



T-SQUARED

Scope of Capabilities

An introduction to T-SQUARED Group Ltd

The Team Works.



Introducing T-SQUARED



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Introducing T-SQUARED

T-SQUARED is a design & build company with an M&E Services background working as a specialist contractor for clients with strategically important facilities where quality and reliability are paramount.

Since the inception of the company in 2003, T-SQUARED has enjoyed significant and continued success and has grown to become one of the UK's foremost specialist partners in the mechanical and specialist services industry.

Our commitment to innovation, design, service and customer care has ensured that T-SQUARED remains at the forefront in our industry, counting among others leading pharmaceutical, life sciences, biotechnology, food & beverage, medical devices, aerospace, publishing and other highly serviced industries amongst our valued list of clients.

Our design & build service comes from a single and fully accountable supply source which uses a totally transparent, inclusive and personalised approach. All this is delivered by a team of highly qualified globally experienced and committed personnel.

**T-SQUARED IS LESS ABOUT WHAT WE DO.
IT'S ALL ABOUT HOW WE DO IT.**



The Team Works.



The Business



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The Business

Organisational Structure

T-SQUARED Group consists of two distinct types of companies, which allow the group as a whole to offer our clients a full end-to-end service from design and build to facilities services and maintenance provision.

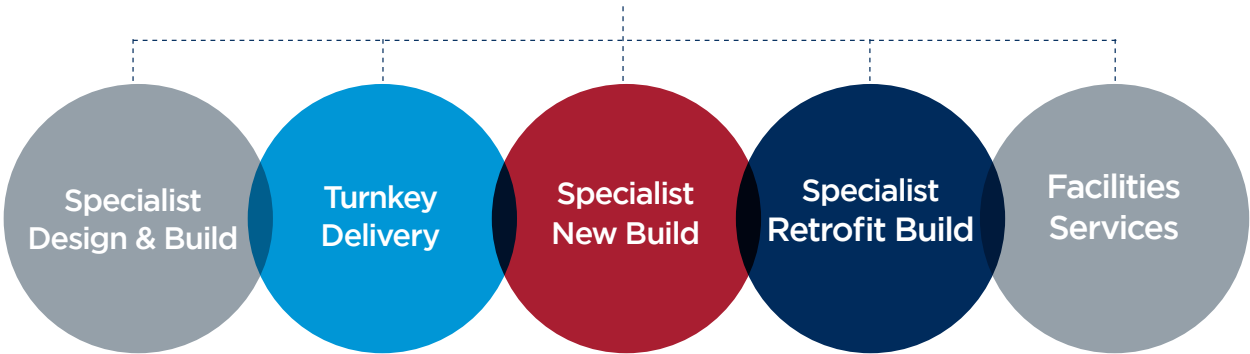
Our Design & Build companies, of which there are three nationwide, act as Specialist Contractors in the design and construction of areas such as Cleanrooms, High-Tech Laboratories and other critical service facilities where a 'turnkey' service is essential. The skills involved here also lend themselves to less technical fit-outs and refurbishments where project management skills are the key.

Our Facilities Services companies are for clients who need business critical facilities to be available and reliable for their processes. From our four centres throughout the UK in Glasgow, Southampton, Basingstoke and Swindon, our Facilities Services teams provide a 24/7 national service for key accounts across the UK. This coupled with high levels of local customer service have ensured the continued success and growth of our Facilities Services business. Whilst the majority of work undertaken by the teams is through ongoing contracts with existing clients, the team also carry out small works projects regularly for their clients.

Through adopting a dedicated and strategic approach across the group we aim to become the preferred supplier for blue-chip companies throughout the UK, for the following specialist services:



End to end management and maintenance of business critical projects and facilities through a single, fully accountable supply source.



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Owner Managed Private Company

T-SQUARED is privately owned with all Directors playing a key part in the day to day running of the business.

We operate a shared equity scheme that enables us to attract the best people and to keep them for the long term. This structure guarantees key members of management have significant equity holdings in the company where they work, thus giving an added incentive to maintain and grow the business.

