Phases 1, 2 and 3) was £13 million



Phase Two new build extension of approximately 1,300m2, providing an extension to the contact lenses cleanroom production area. Works included chilled, heating, ventilation and domestic services with all new air handling plant above the ceiling, suspended from the existing roof structure



mechanical and associated electrical services including hepa filtration, stringent, pressure and temperature control amounting to certification to Class 100,000. The clean room was constructed within an existing facility providing some 350m2 of clean room space



This project comprised of the second phase of a refurbishment to the second-floor laboratories and offices. This included the provision of new roof mounted chillers and AHUs together with the appropriate connections to the existing services. The pre-designed project consisted of the supply, installation, testing and commissioning of new LTHW, CHW and primary and secondary ventilation systems serving fan coil units throughout the second floor. Also installed are domestic, public health services and laboratory wastes

THE ROYAL VETERINARY COLLEGE, NORTH MYMMS Project Value: £750,000



Air conditioning systems, CAT 3 laboratory gas, ventilation and drainage systems, heating, hot water and cooling systems, above ground drainage, specialist sanitaryware installations, ventilation services, plantrooms, fume extract systems, dry riser, BEMS energy management systems, LV electrical distribution, lighting and general power, emergency lighting, data, access control, security and fire alarm systems, lightning protection to the Centre for the Control of Veterinary and Zoonotic Diseases







environment to 2 storey scientific laboratory, the target was to provide a total cleanroom with air locks to ensure that no contaminates entered the working environment to which the client was carrying out lengthy controlled experiments to ensure the quality control of the products manufactured at this plant. The rooms were close controlled temperature environments with fume extraction and hepa filtration to ensure a maintained clean environment. The scope of works covered the installation of independently controlled building services with an integration onto the existing BMS management system for the building. New LTHW plant, medical gases including acetylene, hydrogen and nitrogen, natural gas, hot and cold-water services, fume cupboard ventilation, air handling units, mains power distribution, new lighting, small power, voice and data, fire detection and a new Tannoy system were incorporated into this new facility





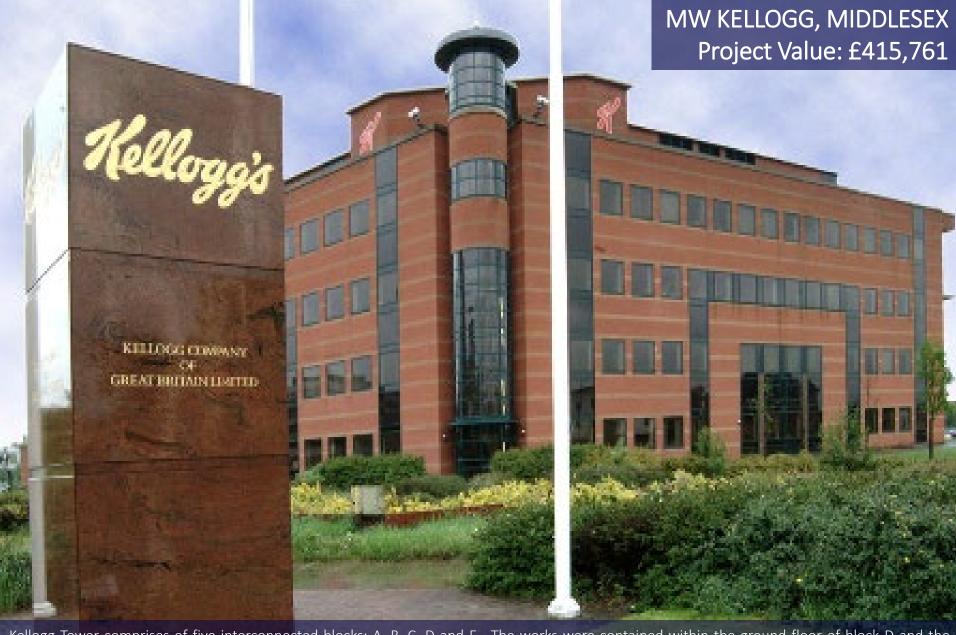
Working with the main contractor and consultant, we took over the contract two weeks into the build programme, following the collapse of the original contractor, using the workforce on site we completed the installation of a suite of clays seven Laboratories. The works involved the full mechanical and bespoke controls system to the Labs, consisting of the air handling unit, all pressure rated supply and extract ductwork, heat pump chiller and bespoke trend controls system. Upon completion, we carried out full commissioning via a specialist contractor to demonstrate and certify the Labs BS/EN Class 7 Standard



mock training bays, staff accommodation, training classroom, conference centre with kitchen and canteen facilities and solar energy recovery rooms



This project consisted of the mechanical services required for a unique break diagnostics test cell at the Mercedes Petronas F1 Factory. This included the integration of new chilled water services into existing headers and plant, along with air conditioning and ventilation to the new control room and workshop of the new test cell



Kellogg Tower comprises of five interconnected blocks; A, B, C, D and E. The works were contained within the ground floor of block D and the basement level of block B. The ground floor comprises of an open plan office, together with a refurbished auditorium. The first and second floors remained fully occupied during the ground floor refurbishment works. The new services consisted of primary air, active chilled beams and an air handling unit for energy recovery. The auditorium is served by a new comfort cooled supply air system



Extension of an existing building to accommodate a train driver's simulator building and classrooms for Network Rail. The building services installation comprised of LPHW heating services, air conditioning services, mechanical supply and extract ventilation, installation of sanitaryware, plumbing services, hot water distribution systems, water mains, public health services, BMS controls and wiring, lighting and power services, emergency lighting, mains power distribution, fire alarm services, lightning protection and data installation





This is a Ministry of Defence (MoD) site, the contract involved the construction of a 'heavy replenishment at sea' (HRAS) proving and simulation facility. Originally ship-to-ship transfers of fuel oil and stores containers had a maximum weight limit of two tonnes (RAS), the HRAS took this limit up to six tonnes. NATO and US warships are being constructed to use the new six tonne HRAS, but the HMS Raleigh facility will be the proving ground for this. The installation will be used for two years as a proving facility and then for the training of Royal Naval personnel. The site incorporates a motion simulator, operated hydraulically, which allows the simulation of various sea states, during simulation, electrical winch loads can vary from ¾ megawatt load to ½ megawatt re-gen within an eight second cycle. To cope with these extremes a 1½ megawatt generating facility is being provided with load banks to absorb the re-gen loads. We were responsible for the diversion of services across the site and the design and installation of mechanical, electrical, public health, fire protection, and hydraulic systems



