

**Anti-Vibration
Products**



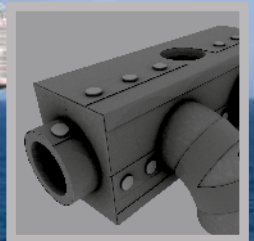
**Expansion
Compensators**



**Flexible
Connectors**



**Acoustic
Products**



**Thermal
Insulation**

**INDUSTRIAL NOISE, VIBRATION & THERMAL
MANAGEMENT SOLUTIONS**

About us

Isolated Systems Ltd specialise in the design, manufacture and installation of industrial noise, vibration and thermal management products.

Established in 1970, ISL began manufacturing anti-vibration equipment and flexible duct connectors mainly for use within the HVAC industry, since then our product range has significantly evolved to include thermal expansion compensators, thermal insulation systems, acoustic enclosures, packaged skid units together with the expertise to deliver bespoke 'turnkey' acoustic solutions.

Exports now account for more than 25% of turnover and our products perform as a key component within the systems of many multi-national blue chip organisations, predominantly serving the Oil & Gas, Power Generation, Pharmaceutical and Semi-Conductor markets. We support and strengthen our position in the supply chain with lean manufacturing, exceptional customer service and innovative product designs that will add value to our clients business.

More recently, we have extended our services to include global support of our products comprising comprehensive site surveys, full installation and commissioning of our systems from our qualified team of site engineers that extends to offshore facilities.



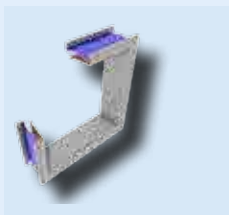
Products

Expansion Compensators + Flexible Connectors

Flexible Connectors, Multi Layer Seals and Expansion Compensators are designed to provide vibration isolation, absorb expansion, and compensate for misalignment in ductwork. They can also reduce noise breakout using dedicated noise attenuation materials and constructions.

Maxi Flexible Connectors

- Bespoke items which can be manufactured to any shape & configuration
- Pressure range 10" to 80" WG
- Temperature range -50°C to +250°C
- Supplied as 'Single' or 'Multi-ply'



ISOFLEX Multi-Layer Seals

- Bespoke items manufactured to any shape & configuration
- Temperature range +600°C (up to 1000°C with bolster)
- Pressure range 1400mm WG / 55" WG

ISOFLEX Fabric Expansion Compensators

- Bespoke items manufactured to any shape & configuration
- The ultimate in arduous operating conditions (Gas Turbine Exhausts)
- 'A0' rating is also an option subject to application and specifications (maintains integrity for 60 minutes in a cellulosic fire scenario)
- Wire mesh support included
- Can be supplied with supporting steel carriers or as 'fabrics' only



Metallic Expansion Compensators

- Designed to accommodate movement in 3 axis - Axial, Lateral & Angular
- Absorbs movement in multiple directions due to their inherent flexibility
- No maintenance required
- Reduces loads & temperatures to minimum

Rubber Bellows

- Supplied either as 'Single' or 'Double' sphere
- Temperature ranges approx. +80°C to +130°C
- Supplied with 'tied' or 'untied' flanges
- Vacuum rings fitted when used on negative pressure applications



Products

Thermal Insulation

Turbine Structures Insulation

- Insulation Jackets provide a pre-shaped wrap around cover
- Typically used for Gas Turbine exhaust collectors, diffusers & turbine body insulation
- Includes fixing straps with 'D' rings & steel lacing hooks
- Suitable for temperatures up to 1100°C

Silicone Foam Insulation

- Fibreless thermal insulation, manufactured from closed cell silicone foam
- Stable, non reactive & resistant to extreme environments
- Minimum water absorption
- Temperature range -60°C to +230°C
- Available in standard sheet or extruded tube
- Easily manipulated to most shapes including intricate geometries
- High density plastic Velcro, stainless steel poppers or straps with 'snap' connectors to ensure a 'snug' fit
- Flame retardant versions available for sensitive applications



