

# Global supply chain integration in the **automotive** sector

## Arlington Automotive **BIRMINGHAM, UK**



### PRODUCTS

- Battery Vents
- Water Pumps
- Chiller Units
- Thermostat Assemblies
- Breathers
- Charger Breather
- Inverter Breather
- Carbon Canisters
- Expansion Tank Assemblies
- DMTL Assemblies
- Idler Bracket Assemblies
- Aux Valve Assemblies
- Tool Kits

### CAPABILITIES

- Made to print assemblies through Poke Yoke rigs / workstations, supported by Full Project Engineers, CAD Engineer, PPAP Engineers, Process Engineers and Quality Managers across all sites

### FACILITIES

- Oven forming
- Mono / Multi-layered nylon
- Fuel lines
- Brake hoses
- Breather / Vent pipes
- Vacuum hoses
- Air hoses
- Drain tubes

## Arlington Automotive **COVENTRY, UK**



### PRODUCTS

- Tool Kits
- Fuel Filters
- Fuel Pumps
- EDC Boards
- Centre Arms
- Water Pumps
- Binnacles
- Vapour Separators
- Passive Arm Assemblies
- External Fuel Line Assemblies
- ROV Retainer Assemblies
- Liquid Trap Assemblies
- Aftermarket Pick and Pack
- Oil Bottling

### CAPABILITIES

- Made to print assemblies through Poke Yoke rigs / workstations, supported by Full Project Engineers, CAD Engineer, PPAP Engineers, Process Engineers and Quality Managers across all sites

### FACILITIES

- Oil bottling machine
- 3D Printer

## Arlington Automotive **DERBY, UK**



### PRODUCTS

- Breathers
- Battery Vents
- Carbon Canisters
- Water Inlet Pipe
- Secondary Air Bracket Assemblies
- Symposer
- Ride Height Sensors
- Oil Pickup Pipe
- Vac Pump
- Water Bypass Tubes
- Spare Wheel Tie Down Bolt

### CAPABILITIES

- Made to print assemblies through Poke Yoke rigs / workstations, supported by Full Project Engineers, CAD Engineer, PPAP Engineers, Process Engineers and Quality Managers across all sites

### FACILITIES

- Hot air pipe former

## Arlington Automotive **NEWTON AYCLIFFE, UK**



### PRODUCTS

- BIW Stampings
- Wiring System Support Brackets
- Interior Trim Brackets
- Seating Mechanisms
- Seat Restraint Components
- Fuel System Support Brackets
- Suspension / Chassis Mounting Brackets
- Perforated External Grills
- Perforated Speaker Assemblies
- Bumper Stampings / Assemblies
- Engine Stamped Components
- Pedal Boxes
- Instrument Panel Beams

### CAPABILITIES

- Small to medium pressing supplier with on-site powder coating and EP paint lines
- Robotic MIG and spot welding
- Assemblies

### FACILITIES

- Progressive Presses up to 600T
- Robotic MIG and spot welding
- EP Coating line: 1000 hours salt spray
- Assembly
- We are also looking at investing in 2 new 800T / 1000T presses

## Arlington Automotive **SLOVAKIA**



### PRODUCTS

- Fuel Assemblies
- Cooling

### CAPABILITIES

- Made to print assemblies through Poke Yoke jigs / workstations

## Magal AWT and Magal Engineering **READING, UK**



### PRODUCTS

- Thermostats – electrical and mechanical
- Complex Technical Plastic Injection Moulding
- Welded Plastic Coolant Assemblies

- Transmission Oil Valve
- Metal Pressings
- Aftermarket Hydraulic Steering Gears

### CAPABILITIES

- Engine thermo-management systems expert
- Element and thermostat manufacturing
- Design, development, prototyping and validation
- Fully equipped test laboratory
- CAE and CFD analysis
- 3D printing

### FACILITIES

- Range of plastic injection mould presses up to 600T
- Ultrasonic welding equipment for leak tight joining of complex assemblies
- Manual, semi-automated and fully-automated assemblies
- Thermostat wax element charging and calibrating

