

Description

- ◆ This £8.5m extension is a large 10m high industrial unit with mezzanine plant/amenity areas and a large basement housing the hydraulic equipment and 2no. 300 tonne concrete seismic blocks
- ◆ The extension is to be used by Jaguar Land Rover (JLR) to test various components and vehicles prior to them going into full production
- ◆ The testing areas range from small test beds for small components to large multi-million pound test cells to test entire cars
- ◆ As part of the project a number of specialist systems were incorporated including specialist extract, hydraulics and compressed air
- ◆ Energy efficient dimmable metal halide high bay luminaires to match existing installation
- ◆ LED luminaires were used in all other areas eg offices, corridors and amenity areas
- ◆ All lighting locally controlled using presence/absence detection and daylight dimming
- ◆ The existing fire alarm detection and sounder coverage was extended to include the new building areas
- ◆ Electrical systems include provision of 4MVA of HV switchgear and LV distribution for extended building
- ◆ Provided voice and data containment and associated infrastructure.



Involvement

- ◆ SDS were appointed by Interserve Engineering Services (IES) as part of the design and build team for Interserve Construction
- ◆ We attended regular project meetings and surveys to develop the performance brief and allow IES to install and procure the complete project
- ◆ SDS carried out the detailed design for the project including all schedules and calculations to enable the client's technical advisor to review and approve the detailed design
- ◆ Due to the technical nature of the equipment and users within the building, detailed co-ordination and user group meetings were carried out to ensure that room data sheets generated by the client were incorporated and accepted
- ◆ As part of our design we carried out detailed calculations using Dialux for lighting, Amtech for lighting and Hevacomp for the mechanical calculations. Once complete these were issued to JLR for review and approval.

Benefits Delivered

- ◆ Engagement in the value engineering process to highlight the risk and benefits of alternative design options
- ◆ Cost effective design of services to meet client specifications
- ◆ Careful co-ordination of services to meet the clients detailed requirements.

£8.5m, 3500m² Research & development extension for Jaguar Land Rover (JLR)