Calcium Silicate Insulation

- High quality pre-formed insulation for pipe or vessel assemblies in hot process applications
- Non-combustible Calcium Silicate with an upper temperature of 1000°C (1832°F)
- Outer weather protection of anti-static silicone coated glass fibre fabric, which is water proof & UV resistant
- Pre-fabricated shells that close around pipe straights, elbow, flanges & valves
- Insulate & also reduce noise breakout with only one layer of 40mm insulation, other thicknesses available
- Environmentally friendly, non toxic, asbestos, formaldehyde and ammonia free
- Pre-formed construction cuts site installation working hours, reducing costs significantly
- Assembly - tongue & groove joints & spigot ends for pipework ensure a waterproof installation and minimise thermal losses. Outer facing has an overlapping flap adhered with specially developed adhesive
- No maintenance required - can be easily removed for inspection and re-fitting
- Dimensions - 1/2" to 24" pipe sizes available as standard, other sizes available including vessel radius and bevelled lagging and domes shapes
- Bends come with standard 90 degree bends, however 45 degree bends & special angles can be supplied

Thermal Jackets

- Wrap around cover for heat retention, frost or personnel protection
- Reduces heat gain inside plant rooms & enclosures
- Fastenings include Velcro flaps, fixings straps with 'D' rings & pull-cords
- Indoor or outdoor use
- Temperature range -50°C to +1100°C
- Easy to install & remove reducing site installation working hours
- Stainless steel knitted mesh can be added where pipework vibrates

Products

Acoustic Products

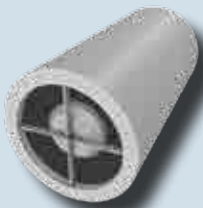
Isolated Systems Limited design, manufacture and install a variety of Acoustic Products to comply with specific noise levels or standards, from single products to large projects, onshore or offshore, servicing many global companies

Acoustic Enclosures, Weather Enclosures & GRP Weather Enclosures

- Designed to reduce noise down to level required or for weather protection
- Range includes close-fit through to large walk in Enclosures
- Designs :-
 - Frameless
 - Panel to panel construction, bolted or clipped together
 - Extruded aluminium frames with panels retained with quick release fasteners for easy fitting & removal
 - Steelbox frame with panels bolted down or fitted with quick release fasteners
- Optional extras - doors, access panels, ventilation, windows, demountable



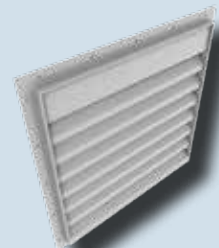
Silencers / Attenuators



- Small cross-talk to large industrial Attenuators - Rectangular and/or Circular
- Light gauge & heavy gauge castings
- Available in pre-galvanised mild steel, stainless steel, aluminium and polypropylene
- Ductwork/HVAC Attenuators manufactured in accordance with HVAC spec DW/144
- Acoustic performance selected with software by trained acousticians

Acoustic Louvres & Weather Louvres

- Compact, aesthetically pleasing, with all round weather protection.
- Light gauge & heavy gauge casings
- Available in pre-galvanised mild steel, stainless steel, aluminium and polypropylene
- Acoustic performance selected with software by trained acousticians



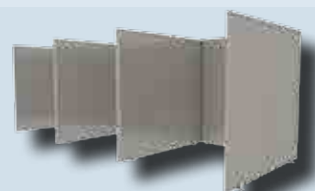
Acoustic Fan Jackets & Acoustic Lagging (Mattresses)



- Flexible hard wearing wrap-around cover
- Reduces noise breakout from cased axial fans, compressors, turbines packages etc
- Fastenings with Velcro flaps & additional fixings straps with 'D' rings, eyelets or insulation 'stick-pins' if required
- Pre-shaped jackets/lagging are easy to install & remove, reducing site installation working hours & costs significantly
- Fire retardant or class '0' fire rating construction available

Acoustic Screens

- Variety of acoustic screens available from standard & bespoke designs
- Infinite number of designs, 2 standard ones are :-
 - Frameless - panel to panel construction. Panels bolted or clipped together used for close-fit, small or large screens
 - Panels - bolted to a steel box section frame, used for medium to large screens & offers a rigid structure
- Acoustic performance - designed to reduce noise level down to required level or standard specified



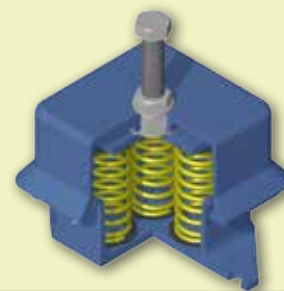
Products

Anti-Vibration Products

Our business started over 40 Years ago with a modest range of Anti-Vibration Spring Mounts. Through the process of in-house development & testing and working closely with our growing Customer base, our Anti-Vibration Equipment Product range has extended to meet ever more stringent isolation requirements and application specific demands. Furthermore, due to our in-house design and manufacturing capability, we can quickly develop new designs or modify existing Mount geometries, to suit customer specific applications or site based size restrictions.