The bonus element for T-SQUARED is that these managers have motivation levels such that management from above is seldom required and T-SQUARED Group Directors are freed up to take on engineering roles and to ensure key accounts are provided with the correct level of service.

Recruiting and retaining the right people has been the key in achieving successful growth whilst maintaining exemplary standards of customer service within a safe working environment. T-SQUARED has a world-class management team with extensive experience of designing, constructing and maintaining critical services facilities both nationally and internationally.

Financial Strength

In this current climate of financial uncertainty, T-SQUARED is one of the few companies who can confidently claim solid financial credentials. A combination of operating a low overhead business model combined with tight financial controls has seen T-SQUARED achieve organic growth year on year from a standing start in 2003. Our turnover of £12.5M in 2010/11 has also been achieved without the assistance of bank funding.

Whilst our core services of design and project management are delivered through our 75 strong team, T-SQUARED operates a low overhead business model through outsourcing non-core activity. We fully understand the value of outsourcing and utilise it where applicable to ensure we retain the lowest overheads possible through eliminating 'non productive time'. This in turn ensures we retain our competitive advantage within the marketplace.

Working with us, you can be confident of our financial stability and ability to deliver your project from concept to completion.

T-Squared = Financial Security



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Business Model

The T-SQUARED business model has been built primarily around our ability to provide an 'end to end' service through our Design & Build and Facilities Services teams which create a close client/contractor relationship that is seldom generated through traditional tendering. In order to maintain this relationship, T-SQUARED delivers consistently high levels of quality and customer care both during and after each project.

Trust x Teamwork = T-SQUARED

Trust is essential in establishing and maintaining customer confidence. It sits at the core of our culture of workplace safety and striving for quality. It provides the freedom and security in which individuals can be responsible for achieving their goals and are rewarded for their attainment.

Teamwork is recognised as the main component in our sustained growth. No organisation can survive without clear and shared sense of direction, with every member being committed to working together toward common goals.

We call it the 'multiplier effect' and it's what sets us apart from our competitors and has led us to develop long-term relationships where 90% of our business comes from existing clients.



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External Accreditation - Quality Management: ISO9001

We recognise that in today's marketplace our customers demand and expect excellence. T-SQUARED stretches performance beyond this point to being consistently outstanding. More than one company can deliver an excellent result but if we are outstanding we are able to operate ahead of the competition. Striving to set new standards has been instrumental to the ongoing success of T-SQUARED and underpins every aspect of our service delivery.

Having industry recognised credentials affords our clients peace of mind they are working with a company who have industry recognised standards ISO9001 (Quality) and ISO14001 (Environment).

T-SQUARED embraces a culture of responsibility that embeds quality awareness through every aspect of our organisational processes. Our ongoing commitment to employee and site safety, quality control and quality assurance, customer satisfaction and continuous improvement is reflected in our ISO9001 (Quality) accreditation, which has been held since December 2004.

Our Quality Management System was introduced to provide the framework for how T-SQUARED consistently meet and exceeds customer quality requirements, continually improves operations and determines if our work methods are both efficient and cost effective for our clients.



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External Accreditation - HSE: ISO14001

Our commitment is to ensure working with us would mean that you would be supported with services delivered to the cutting edge of HS&E, corporate governance, business efficiency, staff and customer welfare best practice. The combined subjects of health safety and environment in the workplace are at the forefront of all organisations in today's climate, and rightly so, as to ignore or disregard them can have devastating commercial, social, ethical or moral results, ultimately affecting everyone directly or indirectly.

With ever changing and challenging legislation in these fields it is our goal to stay one step ahead. We do this by employing specialist external consultants to manage our health and safety. These issues are non-core business but are of significant importance. They are very complex areas with specific and dynamic legislation.

