The Company

With over 30 years experience in the construction industry, Core Cut’s specialist concrete drilling and cutting expertise has helped it become one of Britain’s leading specialists in diamond drilling, sawing, and controlled demolition work.

With their Head Office based at Broxburn in West Lothian and strategically based branches throughout the country, Core Cut has built its enviable reputation with its highly trained team of CSCS qualified operators on skilful use of the very latest equipment, carrying out thousands of contracts promptly and precisely throughout the country.

In short, Core Cut provides a truly professional service in the field of contracting nationwide.

Key Services

- Diamond Drilling
- Diamond Floor Sawing
- Diamond Wall Sawing
- Diamond Wire Sawing
- Controlled Demolition by ROBOLITION
- Hydraulic Bursting/Crunching
- Chasing
- Surface Preparation
- Cementitious and Resin Grouting
- Resin Crack Injection
- Pressure Pointing
- Structural Repairs
- Anchor Fixing Installation
- Technical Advice
- Reinforcement Surveys
- Passive Fire Protection
- Specialist Nuclear Services
- Installation of Micropiles
Diamond Drilling

Diamond Drilling is the most versatile and efficient method of forming holes and openings in a wide range of hard materials, from Heavily Reinforced Concrete and Natural Stone to fragile Terrazzo Tiles, to almost unlimited profiles and depths.

At Core Cut we are proud of the speed at which we can undertake and complete even the most complex drilling operation and continue to evolve and develop techniques and equipment to solve any drilling problem.

Key Features

- Dust and Vibration Free
- Lightweight
- Hole Sizes from 8mm – over 1500mm
- Low Noise Output
- The Most Precise Method of Forming Service Penetrations
- Multi Functional
- No Dust Due to Wet Cutting
- Clean & Safe
- Dry Drilling Where Required

- Flexible Power Sources (Electric, Hydraulic or Compressed Air)
- High Performance Automated Rigs
- New Slurry Containment and Re-cycling System Allows Wet Drilling in Finished Areas
- Non Percussive Techniques Maintain Structural Integrity
- Full Range of Case Studies Available
- Fully Trained CSCS Accredited Operators
- Fully Equipped Mobile Workforce Covering the UK and Europe
Utilising and pioneering the latest technology, Core Cut are able to drill holes in a number of applications from New Build Housing Contracts to Complex Civil Engineering and Nuclear Decommissioning projects.

The versatile range of equipment can be Hand Held Electric, Rig Mounted, Self Contained Trailer or Airport Rig and is lightweight and adaptable allowing even the most demanding projects to be undertaken with speed and precision.

Where appropriate Core Cut can utilise Stitch Drilling, which is a technique of forming large and unconventional shapes by using a series of overlapping holes which are free from spalling and require little or no reinstatement.

This procedure can be used across the four plains of vertical, horizontal, angled and inverted.
Floor Sawing

When you need to slice through Heavily Reinforced Concrete or Asphalt our range of High Output Precision Equipment gives clean edges and aids in the breaking out of unwanted sections. Ideally suited to horizontal surfaces such as roads, pavements and runways we can cut up to a depth of 700mm and achieve the result in a very short timescale.

Key Features

- High Powered Turbo Diesel Engined Equipment for Production Floor Sawing Externally
- Electrically Powered Equipment for Internal Use
- Precision Cutting of Reinforced Concrete and Asphalt
- Split Saws Featuring Component Interchangeability for Inaccessible Areas
- Demolition Cutting for Refurbishment
- Removal of Defective Concrete
- Loop Cutting
- Precision Cutting of Joints using Compact Self Propelled Saws
- Minimal Vibration
- Dust Free
- Fixed Price Contracts
- Blade Types to Suit Every Application
- Full Range of Case Studies Available
- Fully trained CSCS Accredited Operators
- Fully Equipped Mobile Workforce Covering the UK and Europe
With Core Cut’s Floor Sawing expertise, we can achieve the cutting of internal floor slabs up to 600mm thick quickly and quietly with no fumes in locations such as Supermarkets, Factories and Hospitals, where speed of operation and appreciation of the sensitive nature of the location is important. Expansion joints up to 50mm wide can be cut quickly and accurately with our self propelled joint cutting saws.
Wall Sawing

Using the very latest in High Cycle Electric and Hydraulic Wall Saw technology we can precision cut openings to form doors and windows, and remove entire sections of structures in materials such as Heavily Reinforced Concrete, Brickwork and Stone in buildings where access for conventional equipment is precluded and cut to depths of 1000mm in the most demanding situations.