Spring Type Mounts

- Heavy Duty Enclosed Spring style
 - Available in Single, Twin or Four spring variants
 - Typical load range 25kg to 1324kg
 - Offshore range available featuring non-sparking bronze casting
- Heavy Duty Open Spring style
 - Available in Single, Twin, Four or Six spring variants
 - Typical load range 25kg to 1985kg
- Light Duty Open Spring style
 - Single spring variants only
 - Typical load range 16kg to 381kg

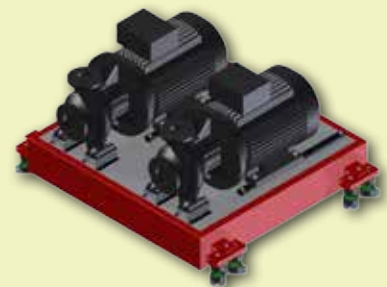


Rubber Type Mounts

- Rubber Bobbin type
 - Suitable for supporting motors/control panels, etc
 - Load range 15kg to 1800kg
- Rubber Turret type
 - Suitable for supporting fan/motor within Air Handling Units, etc
 - Load range 82kg to 876 kg
- Rubber Machine Mounts type
 - Suitable for isolation of guillotine/punch press, etc
 - Typical load range 16kg to 381kg
- Captive Rubber type
 - Suitable for mobile applications - road, sea or rail etc
 - Load range 80kg to 1400kg

Anti Vibration Type Hangers

- Neoprene Rubber Turret type Hanger
 - Load range 4kg to 300kg
- Spring type Hanger
 - Available in single or multiple spring options
 - Load range 10kg to 386kg
- Constant Height Ceiling & Pipe type Hangers
 - Available in single or multiple spring options to isolate low frequency vibration
 - Load range 34kg to 1540kg

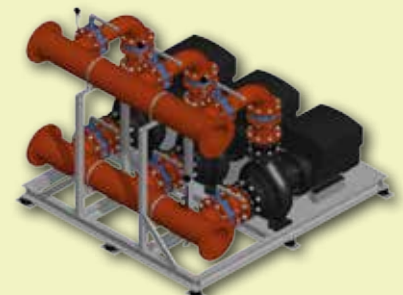


Inertia Bases

- Includes a base plate & wire mesh reinforcement
- Outrigger style mount support feet or Inboard space saving mount brackets
- Supplied either - empty, pre-filled with concrete, and/or with pumps fitted

Packaged Skid Units

- Bespoke packages to comply with existing design parameters, or ISL in-house design
- Designed to support single or multiple pump units
- Issued with factory pressure test certificate



Services

Isolated Systems offer bespoke engineering solutions, design, commissioning and consultancy services. This underpins our broad product offering in sectors such as Commercial Building Services, HVAC, Oil & Gas, Power Generation, Semi-Conductor, Marine Defence and Pharmaceutical.

With our customers asking us to form a key strategic role in their supply chain, our Services and Aftercare Division are continually expanding, with the ability to operate on a World Wide Basis.

With Approved Supply Status in Key Sectors and with Key Accounts, ISL are able to offer you a cost effective, reliable and prompt solution within our scope of supply.

Design

Product Design

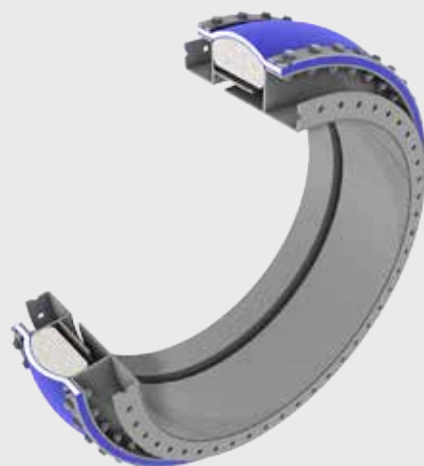
The ISL design department uses the latest **Autodesk Product Design Suites**, which enable us to offer solutions for the whole of our product range. The design office support all departments within Isolated Systems Ltd; whether it is for production, marketing, design, drawings or technical verification requirements. All areas of design are undertaken, from conceptual design through to detailing, enabling accurate manufacture.