Our employees are without doubt our most valuable assets. We make considerable investment in people & we aim to protect our investments. As we understand our employees are our most valuable assets because of the knowledge they possess, they are fundamental to the success of our business. Their effective development is therefore paramount which is why we rely on specialised services from our industry recognised HS&E partners to help design training programmes that suit both our needs and our customers. We receive custom built modular training courses from our specialist partners to ensure our staff have all of the knowledge necessary to enable them to always work to best practice.

We receive class leading process, procedures, training and consultation which, combined, allows us deliver consistent high standards.

Our HS&E partner is one of the UK's leading health, safety and environmental specialists providing us with services we can depend on, beyond legal compliance, structured, clear and easily followed procedures, systems that deliver reliable consistent control for managing hazardous substances, updated to take advantage of the latest technological advances.

T-SQUARED takes its commitment to the environment and sustainability very seriously. The environmental activities of our business are not restricted only to those associated with our design and build processes but also to the type of suppliers we engage with, the products we provide / develop and the added value services we can offer to our client base and beyond.

Our clear commitment to providing environmentally and ethically sound products and services is demonstrated by the certification of our Integrated Management System to ISO 9001:2000 (Quality) and ISO 14001:2004 (Environment) since September 2009.



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Our Core Service Offering



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Our Core Service Offering

Design & Build Only

T-SQUARED is a leading provider of specialist design, construction and servicing for controlled environments and business critical facilities. From our strategic centres in Glasgow, Southampton, Basingstoke and Swindon our dedicated teams take a holistic approach to every project, ensuring quality of service from initial enquiry through to the completion of each project.

Our commitment to providing innovative, cost effective solutions which deliver lifetime value for our clients has seen us develop long term working relationships with some of the UK and Europe's leading organisations across multiple sectors. Our aim to become the preferred supplier for blue-chip companies throughout the UK, for the following specialist services:

Specialist Design & Build

Cleanrooms, laboratories and other controlled environments for specialist organisations who require a design and production partner with a proven track record of delivering innovative, cost effective solutions, on time, every time.

M&E Services

Full service M&E offering from our four nationwide centres has seen T-SQUARED undertake a range of projects from preventative mechanical and electrical maintenance through to HVAC installations.

Multi Disciplinary Turnkey Projects

Whether it is Cleanrooms, Laboratories or Production Lines, T-SQUARED has the experience to deliver the end product in its totality through a single, fully accountable supply source.

Specialist New Builds

From concept to completion, our experienced in-house design and project management teams will ensure every aspect of your new build meets regulatory and business requirements.

Retrofit Builds

With controlled environments and business critical facilities come ongoing challenges to business requirements and regulatory changes. T-SQUARED can help your organisation modify or upgrade your existing facilities to meet and surpass these requirements.

Our complete Design & Build service has allowed us to build an enviable track record and an impressive client list, which is underpinned by a 90% repeat business level. This Design & Build only service allows us to offer streamlined solutions, which in turn offers capital cost and timescale savings for our clients.

The client benefits of undertaking a Design & Build project with T-SQUARED are:

- Our ability to provide a seamless service ensures the clients' vision can be implemented the way it was intended
- Design & Build provides endless flexibility – our clients can amend design specifications with little complication or cost implications. Engaging separate design and installation costs can lead to spiralling budgets and put further pressure on already tight deadlines
- Our ability to provide excellent project management and customer care from concept to completion



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Our Core Service Offering

Design & Build Only Clients

The following gives an indication of our Design & Build client base:



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Biotechnology Sector

The Biotechnology sector requires highly specialised Cleanrooms and Laboratories where the concentration of airborne particles, temperature, humidity and pressure can all be carefully controlled. Such controlled environments must be designed to meet very specific performance requirements, and care taken to minimise contamination risk.

Our team of designers are highly experienced in this sector and use their combined expertise to deliver Cleanrooms, Laboratories and other controlled environments to the highest standard.



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Biotechnology Sector

The Client: SAFC Biosciences

SAFC Biosciences (Irvine) are manufacturers of cell culture products, reagents and Down Stream Purification (DSP) buffers.

