



EXSEL DYTECNA

ENGINEERING

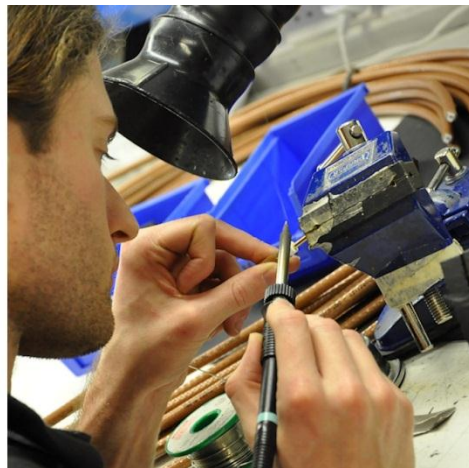
Manufacturing Services

Engaging Exsel Dytecna to manufacture specialist product in an ISO accredited safety, environmental and quality environment brings many benefits to businesses of all types.

Exsel Dytecna design, product and manufacturing innovation can in particular support the evolution of entrepreneurial UK and overseas product organisations.

The understanding of the processes, disciplines and infrastructure is essential for efficient and cost effective manufacturing. With over 50 years' experience of specialist UK product manufacturing, Exsel Dytecna is well-regarded with a pedigree of delivery and quality in product and services and is a strong and reliable business partner.

Exsel Dytecna also offers cable and harness manufacturing.



Key Customer Benefits

- Minimise initial business set-up costs and management overhead
- Leverage from existing commercial operations and administration
- Reduced lead time for staff recruitment, local processes in place
- Experienced in business 'flex', demonstrated ability to increase/reduce business size to meet delivery demands
- Potential for access to local business support funding
- Minimised risk – all local market fluctuations would be offset to manufacturing partner
- Accreditations in place
- Shortened and proactively managed supply chain, no time zone issues
- Leverage supply chain and purchasing power using existing supplier assessment processes
- Localised spares and support network for European operations
- Reduced manufacturing costs, import taxes, transport costs
- Avoidance of local taxes and administrative burden of setting up operations
- Ability to source local suitably qualified resources
- Option to utilise Dytecna in-house engineering and through life support services

Key Attributes

- Trusted partner in joint endeavours.
- Respected - quality of delivered product and project management
- Demonstrated ability to respond quickly and efficiently to changing circumstances
- Knowledgeable of standards and requirements

Core Competencies Include

- Mechanical, electrical, electronic design (employing Solidworks and Inventor design software)
- Medium volume quality manufacturing
- Software design for monitoring and control (including safety critical operation)
- Certification & test activities (components and systems)
- Through Life Support analysis and planning including obsolescence management
- Safety management & safety case administration
- Technical documentation including illustrated spares schedules

Manufacturing, Assembly and Supply Chain Management

- Mechanical, electrical, electronic systems.
- Manufacture of complex fabricated assemblies using in-house machine tools and facilities: Turning; Welding MIG / TIG / Arc / Gas; Milling; Punching; Bending; Laser Cutting; Drilling; Plating / Painting / Silk Screen Printing.
- Design and manufacture of electronic subsystems and **specialist wiring harnesses**:
 - ROHS Compliant Cable Assemblies
 - Cable/Harness Design and Prototyping Service
 - Manufacture/Assembly to IPC WHMA-A-620 disciplines
 - Ruggedized Cable and Conduit Assemblies for Vehicle Systems and Platforms for Harsh Environment Operation
 - Single, Multi-Core, Coaxial, Ribbon, Flat and Twisted Twin Cable
 - Single / Double Screened, Power, Data Cable Assemblies
 - Flat and Circular Earth Bond Braided Assemblies
 - Multi-branched Hand Laid Wiring Looms (up to 10 way)
 - Non Hand Laid Cables up to 150 Metres
 - Multi Core MIL-C Cables up to 156 Pins
 - Cable Assembly Repair and Refurbishment Service
- 'Lean' processes employed; Broad supply chain expertise; Access to supporting local manufacturing network

Fabrication Capability

Cutting

Amada Alpha 4 Laser Cutter

- Max cut of up to 10mm Mild Steel
- Max cut of up to 9mm Stainless Steel
- Max cut of up to 6mm Aluminium
- Max sheet size of 3000 x 1500mm
- Capable of cutting Blast Armour plate 50B
- Max sheet weight 330 kg

Amada Alpha 3 Laser Cutter

- Max cut of up to 4mm Mild Steel
- Max cut of up to 3mm Stainless Steel
- Max cut of up to 3mm Aluminium
- Max sheet size of 2500 x 1250mm

Kaltenbach Saw

- Able to cut up to 130mm tube and 120 x 120mm or 300 x 40mm solid bar
- Capable of cutting Mild Steel, Stainless Steel and Aluminium

Also equipped with Band Saw and Chop Saw for cutting smaller material

Welding

TIG / MIG / MAG

- Aluminium TIG welding up to 25mm thick
- Aluminium MIG MAG welding up to 10mm thick
- Mild Steel MIG welding up to 15mm thick
- Mild Steel TIG welding up to 10mm thick
- Stainless Steel TIG welding up to 10mm thick

Stud Welder

- M3 to M8 stud s can be fitted to Aluminium, Stainless Steel and Mild Steel

Folding / Bending

Amada Press Brakes

HFP (7 Axis) and HFT (5 Axis) 80 Tonne

- Max of 10mm Mild Steel (subject to length)
- Selection of sectional tooling
- Ability to produced bespoke tooling in house
- Direct and 2D programming

Tubella UNI 60 Digital Tube Bender

- Two sets of tooling 1" and 1 ½ " diameter for bending grade material
- Max Mild Steel tube 1 ½" outside diameter with a 2mm wall thickness
- Max Aluminium tube 1 ½ " diameter with 3mm wall thickness

Milling

XYZ Miller

- Three axis CNC machining
- Two axis CNC machining
- Manual machining

Additional Equipment

Heager Insertion System 618 Plus

- M3 – M10 clinch studs into Mild Steel, Stainless Steel and Aluminium
- Suitable for a variety of clinch type fasteners

Rivet Nut Tools

- Capable of inserting M3 – M12 Rivnuts

Universal Pipe Notcher

About Exsel Dytecna

Dytecna originated in 1947 and from inception has demonstrated expertise in engineering with the selection and procurement of military and off-the shelf equipment for integration into a wide range of bespoke systems – installed into tracked and wheeled vehicles, static and air-portable containers or other mediums to suit special roles and environments.

In recent years this expertise has expanded to include the design and manufacture of training and simulation hardware, protection devices and equipment (including ballistic and electronic force protection systems), and conditioning monitoring and power distribution solutions for complex systems.

Today, as a leading independent engineering solutions, technology systems and support services company, Exsel Dytecna continues to deliver to its traditional customer base and is also bringing engineering innovation to other technologically advanced sectors.

Our People

People have always been the key to our success. All staff are academically and professionally qualified to meet internal job specifications. Suitably qualified personnel are recruited from electrical, electronic, mechanical, software and systems engineering disciplines from a wide range of industrial and military backgrounds, including but not exclusively, HM Forces, Aerospace, Telecoms, Automotive and Process industries.

Accreditation

Integrated Management System (IMS) operating in accordance with ISO 9001 and ISO 14001.