OVERVIEW

- New product design and product development
- 3D design (including, but not limited to, anti-vibration mounts, sheet metal work, pipe work, multi-layer fabric systems, inertia bases/skids and noise control products)
- 2D detailing and drafting
- 3D rendering / design visualisation / marketing images
- Conceptual design

DESIGN CAPABILITIES

- 2 Dimensional drawing and design, enables seamless integration with customers' legacy designs.
- 3 Dimensional drawings and models (using parametric design methods), enables design accuracy and visualisation of product prior to manufacture.
- Finite Element Analysis of components and assemblies to prove and optimise the design, prior to manufacture.



Services

Surveying, Installation & Commissioning

Here at ISL, not only do we supply and manufacture a wide range of products, we are also able to support our customers even further by offering site survey, installation and commissioning services.

Surveys

- Comprehensive site surveys
- Noise
- Vibration
- Insulation

Design

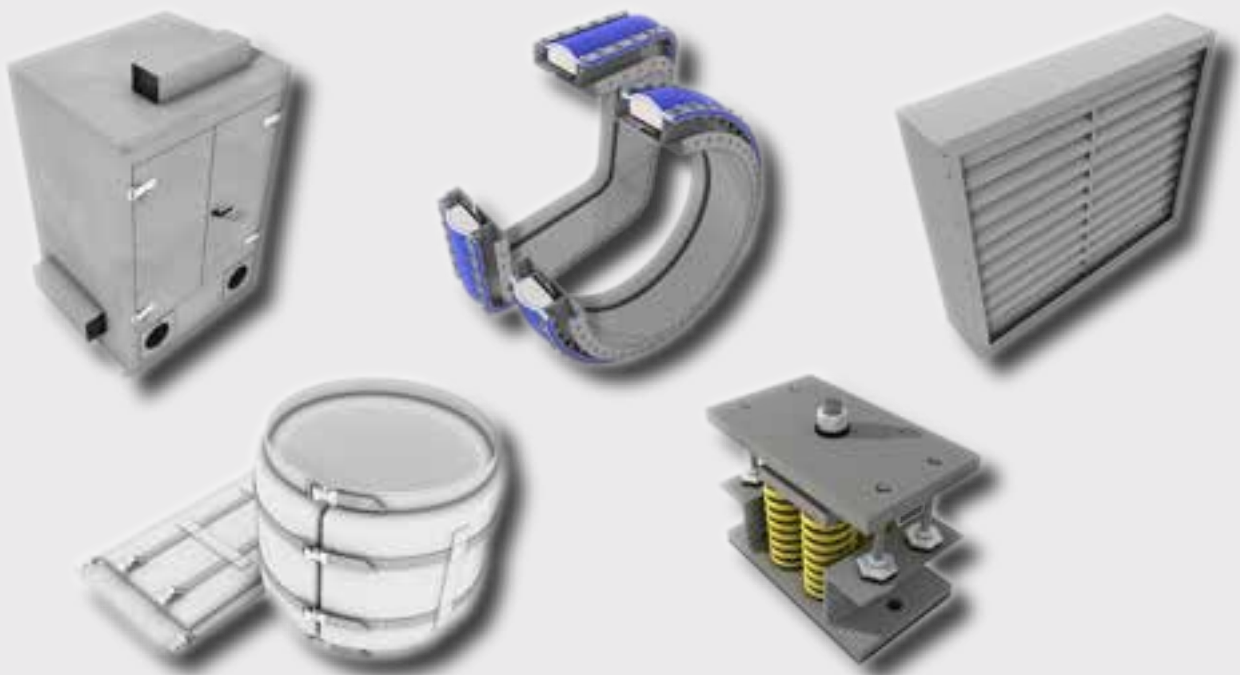
- Specifications
- R & D
- Thermal Mapping
- Advanced Aging Analysis

Installation

- Experienced Site Personnel
- World wide locations
- On and Offshore
- Safe Contractor Approved

Commissioning

- On both new & refurbished installations
- Ensures smooth start up on installation
- Guaranteed work
- Locations worldwide



Services

Top Safety Accreditation for Isolated Systems Ltd.

Isolated Systems Ltd have accreditation from Safecontractor for it's commitment to achieving excellence in health and safety.

