



Company Experience List – Test Facilities, Engineering Design and Analysis

Year	Customer	Project Description	Location	Scope
2007	Rotec Hydraulics	Analysis of winch for a vehicle	UK	Engineering analysis
	Flight Refuelling	Structural calculations – MOL plant seismic verification	UK	Design calculation
	Flight Refuelling	Design Review – V22 Fuel Test Rig	UK	Design review
	Goodrich Wheels and Brakes Div, OH	Assistance with repairs to existing aircraft wheel brake test machine	USA	Design assistance
	FAA Technical Center, NJ	Assistance with modifications to runway test machine	USA	Design assistance
2006	Ocean Fabrications	Electrical consultancy – submarine cable system safety earthing during tests and repairs	UK	Engineering consultancy
	Rotec Hydraulics	Power pack mechanical design	UK	Design
	Rotec Hydraulics	Winch post mechanical design	UK	Design
	FAA Technical Center, NJ	New load modules for runway test machine	USA	Design
2006/7	Flight Refuelling	Fuel Test rig for Goodrich	UK	Design assistance
2005	TM Engineers	Large chandelier for shopping mall	UK	Design
2005/6	Dunlop Aircraft Tyres	<ul style="list-style-type: none"> Design and supply of tyre temperature probes for high speed aircraft tyre test machine Machine also substantially upgraded by us in 2000 to provide higher loads and capability (machine originally supplied in 1964) 	UK	Design and Supply
2004	Johnson Matthey Fuel Cells	Design of fuel cell collation machine	UK	Design
	Burness Corlett	3D ship modelling	UK	CAD modelling
	Horstman Defence Systems	FE Study – main battle tank suspension	UK	Engineering analysis



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2003	Johnson Matthey Fuel Cells	Analysis of fuel cell assembly problem	UK	Engineering analysis
	Horstman Defence Systems	<ul style="list-style-type: none"> Idle bracket analysis - main battle tank suspension ULFH Arm investigation - main battle tank suspension ULFH Suspension arm FE - main battle tank suspension Suspension arm FE analysis - main battle tank suspension M777 Suspension arm FE analysis- main battle tank suspension Stub axle report- main battle tank suspension 	UK	Engineering analysis
	Rotec Hydraulics	Winch analysis	UK	Engineering analysis
	TM Engineers	Design of fuel tanks for Airbus A330 fuel system test rig	UK	Design
	Goodrich Wheels and Brakes Div, OH	Design of modifications to elderly aircraft brake test machine	USA	Design
	Marlin	Project management on automation project for contact lenses	UK	Engineering consultancy & management
	Johnson Matthey Fuel Cells	<ul style="list-style-type: none"> Design and development of materials handling equipment Design and supply of final collation machines for fuel cell assembly (altogether 4 projects) 	UK	Design and Supply
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2002	Marlin	Project management and engineering assistance for car seat slide assembly machines	UK	Engineering consultancy & management
	Johnson Matthey Fuel Cells	<ul style="list-style-type: none"> Design and development of materials handling equipment Design and supply of final collation machines for fuel cell assembly (altogether 2 projects) 	UK	Design and Supply
	Pains Wessex	Design and supply of test rig for aircraft flares ejection and dispersion	UK	Design and Supply
	Goodyear / Dunlop	Move , refurbish and sell off old tyre test machine	UK	Engineering consultancy & management
	Horstman Defence Systems	<ul style="list-style-type: none"> FE analysis - main battle tank suspension Arm analysis - main battle tank suspension 	UK	Engineering analysis



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2002 cont	Alan Cobham Engineering, Blandford	Control system design for fuel test rig	UK	Design
	Bowyer Engineering	Tooling design using Solid Works	UK	Design
	FAA Technical Center, NJ	Modifications to runway test machine	USA	Design
2001	Marlin/Ralee	Engineering assistance / Project and construction management UCCM 3 – a machine for measuring the profile of completed wings for Airbus aircraft for Ralee based in CA	UK/USA	Engineering consultancy & management
	Federation Equipment	Winch design	UK	Design
	TM engineers	Design of base-frame for very large Generator	UK	Design
2001	Horstman Defence Systems	Design and supply of thermal characteristics test rig for main battle tanks suspension units	UK	Design and Supply
	Link Engineering Inc, Detroit MI	Design and supply of nitrogen and pneumatic systems for refurbishment of large aircraft tyre test machine for Dunlop Aircraft Brakes Division.	UK/USA	Design and Supply
Pre 2001	Spirotech	Shear pin calculations	UK	Engineering analysis
	Goodrich Wheels and Brakes Div	Analysis of vibration problem on aircraft brake test machine		Engineering analysis
	Alan Cobham Engineering, Blandford	Design and supply of fuel system test rigs for commercial and military aircraft, and naval ships (4 projects)	UK	Design and Supply
	Horstman Defence Systems	Design and supply of test rigs for main battle tank suspension units, also FE analysis of same (5 projects)	UK	Design and Supply
	TM engineers	Design of base-frame for very large Motors	UK	Design
		Design of fuel test rig for redevelopment of the Nimrod AWACS aircraft	UK	Design
	Dowty Aerospace	Propeller test rig design	UK	Design
	Link Engineering Inc. MI	Project and construction management, and engineering design, for refurbishment of large aircraft tyre test machine for Dunlop Aircraft Brakes Division	UK/USA	Engineering design, consultancy & management



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Pre 2001 cont	Marlin	<ul style="list-style-type: none"> Project and construction management, and engineering design, for UCCM 1 & 2, machines for measuring the profile of completed wings for Airbus A330, A340 and A380 aircraft for B.Ae. Project management and engineering assistance for contact lens assembly machines 	UK	Engineering consultancy & management
	FAA Technical Center, NJ, DMJM, Washington, DC and Boeing, Seattle WA.	Design of worlds first (and only) full scale airport runway test machine, and subsequent additions. This machine provides real-time and load testing of airport pavements, up to total destruction of the pavement	USA	Design
	Goodyear Tire Corp.	<ul style="list-style-type: none"> Design of advanced high speed aircraft tyre test machine to provide full real-time simulation of take-off, landings and RTO sorties Design of modifications to existing aircraft tyre test machine, and supply of specialist equipment to same 	USA	Design and Supply
	Flight Refuelling	Design and supply of surge test rig for military application fuel testing, and vibration fixture for same	UK	Design and Supply
	Solent Energy	Consultancy on US DoD bid strategy for aircraft Ground PSU's	UK	Engineering consultancy