Background to the Project

SAFC required a full strip out of an existing production area, to be replaced with the construction of a new Cleanroom facility with 2no. mixing rooms and 2no. fill rooms, as well as an adjacent WFI Plantroom.

Scope of the Project

T-SQUARED successfully tendered against 3 other companies to be appointed as the specialist design and build contractor. T-SQUARED worked with the client's design brief to develop the design of the cleanroom production suite.

The scope of works also included the process design involved with the production machinery with all the Validation involvement from the Medicines and Healthcare Products Regulatory Agency (MHRA) and Food and Drugs Administration (FDA).

- Full strip out of existing production area
- Design and build of 2no. cleanrooms
- Design and build of 2no. mixing areas
- Design and build of 2no. fill rooms
- Design and build of WFI Plantroom
- Process design for production machinery
- Validation involvement from the MHRA and FDA.

Timescales

Detailed design commenced in early 2010 and project completed by the end of December that year.

Project Value

£2M



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Biotechnology Sector

The Client: SAFC Biosciences



Further case studies within this sector are available upon request.



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Biotechnology Sector

The Client: Bioreliance

BioReliance is a leading global provider of contract services to the biopharmaceutical industry, supporting every phase of the testing, development and manufacturing process.

Background to the Project

BioReliance required a complete upgrade of their Mycoplasma Laboratory facilities, including selection of the most appropriate location for the new laboratory suite within their West of Scotland Science Park headquarters.

Scope of the Project

Following the successful completion of a number of previous projects with the client, T-SQUARED were commissioned to carry out the design and build of the new laboratory facilities. The scope of work included:

- Design and build of 2 Laboratories
- Design and build of 2 Change Areas
- Design and build of common vestibule entrance area
- Validation of all Laboratories to ISO Class 7 and the Change Areas to ISO Class 8

The scope of works involved critical pressure regime requirements within both Laboratories, and the need for physical separation between the Positive Control Lab and Negative Control Lab.

Timescales

The project was completed in XX months, during which time T-SQUARED managed construction carefully in order to minimise disruption to office space adjacent to the Laboratory facilities.

Project Value

£220,000



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Life Sciences Sector

Clients within the Life Sciences sector rely on T-SQUARED to deliver expertise in the precise needs of this industry, delivering Design & Build services across research, development and manufacturing businesses. Our high level of expertise plays a strong part in the development of this thriving industry, providing the bespoke facilities to enable our clients to be at the forefront of life science innovation.



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Life Sciences Sector

The Client: Cellartis AB

Cellartis AB is a Swedish biotechnology company focused on human embryonic stem (hES) cells and technology for drug discovery research, toxicity testing and regenerative medicine.

Background to the Project

Following the award of funding from Scottish Enterprise Tayside, Cellartis acquired a shell building in the Dundee Medipark which required a complete fit out to create a bespoke Laboratory and Office facility.

Scope of the Project

Following a tender process T-SQUARED were commissioned to design and fit out a new office space, laboratory and clean room suite within an existing shell building.

The scope of work included:

- Design and installation of open plan office space, including kitchen area, meeting rooms, and cellular offices
- Design and fit out of laboratories and clean room suite, to Grade B
- Full project management services and management of contract under CDM regulations
- Installation of VRF Air Conditioning System

Timescales

The project was completed on time and to budget.

Project Value

£700k



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Life Sciences Sector

The Client: Cellartis AB



Further case studies within this sector are available upon request.

Life Sciences Sector

The Client: Life Technologies

Life Technologies offers a wide range of life science technologies for disease research, drug discovery and commercial bio-production, operating globally in over 160 countries.

Background to the Project

The client's central dispensary was operating at maximum capacity and required continuous maintenance to preserve a GMP environment. The dispensary required a complete refurbishment, including provision of new dispensary containment booths.

Scope of the Project

Following successful completion of a Cleanroom extension and upgrade project at their Inchinnan site, T-SQUARED were appointed to provide end-to-end project services for the central dispensary refurbishment project.