Safecontractor is a leading third party accreditation scheme which recognises very high standards in health and safety management amongst UK contractors.

Isolated Systems is principally involved in the Commercial Building Services, Oil & Gas, Power Generation, Semi Conductor, Marine and Off Shore sectors, with a multi-million pound turnover. ISL's client base includes major players such as Rolls Royce, Siemens, Grundfos, Flakt Woods and Stenca.

The company's application for Safecontractor accreditation was driven by the need for a uniform standard across the business.

"We believe that more companies need to understand the importance of adopting good risk management in the way that Isolated Systems have done. ISL's high standard has set an example which hopefully will be followed by others within the sectors.

Safecontractor plays a vital role in supporting our clients in meeting their compliance needs, whilst working with their contractors as they progress through the accreditation process".

Under the Safecontractor scheme, businesses undergo a vetting process which examines health and safety procedures and their track record for safe practice. Those companies meeting the high standard are included on a database, which is accessible to registered users only via a website.

Client-organisations who sign up to the scheme can access the database, enabling them to vet potential contractors before they even set foot on site. These clients agree that, as users of the scheme, they will engage only those who have received accreditation.

Hundreds of nation-wide businesses, from several key sectors, use the scheme when selecting contractors for services such as building, cleaning, maintenance, refurbishment or electrical and mechanical work.

Safecontractor is a third party accreditation scheme that assesses health and safety arrangements. Many major clients recognise the scheme and accept the Safecontractor certificate as confirmation of competency.

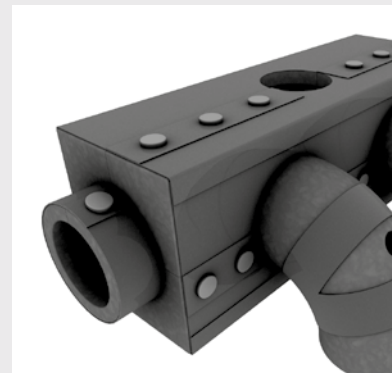
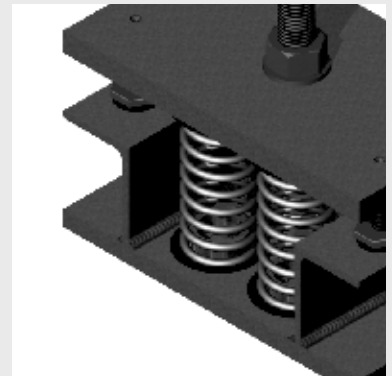
Services

Engineering Consultancy

At Isolated Systems, we pride ourselves on the next challenge. With a track record over many years of designing and manufacturing engineering solutions for our clients we rarely turn away a new opportunity to help.

Each bespoke opportunity is approached with the attitude that we can achieve what is needed and as such we bring an open mind and freshness of thought to anything we are asked to produce.

Isolated Systems offer a Consultancy Service that helps support and underpin our customer base out in the field. This is a 'World Wide Service', with our Consultants visiting clients on a weekly basis offering expert opinion and advice on all our specialist subjects such as Anti Vibration Mounts, Thermal Insulation, Acoustics, Enclosures and Flexible Connections.



Services

Acoustic + Vibration Surveys, Reports & Solutions

ISL's Acoustic Engineers are members of the Institute of Acoustics and between them have many years of experience in noise & vibration control.

We can identify problems or check compliance through site surveys using high quality calibrated sound meters and vibration analysing equipment, producing clear reports according, and recommending suitable solutions (if required) by carefully analysing the survey data aided by ISL's product test data, selection software and the resources of our design department.

Services offered include noise control and environmental noise assessments for the building services and industrial market sectors, all undertaken to BS 4142 & PPG 24 and occupational noise assessments for compliance with the Control of Noise at Work Regulations 2005; and for vibration control and pre-installation stage verification of vibration control measures required (or not) for machine and/or equipment relocation purposes, in conjunction with aspects of the Control of Vibration at Work Regulations 2005.



Case Studies

Apache

Oil & Gas



The Beryl Alpha platform is a fixed condeep gravity based structure (GBS) located in Block 9/13a in the UK sector of the North Sea – approximately 335 km north east of Aberdeen. It is located some 8 kilometers south of the Beryl Bravo platform at a water depth of 117.5 metres.

