

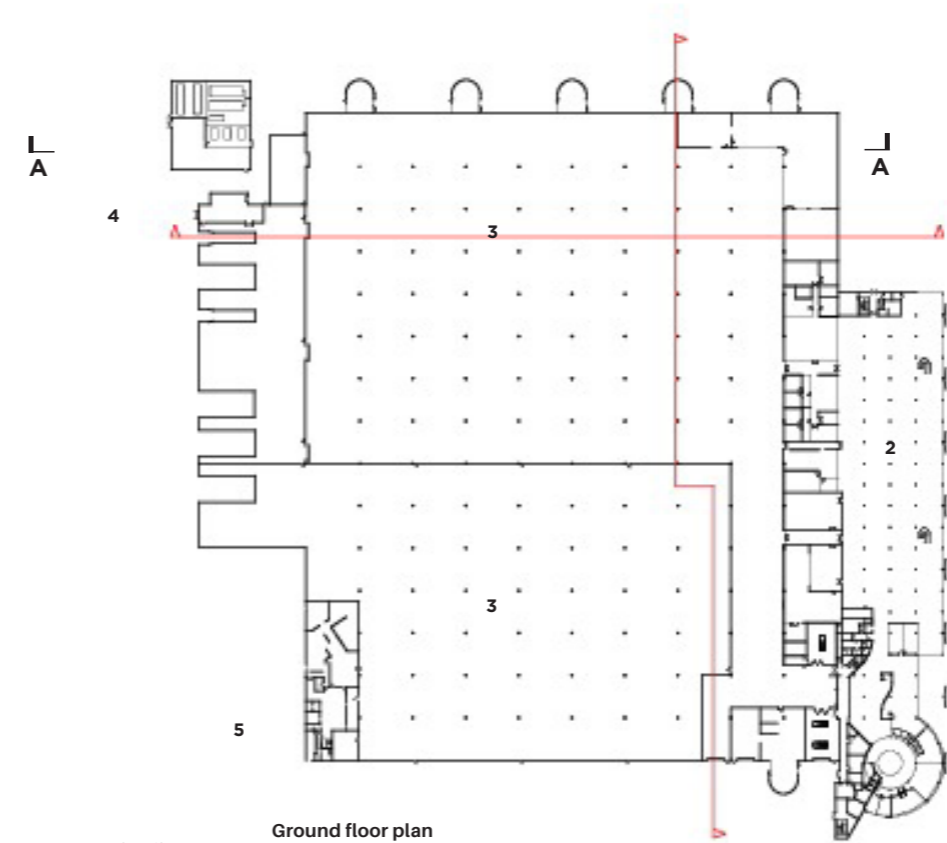
FORD DIESEL CENTRE, DAGENHAM



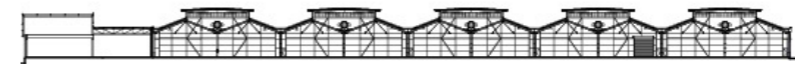
LOCATION: DAGENHAM, ENGLAND
COMPLETION: 2005
VALUE: £28.0M
SIZE: 36,000M²
SERVICE: ARCHITECTURE, LANDSCAPE
SECTORS: INDUSTRY & INFRASTRUCTURE
CLIENT: FORD MOTOR COMPANY, LONDON BOROUGH OF BARKING AND DAGENHAM
CONTRACTOR: SDC CONSTRUCTION GROUP
STRUCTURES: ROYAL HASKONING
SERVICES: HADEN YOUNG LTD
COST CONSULTANT: GLEEDS

Austin-Smith:Lord was appointed designer of the masterplan for this 35-hectare Ford plant in East London, from detail design to implementation, as well as to work on a new Diesel Centre. The project turned the existing plot of land into a supplier park and a centre of excellence for the manufacture of diesel engines for the Ford Motor Company.

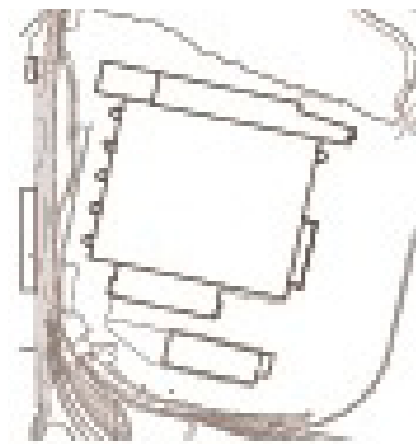
Designed as a landmark scheme within the Thames Gateway redevelopment, this state-of-the-art car factory is considered an exemplar project. The plans for Ford's high-tech diesel engineering and manufacturing facility combine product development and assembly in an innovative workplace environment that integrates the designers and engineers with their manufacturing colleagues to increase Dagenham's diesel engine build capacity.



Ground floor plan
 1. Entrance
 2. Office
 3. Assembly area
 4. Vehicle loading
 5. Staff facilities



Section A-A



Site plan



The design created a sustainable solution for the client as the skeletal frame of the existing building was reused to create the new facility. The main entrance, reception and office space are housed in a new two storey building with a glazed front elevation. The roof, echoing the nature of the adjoining Assembly building roof, delivers natural daylight to the first floor. The linear emphasis is punctuated by curved raised roof upstands accommodating plant rooms and signifying the location of vertical circulation points within the building.

Combinations of structure, roof and transparent elevation create dramatic forms, appropriate to leading edge automotive manufacture. The free-standing structural line at the northern elevation expresses the linear nature and dramatic layering of the building form. The south, east and western elevations, although predominately clad, are punctuated by vertical glazing strips to modulate the sectional profile and local points of access.

The development embodies a number of principles aimed at reduction in primary energy input and the avoidance of greenhouse gasses, including high insulation values, water used as the coolant medium for all air handling systems, re-circulating a significant proportion of air to reduce heat loss and maximising daylight to reduce reliance on artificial light. Battery powered cars recharged by solar energy are located at the building for employee trips throughout the Dagenham Ford Estate.