The scope of work included:

- Complete refurbishment of floor, ceiling, and lighting system
- Strip out of existing dispensing booths, and install of 5 new dispensing booths
- Install of new automated entrance door
- On site project management to meet business critical timescales

Timescales

Due to pressured production schedules the installation period for the refurbishment works was limited to 12 days. T-SQUARED completed the project ahead of schedule in 11 days, allowing production operations to begin early.

Project Value

£300k



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Life Sciences Sector

The Client: Life Technologies



Further case studies within this sector are available upon request.

Life Sciences Sector

The Client: Roslin Cells

Roslin Cells are leaders in the isolation of new clinical grade undifferentiated stem cells for use in research and therapy, providing support services for companies and academic researchers developing new technologies for stem cell culture.

Background to the Project

A clean room suite within the Roslin Institute site had become non-compliant due to changes in cGMP standards, and required a full upgrade to bring the facility in line with regulations.

Scope of the Project

Following a tender process with a number of specialist clean room contractors, T-SQUARED was appointed to undertake the full refurbishment of a clean room suite to meet cGMP standards.

The scope of work included:

- Retrofit build of clean room suite to Grade A environment
- Provision of cGMP paperwork for Dq, IQ and OQ protocols
- Validation services
- Ongoing service and maintenance contract for HVAC systems

Timescales

The project was completed on time and to budget.



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Medical Devices Sector

The medical devices industry manufactures products that are inserted into the bodies of patients to replace or improve the functioning of the workings of the human body.

The production of Medical Devices therefore requires uncompromising levels of cleanliness and sterility, with all products and packaging needing to leave cleanroom facilities 100% sterile.

Our highly experience design and build teams will deliver the optimum solution for your business whilst maintaining an uncompromised focus on quality and safety.



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Medical Devices Sector

The Client: Vascutek

Vascutek is a global supplier to the healthcare industry, designing and manufacturing products to address the needs of vascular and cardiovascular surgeons throughout the world.

Background to the project

Following a sustained period of growth, Vascutek required an additional production building on site at their purpose built facility in Inchinnan. Although the land was already part of the site, it represented a challenge to the project as it sat on the alluvial plain next to the River Clyde foundations.

Scope of the project

Following a successful tender bid, T-SQUARED were appointed the design and build contract to build and fit out production building No.4 on the site.

The scope of work included:

- Excavation works on existing site to prepare the land for build
- Design and build of a two floor building, with mezzanine plantroom above
- Design and build of additional on site car parking facilities
- Design and fit out of high tech Cleanrooms and Controlled Spaces
- Build of a temporary Cleanroom within the existing warehouse building, in order to provide extra production resource during build

Timescales

The project was completed in January 2008, 3 months ahead of schedule.

Project Value

£3.2M



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Medical Devices Sector

The Client: Vascutek



Further case studies within this sector are available upon request.



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Healthcare Sector

In the Healthcare sector the design of Cleanrooms will have a direct impact on the safety of patients and the maintenance of sterilisation is of critical importance. T-SQUARED fully understand the diverse requirements of this industry and the need to create controlled environments for a diverse range of activities such as operating suites, analysis laboratories, and sterile rooms. Contamination risk areas include the protection of patients and healthcare staff, as well as the protection of sterile medical devices. Our team of highly experience designers will deliver the optimum solution for your business whilst maintaining an uncompromised focus on safety.



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Healthcare Sector

The Client: Haemonetics

Haemonetics is a global leader in blood processing technology, providing solutions for blood supply chain management. T-SQUARED has a long-term contract in place with this client for ongoing service and maintenance.

Background to the Project

Due to the installation of two new large scale pieces of production machinery, Haemonetics required an extension to an existing clean room facility in order to accommodate the new machinery. The client had plans in place to purchase land next to the clean room building, in order to provide space for the extension.

Scope of the Project

Following a tender process T-SQUARED was commissioned to design and build an extension to the existing clean room, in order to house new machinery. A solution was put forward that negated the need to purchase additional land for the project.