Key Features

- Precision Cutting
- Vibration Free
- Cut to 1000mm Depth Utilising Blades of up to 2200mm diameter
- Precise Remedial Works
- Remote Controlled Operation for Increased Safety
- Angle Cutting
- Inverted Cutting
- Stair Cutting
- Flush Cutting
- Speed & Versatility
- Fume Free
- Full Range of Case Studies Available
- Fully Trained CSCS Accredited Operators
- Fully Equipped Mobile Workforce Covering the UK and Europe
Pre-Cutting prior to Demolition

Cutting to Depths of 1000mm

Remote Controlled Operation

Saw Cutting Prior to Removal of Defective Concrete

Pre-Cutting prior to Demolition

Cutting to Depths of 1000mm
Wire Sawing

When faced with the problem of removing large sections of Heavily Reinforced Concrete in complex situations where access is restricted such as a Bridge Deck or the removal of Columns and Beams, where depth and speed of cut are critical, Wire Sawing provides the solution and has been extensively used by Core Cut on some of the UK’s largest projects.

Diamond Wire Sawing using High Cycle Electric or Hydraulic Equipment is the fastest and most versatile means of cutting Heavily Reinforced Concrete. The Wire Saw easily handles the thickest sections of all construction material with cutting rates in excess of 1m²/hour achievable and the ability to cut circular openings up to 2500mm diameter leaving clean straight and smooth cut surfaces with no damage to the remaining structure.

Key Features
- Non-Percussive
- Smooth Cut Face
- Unlimited Cutting Depth
- Horizontal, Vertical and Angled Cutting of Circular Openings up to 2500mm diameter
- Quiet and Fumeless
- Fast and Flexible
- Plunge Cutting Facility Allowing Blind and Rebated Openings to be Formed
- Safe Remote Controlled Operation
- Full Range of Case Studies Available
- Fully Trained CSCS Accredited Operators
- Fully Equipped Mobile Workforce Covering the UK and Europe
YEARS AT THE CUTTING EDGE

PRECISION WHERE IT COUNTS

Tay Road Bridge Ramp Removal

De-commissioning off-shore structures

Tay Road Bridge Ramp Removal

Wire Sawing Steel Caisson

Cutting of Circular Openings up to 2500mm diameter
Specialist Sawing

Core Cut also offer a full range of Specialist Sawing alternatives which can be used in conjunction with our conventional Floor, Wall and Wire Sawing techniques. These specialist saws such as Hydraulic and Petrol Chain and Ring Saws and Hydraulic Zohro Sword Saws allow square or rectangular openings to be formed with no over cutting at the corners to a depth of up to 1000mm across a wide range of materials.

Key Features

- No Over Cutting on Corners (i.e. square edges)
- Cutting Depth up to 1000mm
- Low Noise Output
- Non Percussive
- No Dust due to Wet Cutting
- Multi Functional
- Flexible Power Sources (Petrol, Electric or Hydraulic)
- Full Range of Case Studies Available
- Fully Trained CSCS Accredited Operators
- Fully Equipped Mobile Workforce Covering the UK and Europe
No Over Cutting

Ideal for Openings in Brick or Blockwork

Zohra Sword Saw

Ring Saw

Cutting up to 1000mm Deep

YEARS AT THE CUTTING EDGE

PRECISION WHERE IT COUNTS
Hydraulic Bursting

Hydraulic Bursting is one of the safest and most efficient methods of removing Reinforced or Mass Concrete, Brickwork, or Natural Stone.

Hydraulic Bursters are placed in pre-drilled holes and expanded to induce controlled cracking of the material. Thus reducing it to manageable sections for removal.

What’s more, the equipment can be used in confined spaces without risk. Indeed, Core Cut have used this technology to remove Heavily Reinforced Concrete up to 5m thick in structures such as Dams, Bridges and Nuclear Power Stations where a precise, controlled system of removal was required.

Key Features

- Non Percussive
- Dust Free
- Bursting Power Ratios of Over 1000 tonnes
- Electric, Diesel and Petrol Options
- Low Noise
- Easily Accesses Sensitive and Inaccessible Areas
- Full Range of Case Studies Available
- Fully Trained CSCS Accredited Operators
- Fully Equipped Mobile Workforce Covering the UK and Europe
Concrete Crunching is an effective and environmentally friendly way to carry out Controlled Demolition in a variety of materials and applications.

Using this method, we can demolish floors, walls and staircases up to 350mm thick – quickly, silently and with very little dust or vibration.