## Magal Cables **STOURPORT, UK**



### PRODUCTS

- Jacks
- Winch / Lift Assist
- Control Cables
- Park Brakes
- Pedal Box
- Chassis
- Other Pressings
- Plastic Injection Moulding

### CAPABILITIES

- Jack development and DVP
- Spare wheel winch development and DVP
- Medium to light duty actuation cables development and DVP
- Pedal box development and DVP
- Complex metal brackets

- Plastic injection moulding up to 150T
- Fully equipped test laboratory

### FACILITIES

- Range of stamping presses up to 260T
- Cable extrusion, die casting and manipulation
- Conduit manufacture
- Cable winding
- Plastic injection moulding up to 150T
- Automated robotic MIG welding
- CNC machining
- Manual, semi-automated and fully-automated assemblies

## Magal Dauphinoise Thomson **GRENOBLE, FRANCE**



### PRODUCTS

- Wax Element for thermostatic radiator valve and industrial applications
- Wax Element with PTC Resistor
- Engine Thermostat Plastic Housing Assemblies

- Thermostats - electrical and mechanical
- Thermostat Housings
- Temperature Regulators for air, oil, water and fuel

### CAPABILITIES

- Engine thermo-management systems expert
- Element and thermostat manufacturing
- Transmission oil valve development and validation
- Design, development, prototyping and validation
- Fully equipped test laboratory
- CAE and CFD analysis

### FACILITIES

- High speed in-house designed wax element production machines
- Fully-automated and manual assembly
- Development and technical facility with laboratory
- Development of prototypes and prototype tooling
- Plastic injection moulding up to 300T

## Magal Tech **CHENNAI, INDIA**



### PRODUCTS

- Connecting Rods
- Car Jacks
- Tool Kits
- Thermostats and Elements
- Exhaust Manifolds
- Control Cables
- Machining
- Metal Pressing

### CAPABILITIES

- Jack development and DVP
- Thermostat development and DVP
- High precision machining and grinding of Conrods
- High precision machining of Steel and Aluminium

- Development of prototypes for testing and analysis
- Fully equipped metrology laboratory
- Aerospace accreditation AS9100

### FACILITIES

- Conrod automated machining transfer lines – forged and sintered
- Steel presswork – 29 presses up to 1000T
- Jack assembly lines and CNC machining
- Thermostat element manufacture and calibration
- Manual assembly of medium duty control cables
- CNC machining of steel and aluminium castings
- Aerospace component machining

## Magal Cavo **KOCAELI, TURKEY**



### PRODUCTS

- Tyre Carriers and Cables
- Parking Brake Assembly and Park Brake Cables
- Cables for: hood release, clutches, windows and doors
- Safety Critical Seat Belt Retaining Cables

### CAPABILITIES

- Development and DVP for spare wheel winch, park brake and cables
- Tooling development (progression, injection moulding)
- Metal stamping development progression and single operation

- In-house tool room and die making
- Fully equipped test laboratory

### FACILITIES

- Cable manufacturing
- Extrusion, moulding and over moulding
- Progression pressings up to 600T injection moulding with robotic handling
- Final assembly and test facility
- Zamak injection
- Electrostatic powder paint line
- CNC machining

## Magal Tongrun **JIANGSU, CHINA**



### PRODUCTS

- Hydraulic Jacks
- Scissor Jacks
- Tool Kits
- Park Brake
- Spare Wheel Winch
- Control Cables
- Future – Thermostats and Oil Temperature Control Valves

### CAPABILITIES

- 3D design software used for structure analysis and industrial modelling
- R&D centres in China, USA and France have developed global programs with Ford and General Motors

- Testing Centre meeting international and national industry standards

### FACILITIES

- Workshop facility of 110,000 mtr. Sq.
- 12 Scissor Jack assembly lines
- 3 Hydraulic Jack assembly lines
- Control cable assemblies
- Automated park brake assembly line
- Semi-automated Control Cable assembly line
- 20,000 mtr. Sq. products warehouse with barcode system