The scope of work included:

- Design and build of clean room extension
- Installation of new production machinery
- Deep clean and validation of the completed clean room
- Installation of air conditioning system

Timescales

The project was completed within the Christmas/New Year shut down period, ensuring no loss of production was incurred.

Project Value

The project was brought in under budget at a value of £340k (versus original client budget of £630k) due to the optimum solution provided by T-SQUARED.

Healthcare Sector

The Client: Haemonetics



Further case studies within this sector are available upon request.



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Healthcare Sector

The Client: Haemonetics

Haemonetics is a global leader in blood processing technology, providing solutions for blood supply chain management.

Background to the Project

At the end of a lease period for off site warehouse facilities, Haemonetics required a build partner to work in partnership with their architects on the development of a new on-site warehouse. Bringing the warehouse in house delivered considerable cost savings and efficiencies.

Scope of the Project

Following a tender process T-SQUARED were commissioned to carry out the build of a large scale extension project, to include on site warehouse facilities and additional office space. The extension had to be accommodated within a challenging layout of existing site buildings and required close liaison with Planning to ensure the protection of mature trees on the site boundary.

The scope of work included:

- Design of extension in conjunction with the Client's Architects
- Site excavation for new buildings and car park
- Build of warehouse, loading bay, and air conditioned office space

Timescales

The project was completed over an agreed period of XX months to ensure minimum disruption to production and distribution.

Project Value

£1.5M



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Healthcare Sector

The Client: Haemonetics



Further case studies within this sector are available upon request.



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Healthcare Sector

The Client: Catalent Pharma

Catalent Pharma Solutions are a Global company offering the following services:

- Biologics/GPEx®|Pre-Formulation|Formulation
- Solid-State Services
- Pharmaceutical Lab Services
- Biopharmaceutical Lab Services
- Global Regulatory Consulting
- Better Treatments With Optimal Drug Delivery
- Drug Delivery Systems
- Clinical Supply Services
- Integrated Manufacturing
- Packaging Services
- Packaging Delivery Solutions

Background To The Project

After suffering a fire at their Corby packaging plant, Catalent Pharma Solutions urgently needed to keep operating and maintaining supplies to their customers despite the fire.

After identifying an unoccupied 900m2 area at their Swindon site, they moved quickly to identify a suitable partner who, in a 4 week timeframe, could deliver packing rooms, air locks and support areas compliant with required GMP levels.

Scope of The Project

Packaging Lines – Phase 1

T-SQUARED was appointed to carry out the design, construction, installation and relocation of the works which included:

- Construction of new walls, floors and ceiling coverings
- HVAC Services
- Electrical Power services
- Alarm, sprinkler and access control systems

Timescales

Working 24/7, T-SQUARED completed the works package within a 4 week timeframe

Project Value

£1.3M



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Healthcare Sector

The Client: Catalent Pharma



Further case studies within this sector are available upon request.



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Food & Beverage Sector

The Food & Beverage sector requires controlled environments that meet the highest standards of hygiene and service. T-SQUARED's team of designers and engineers use the newest design techniques to deliver a range of specialist builds such as temperature controlled warehouses, manufacturing plants, and industrial refrigeration.

We understand that in this industry, breakdowns can result in loss of business or extensive product wastage. Our design engineers give consideration to this at every stage of the planning process, often building in N + 1 redundancy to plant designs to keep facilities within their operating bands even if one unit goes down.



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Food & Beverage Sector

The Client: Berry Bros. & Rudd

Berry Bros. & Rudd is Britain's oldest wine and spirit merchant, selling wine and spirits to both commercial and private customers on a global scale.

Background to the project

Berry Bros. & Rudd required an overground wine cellar for storage of wines bought as investment by their clients. The storage facility needed to replicate the traditional underground cellar environment with a very stable temperature and humidity conditions, as well as being capable of storing up to 3million bottles of wine.

Scope of the project

Following a successful tender bid, T-SQUARED were appointed the contract to design and build the new storage facility within an existing empty warehouse facility. The scope of work included:

- Turnkey project management services
- Design and build of a temperature controlled storage facility
- Installation of HVAC systems
- Installation of sprinklers, lighting, power, and smoke ventilation

Timescales

The project was completed in December 2008.

