

Curriculum Vitae
of
Malcolm J Robins
Chartered Mechanical Engineer

Occupation :	Director, Dove Thermal Engineering Limited The company incorporates Dove Associates, a design and engineering consultancy established 1978.
Specializations :	Areas of heat transfer, thermodynamics and fluid mechanics relating to thermal engineering topics Forensic engineering, Expert Witness, Capital plant design and construction
Activities :	Fault investigation, systems development, thermal design, and expert witness in related fields
Professional :	Member, Institution of Mechanical Engineers (MIMechE) Member, Institution of Engineering Designers (MIED) Member of the Heat Transfer Society late Fellow, Institution of Plant Engineers (FIPlantE) late Fellow, Society of Operations Engineers (FSOE)
Awards :	Design Council Award for "Consistent High Standards of Project Management & Design Capability"
Academic :	Diploma in Mechanical Engineering with Marine Endorsements Chartered Engineer, Engineering Council registration 655388 Open University Mathematics and Technology (distinction)
Skills :	Forensic Analysis Engineering Design CAD Solid Modelling Mathematical Modelling
Experience :	Biothermal, Process & Environmental Engineering Plant Design and Engineering Manufacturing Plant & Factory Services Product Design Development and Testing Process Plant Design & Project Management
Extra-mural :	IMechE Area Management Committee Heat Transfer Society National Committee

ACCREDITATIONS

London University Examinations Board/BTEC/City & Guilds :	Examination Writer-Editor in Engineering & Manufacturing from 1996
Industrial Development Board for Northern Ireland :	Member of Interim Management Panel from 1996
NatWest-BP Awards for Technology :	Project Assessor from 1992
British Engineering Design Awards :	Industrial Awards Adjudicator from 1991
Production Engineering Research Association :	Production Plant & Machinery Advisor from 1983
Design Council :	Engineering Design Consultant from 1983
Departments of: Trade & Industry/Energy/Environment :	Various Accreditations from 1980

PRIOR EMPLOYMENT

Heenan & Froude Limited (1970-78) :	Regional Manager (from Area Engineer); Engineer-in-Charge (Extended Surface Equipment) Activities: Evaporative cooling towers; gas/air coolers; engine test plant; drives & couplings
Hydronyl Limited (1968-70) :	Engineer-in-Charge (from Technical Sales Engineer) Activities: Heat & mass transfer consultancy to the petrochemical and process industries
Serck Heat Transfer (1966-68) :	Senior Project Engineer (from Project Engineer) Activities: Process & mechanical design of tubular heat transfer equipment and systems
Carter Thermal Engineering (1965-66) :	Applications & Development Engineer Activities: Product & plant project engineering; research & development
Royal Dutch Shell (1961-65) :	Student Apprentice, Alternative Training Scheme for Engineer Officers (MITB)

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Anonymized list of projects undertaken to August 2023

Air blast radiator for HTF conditioning	High temperature calendering plant
Air preheater with flash steam recovery	High vacuum furnaces and systems
Air rings for blown film extrusion	Homebrew boiler failure mode investigation
Air source heat pumps	Hot box process heating
Aircraft undercarriage spin-up system	Hydraulic press engineering
Air-to-air plate recuperator	Hydraulics test cells
Alternative Dispute Resolution	Hydrolyzation reactor tempering rig
Anaerobic digestate sterilization	Ice factory design & build
Anti-ligature radiator enclosures	Ice rink design & operation
Aquaculture system design	Ice-making plants
Architectural acoustic doors	Immersion cooler design & prototyping
Arena air conditioning	Integration of site energy systems
Autoclave design & mathematical modelling	Large process steam condensers & systems
Automotive catalyzer exhaust systems	Legionnaires' disease outbreak
Batch-fired biomass boiler operation	Liquid phase heating plant
Bio-fuel factory heating system	Locomotive test bed systems
Bio-fuel heating system investigation	Marine airconditioning system
Biogas process optimization	Marine boilers and economizers
Bioheat reactor evaluation	Medical dose metering unit
Biomass Boiler Plant Design & Installations	Military vehicle defence systems
Biomass boiler structural failure	Mineral colour milling & blending plant
Biomass boiler performance modelling	New build office aircon & systems
Biomass conditioner	Offshore pipeline drying
Biothermal modelling & engineering	Paper mill energy systems
Boiler fire investigation and refurbishment	Papermaking plant failure mode analysis
Boiler plant investigations	Peltier effect appliances
Boiler upgrades	Personal accident investigation
Boilerhouse and process plant	Plant management services
Bottling plant process services	Platen heat transfer & design
Boundary layer extrudate cooling units	Power conversion control system
Calendering line thermal design	Pressure vessel explosion
Carbonated drinks processing	Pressurized HTF plant rectification
Cash dispensing machine (ATM) cooling solutions	Process control chiller
Causes & mechanisms of ships' funnel fires	Product thermal evaluation
Central services plant building for large site	Production line induction heating
Chromium plating	Production line product testing stage
Class 125 high speed diesel train systems	Production process improvement
Class 158 DMU HVAC re-engineering	Production research facility
Cold room airconditioning	Production test facilities
Continuous casting process	Rail vehicle aerodynamics for HVACR porting
Corrosion systems	Refrigerated laboratory immersion bath
Crude oil pump-out exchanger & pontoon	Regenerative furnace design
Cryogenic food processing plant	Renewable Heat Incentive (RHI) consultancies
Diesel-electric nose-mount chiller	Rivers physical & mathematical modelling
Disposal of steam boiler plant	Rotary dryer and calciner thermal design
Domestic & office dehumidifier	Salt refinery design
Double-pipe heat exchanger designs	Salt bath rubber extrusion
DTI energy network survey and analyses	Sample rotary dyeing machine
DTI Renewable Heat Incentive consultancy	Sintered component cooling
Dupont pressurized HFC plant	Site cooling services design and installation
Electrical appliance prosecution	Soft drinks manufacturing line
Environmental noise surveys	Solid state dynamic balancing system
Essential oils plant investigation	Steam systems fault investigation and rectification
Factory services & plant installation	Steam traction engine investigation
Factory ventilation plant	Steaming ovens for catering and food manufacture
Flat-bed thermo-bonding	Storage warehouse airconditioning
Food flavour application machinery	Sugar boiling pan calandria section
Fridge-freezer investigation and television appearance	Tempering incubator design & prototyping
Fuel oil heaters	Thermal break roof hatch design & prototyping
Fuel test rig thermal systems	Thermal fluid heating plant
Furnace plant failure investigation & analysis	Thermic lance and rotary degasser
Furnace systems engineering	Thermodynamics laboratory
Gas fired heating module for baking ovens	Thermo-forming consultancy services
Gas turbine test plant	Transformer oil recovery plant
Ground source heat pumps	Transport HVACR coils & systems
Heat pumping systems design	Trent 900 engine environmental test systems
Helicopter blade heating & vibration	Tube extrusion mill services
High speed thermodynamic valve	Warehouse airconditioning design & installation