Core Cut operates a comprehensive range of machines from Power Crunchers with a crushing force of 45 tons right down to Hand Crunchers – ideal for refurbishment jobs where access is restricted or the area is sensitive.

Key Features

- Non Percussive
- Dust Free
- Hand Crunching to 350mm Thick
- Electric, Diesel and Petrol Options
- Low Noise
- Easily Accesses Sensitive and Inaccessible Areas
- Full Range of Case Studies Available
- Fully Trained CSCS Accredited Operators
- Fully Equipped Mobile Workforce Covering the UK and Europe
Robolition

Jobs that might once have seemed impossible are now within your reach with Robolition. This compact Electric, Fume-Free Remote-Controlled machine climbs stairs with ease and can be manoeuvred, lifted or hoisted up to the most exposed positions. It works over twelve times harder and faster than a man with a jackhammer – and a lot more safely.

With its astonishing power to weight ratio, Robolition handles tools that normally require a carrier at least twice as heavy. You can equip it with Hydraulic Breakers, Concrete Crushers, Drilling Equipment, Wall Saws or Buckets to perform many functions.

Key Features

- Safety (Remote-controlled up to 30 metres)
- Remote Operation Removes Risk of Hand/Arm Vibration Syndrome
- Compact/Works in Confined Spaces (Passes through standard doors)
- Electric/Fume Free
- Works in Existing Buildings, Without Noise or Vibrations
- Climbs Stairs with Ease
- Full Range of Case Studies Available
- Fully Trained CSCS Accredited Operators
- Fully Equipped Mobile Workforce Covering the UK and Europe
Its flexibility is phenomenal. Thanks to the three-part robotic arm, the machine’s working radius is immense. The low centre of gravity and strong support legs keep it steady, even when the arm is fully extended.
Core Cut offers the full range of Surface Preparation and Concrete Treatment Services from Machine Mounted Micro Planing to Super Polishing of decorative concrete slabs. Utilising the most sophisticated surface preparation technology available, fully trained CSCS accredited operators can give you the finish required in any application.

Key Features
- Diamond Grinding
- Scabbling
- Planing
- Captive Vacuum Shot Blasting
- Coatings Removal
- High Spot Removal
- Slab Level Reduction
- Floor Finish Restoration
- Bridge Deck Membrane Removal
- Concrete Polishing
- Latex and Adhesive Removal
- Full Range of Case Studies Available
- Fully Trained CSCS Accredited Operators
- Fully Equipped Mobile Workforce

Covering the UK and Europe
Grooving to provide texture to concrete car park

Concrete Polishing

Hand Grinding

Scarifying

Micro Planing
Core Cut undertakes a range of different types of Grouting, from the Grouting of Machine Bases, Infilling of Voids behind Retaining Walls, Bridge Abutments and Tunnel linings to the Mass Infilling of Abandoned Sewers and repairs to Hydro Electric Power Stations and Fresh Water Reservoirs.

Many of the contracts undertaken have required strict control of the injection pressures and the use of a range of different grout application methods, from high capacity self contained diesel pumps to compressed air or electric, to suit the specific requirements of a given project.

For the sealing of fine cracks in concrete and masonry Core Cut have the expertise to apply a range of crack injection techniques to bond structures and prevent water ingress and dampness.

Key Features
- Self Contained Mobile Equipment
- Diesel, Electric or Air Powered
- Ability to Apply a Range of Materials to Suit All Applications
- Full Range of Case Studies Available
- Fully Trained CSCS Accredited Operators
- Fully Equipped Mobile Workforce Covering the UK and Europe
Stitching Bar/Anchor Installation

Often the only practical means of re-uniting damaged structures is by the use of Stitching Bar/Anchors bonded with either cementations or resin grouts. As an approved installer of the Cintec range of Anchors, Core Cut have carried out extensive structural repairs to Historic Buildings and Monuments, Bridges, Tunnels and Harbours, gaining an enviable reputation for solving complex challenges of structural preservation.

Core Cut also have extensive experience in the supply and installation of conventional mechanical and resin fixings for applications from the fixing of Structural Steel Work to the installation of Fall Arrest Anchors.

Pressure Pointing

Using a pre-blended mortar and a specially designed pumping system, Core Cut’s engineers have repeatedly proven their expertise in the field of Pressure Pointing from Bridges to Tunnels, both in Masonry and Brickwork. Contracts completed have included the sea walls at Rothesay and Dunoon and the harbour wall at Dunbar.