Project Value

£1.5M



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Food & Beverage Sector

The Client: Berry Bros. & Rudd



Further case studies within this sector are available upon request.



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Technology Sector

Specialist Cleanrooms and Production Lines are a vital requirement in the manufacture of products such as silicon chips, hard disk drives and other technologies. These products are highly sensitive to dust particles and other impurities, therefore the installation of controlled environments is key to maintaining business operations and producing high quality products.

Our team of highly experienced designers will deliver the optimum solution for your business, minimising contamination risk and working to the highest level of industry standards.



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Technology Sector

The Client: Freescale Semiconductors

Freescale Semiconductor is one of the leading manufacturers of microcontrollers, microprocessors and semiconductors in the world.

Background to the Project

The Freescale Semiconductor East Kilbride site is to be sold off with Freescale involvement being restricted to the Engineering Support Building. This project package involved relocating Freescale personnel and their working environments to the bottom two floors of the ESB.

Scope of the Project

T-SQUARED was commissioned to carry out the design, construction, installation and relocation of the works which included:

- Creation of a New Products Introduction (NPI) test area
- Creation of a Product Distribution Centre (PDC)
- Creation of a kitchen/breakout area
- Creation of additional meeting rooms, network room and shower rooms

Services included the installation of a close control air conditioning system, electrics including HV transformer, liquid nitrogen, sprinkler tank and pumphouse, data, ESD raised flooring, acoustic walls and compressor installation.

Timescales

Detailed design commenced in March 2011 and project completed at the end of June 2011.

Project Value

£900K



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Technology Sector

The Client: Freescale Semiconductors



Further case studies within this sector are available upon request.



Education Sector

Educational facilities are becoming increasingly specialised and as learning techniques evolve there is a need to look towards less traditional designs to support students and teachers. The health and safety of students within these high footfall buildings is paramount, and T-SQUARED designers are able to balance this with an increasing demand for sustainable building materials and renewable energy sources within the Education sector.

Within this sector there is a requirement in some facilities for specialist laboratories and clean rooms to support medical and biology education.



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Education Sector

The Client: University of Glasgow (LISA Laboratory Cleanroom)

The University of Glasgow is the 4rth oldest university in the English speaking world dating back to 1451. As part of the School of Physics and Astronomy, The Institute for Gravitational Research is involved in the space-based LISA-mission (Laser Interferometer Space Antenna).

Background to the Project

The Institute for Gravitational Research at the University of Glasgow required a specialised clean room for the sole use of its LISA pathfinder mission.

Scope of the Project

Following the successful completion of a clean room project for this client (see case study 11 – University of Glasgow (SRDG Materials Clean room) T-SQUARED was commission to design and build a bespoke Clean room. The project was particularly challenging as the build took place adjacent to existing clean room facilities which had to remain operable at all times.

The scope of work included:

- Design and build of a clean room to ISO Class 7 standard
- Provision of complete turnkey project services
- Supply and install of all M&E, fabric, and furniture

Timescales

The project was completed ahead of schedule and on budget



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Education Sector

The Client: University of Glasgow (SRDC Materials Cleanroom)

The University of Glasgow is a major research-led university operating in an international context, with a broad expertise in subjects as varied as arts, sciences, social sciences and medicine.

Background to the Project

The Institute for Gravitational Research at the University of Glasgow required a specialised facility for use in gravitational wave searches, to support their research.

Scope of the Project

T-SQUARED were commissioned to provide a complete turnkey package for the design and build of a Class 7 Clean room within an existing laboratory area. The scope of work included:

- Design and build of a highly serviced clean room with 'Ultra Pure' water and compressed air, laminar flow cabinet, and laser area

Replacement of the complete external glazed wall, to be completed within tight security conditions

Timescales

The project was completed within a challenging project timescale to ensure all building works were restricted to university holiday periods.



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Contact Details



T-SQUARED

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