The Beryl Alpha began production in 1976 and comprises a main GBS production platform; a bridge linked, steel four-legged Riser Access Tower (RAT) and bridge linked flare tower.

Risers for flowlines serving sub-sea wells in the Beryl area, gas import risers from the Beryl Bravo platform and Gryphon field FPSO, as well as the gas export riser to the SAGE export pipeline, all access the Beryl Alpha at the RAT.

Isolated Systems supplied 'Off Shore Service Teams' who carried out site surveys, repairs and replacement 'Flexible Connectors and Expansion Compensators' to and for 'Gas Turbines' located on the Rigs.

Case Studies

Knarr FPSO Project

Oil & Gas



The Knarr FPSO is a Floating Production, Storage & Offloading vessel being used in the Norwegian sector of the North Sea. The FPSO was built in Korea by one of the world's largest shipbuilders.

Working in partnership with a major Scandinavian oil & gas supply company, Isolated Systems have produced High Temperature Pipe Insulation designed to meet the high specification & environmental conditions required.

Isolated Systems High Temperature Pipe Insulation is lightweight, fireproof, and suitable for temperatures up to 1000 degrees Celsius. It is pre-profiled & coated if required for fast and simple installation compared to separate multilayer insulation solutions.

The project required 8,000m (4 miles) of 600mm long straight pipe sections, 6,000 off 45 & 90 degree formed bends & 1,200m² of radius and bevelled vessel cladding, with pipe diameters ranging from as small as ¾ inch up to large 24" pipes being insulated.

Isolated Systems organised the logistics, working to stringent prioritised delivery schedules with containers shipped to Korea.

Case Studies

The Sir Francis Crick Project

Commercial Building Services/HVAC



The Sir Francis Crick Institute is a “new build” located adjacent to St. Pancras International Rail Station in the London borough of Camden.

The Institute specialises in Medical Research and Innovation.

Working in close partnership with the U.K's leading Pump Supplier, ISL designed and fabricated Inertia Bases to meet with the stringent specifications associated with the project.

Our scope included the supply of over 100 fabricated mild steel Inertia Bases featuring on-board jacking facilities and special paint finish. All bases were supplied pre-filled with concrete and with Pumps and Rubber Bellows fitted.

The Bases supplied ranged in size from: 650mm (L) x 550mm (W) x 120mm (D) to 2450mm (L) x 1200mm (W) x 350mm (D) and supported by either 4 off or 6 off high deflection Spring Anti-Vibration Mounts.

Due to necessary road closure agreements in place to permit access of large items of equipment to the job site, strict delivery schedules had to be adhered to.

Sectors

Our portfolio of products and services along with our customer base and the sectors we serve has grown phenomenally.

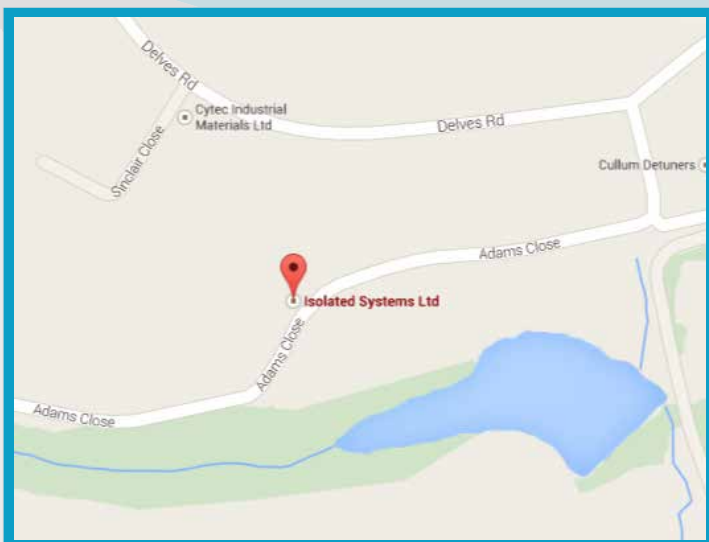
We now serve Key Blue Chip names in Sectors such as Oil & Gas, Power Generation, Semi-Conductor, Marine, Pharmaceutical, and as mentioned before Commercial Building Services & HVAC.

Across all of these Sectors we support our customer base with a Bespoke Service, Consultancy, Commissioning and Service & Repair with a dedicated team of Field Service Engineers.





Scan Here
For our website



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