All of these projects were carried out in difficult tidal conditions, using an accelerator to ensure complete set of the mortar. Joints were first cleaned out with water jets operating at pressures of up to 6,000psi, followed by the new mortar being injected to depths of 300mm into the stonework fabric. The pointing was then struck off to give a finish that blended with the original mortar.
Core Cut in conjunction with the very latest technology from Hilti are at the forefront of the analysis of the Steel Reinforcement in Reinforced Concrete Structures.

The Ferroscan FS10 is portable, fast and can detect and measure the depth of cover, diameter and positioning of reinforcing bars over a wide area.

**Key Features**
- Verification of Reinforcement
- Checking of Cover
- Avoiding Rebar Hits
- Scans Large Areas Quickly
- Provides a Viewable Image of the Reinforcement
- Extended PC Evaluation and Document possibilities
- Reinforcement Shown as Clearly Visible Greyscale Image
- Single Scans up to 30m
- Dust and Water Splash Proof
- Full Range of Case Studies Available
- Fully Trained CSCS Accredited Operators
- Fully Equipped Mobile Workforce Covering the UK and Europe
The verification of reinforcement is vital in today’s modern building techniques and reinforcement surveys can aid in a variety of situations.

- Building Acceptance Inspections
- Cover Checking over a Large Area during Renovation
- Quality Control
- Verification of Length
- Post Installed Reinforcement

The specially designed PC software permits further processing, evaluation, exact analysis and documentation of all the data recorded.

- Prints out Scanned Images and Reports including Data from Several Points in the Images
- Provides a Complex Algorithm which Ensures Good Differentiation between Closely Spaced Reinforced Bars
- The System has a 32bit PC Compatibility with Windows 95, 98 and NT
- On The Spot Printouts
The proven and reliable system for correcting foundation problems.
The Helical Pile Foundation System offers a technically superior and cost efficient alternative to other remedial systems.
The concept operates on the principal of turning a helical (screw) pile into stable subsoil strata until the torque applied indicates that the necessary load capacity has been achieved. Adjustable brackets are then attached to the base of the foundation walls connecting the piles to the foundation.
The weight is then shifted to the piles allowing repositioning which retains any further movement. This system which is backed by over 80 years of structural engineering experience contrasts with other methods which use the structure’s weight to force pipes and concrete cylinders down into the ground. Such costly and time consuming methods require extensive excavation which can disturb site features such as walkways and landscaping.

**System advantages:**
- Faster Installation than Other Methods
- Lower Cost for both System and Installation
- No Heavy Equipment Required
- Installs in Limited Access Areas
- Vibration Free
- Range of Diameters (15cm–36cm)
- Environmentally Friendly
- Resistance to Buckling in Weak Surface Soils
- Stiffer Pile (deflects less at a particular load)
- Additional Corrosion Protection in Aggressive Soils
- Fully Trained CSCS Accredited Operators

Specialist Services

**Helical Pulldown Micropile**

The proven and reliable system for correcting foundation problems.

The Helical Pile Foundation System offers a technically superior and cost efficient alternative to other remedial systems.

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Rotary Percussive Drilling
Our fully automatic Rotary Percussive Drills allow holes to be drilled for fixings, starter bars and anchors achieving high levels of output in a variety of applications and situations without exposing the operator to the dangers of Hand Arm Vibration syndrome.

Wall Chasing
Utilising the very latest in Dust Free Wall Chasing technology, Core Cut are able to form concealed channels for cables, pipes and conduits in Brick, Block, Reinforced Concrete and Masonry.

Thermic Lancing
Where extremely Heavily Reinforced Concrete, Steel or Cast Iron needs to be cut then Thermic Lancing can offer the solution.
We have recently expanded our range of specialised customer services to include Passive Fire Protection. These services will be provided with the same standards of quality, service and customer care that we pride ourselves on and that has been associated with the Core Cut brand for over thirty years.

Our operatives are product trained and have all relevant safety training and certification, supported by in-house, manufacturer backed technical support and benefitting from our efficient operational systems ensuring reliable delivery of service.
All of our specialist services are covered by our ISO 9001: 2008 Quality Assurance Scheme and will carry third party accreditation where required.

Please contact our office for assistance with any enquiry for Passive Fire Protection Services.

Our range of Passive Fire Protection Services:

**Cavity Barriers**
Installation of a range of products to provide resistance to the passage of fire and smoke within voids such as ceiling spaces and raised access floors.

**Acoustic Sealing**
Installation of acoustic rated materials between compartments to provide reduction in sound transmission providing privacy and comfort to building occupants.

**Air Sealing**
Tightening legislation requires improved thermal efficiency through reduced heat loss. An air tightness test of the building is being specified more and more. Compliance with the standard of permitted air leakage requires that all joints and gaps should be sealed during construction. Ideally carried out at the same time as firestopping, this will reduce the need for retrospective work, reducing costs and disruption.

**Intumescent Coatings**
Protection of structural steelwork using intumescent paint from leading manufacturers using modern airless spray units.

**Boarding Systems**
Rigid and semi-rigid boarding systems to provide fire rated encasements to structural steelwork.

**Fire Stopping**
We carry out a range of firestopping to cover all applications including service penetrations through walls and floors, wallheads and slab edge.
YEARS AT THE CUTTING EDGE

PRECISION WHERE IT COUNTS

Specialists in Remotely Deployed Surface Decontamination by PROSHAVE®
The Company

With over 30 years experience in the construction industry, Core Cut’s specialist concrete drilling and cutting expertise has helped it become one of Britain’s leading specialists in diamond drilling, sawing, and controlled demolition work.

Over recent years, it has expanded its area of operations to include nuclear decommissioning and single projects on nuclear sites.

Family owned and run, the business head office is in Broxburn, West Lothian, Scotland, with a regional office in Sheffield, South Yorkshire, England. Core Cut is proud of its reputation within the UK construction industry, and like most family run enterprises, takes pride in offering a personal service that competitors strive to match.

Core Cut is a member of the DSA (Drilling & Sawing Association, UK), the CSDA (Concrete Sawing & Drilling Association, USA), and has ISO 9001 Quality Assurance accreditation. A natural extension of our continued growth and development is Core Cut Nuclear.

Our Nuclear Site Philosophy

The nuclear industry requires and demands the highest levels of safety for buildings, equipment and of those working within nuclear licensed sites.

At Core Cut Nuclear, safety is our overriding priority – whether nuclear, radiological, environmental or industrial safety. We foster a safety culture within the company that permeates throughout our workforce; a workforce experienced in working in nuclear sites and a radiological environment.

The nuclear safety culture cannot be regulated but is formed with beliefs, good habits and attitudes, and forms part of our management and employee training reflected in our achieving Gold Status CSCS Accreditation in 2009.

Capabilities

As well as our high safety standards, our experience of working in nuclear sites, for clients such as DSRL (Dounreay Site Restoration Ltd) and UKAEA (United Kingdom Atomic Energy Authority) at Sellafield, gives us an edge over our concrete and metal cutting competitors.

We have recently carried out the dry diamond drilling of test cores through the shielding structure of a nuclear reactor under strictly controlled radiological conditions.

As a Hilti network partner we can be sure of using the very latest plant and equipment to undertake the most complex diamond drilling, sawing and controlled demolition on nuclear sites, all operated by suitably qualified and experienced classified personnel.

At Core Cut Nuclear, we are proud of our record of completing even the most complex diamond drilling operations on-time and on-budget.

We continue to evolve and develop techniques and equipment to solve any drilling or cutting problem.
Key Services
- Wet/Dry Diamond Drilling
- Wet/Dry Diamond Wire Sawing of Concrete & Steel
- Wet/Dry Diamond Wall Sawing
- Remote Controlled Demolition by Robolition
- Concrete Shaving and Planing
- Project Consultancy
- Provision of Skilled Classified Personnel

Innovation
Utilising and pioneering the latest technology, Core Cut Nuclear and their partner Hilti are able to provide a range of complex drilling and cutting services specifically designed to apply to nuclear decommissioning projects.

Our partnership scheme with Hilti was established to promote best practice using innovative, high quality techniques and class-leading health and safety governance. We have to demonstrate the following:
- Commitment to H&S compliance
- Commitment to operator training
- Utilisation of up-to-date, innovative technology
- Membership of the DSA

In return we have full access to Hilti’s technology and support throughout any project, anywhere in the world. This commitment to excellence is evident in all aspects of our work:
- Dry Coring in Reinforced Concrete using PCD (Polycrystalline Diamond) segment technology
- Dry Diamond Wire Sawing through reinforced concrete and steel
- Remote Controlled Demolition and tool deployment using Core Cut Nuclear’s extensive range of Robolition equipment
- Surface decontamination by Grinding, Shaving and Captive Shot Blasting
- Specialist cutting utilising Portal and Table Wire Saw systems to facilitate size reduction

Every job we do, no matter how small or large, is afforded the highest standards of workmanship and precision.”
Proshave

One of the most important elements of Nuclear De-Commissioning involves the safe removal of impregnated contamination from existing concrete structures such as Cooling Ponds, Treatment Tanks, and Waste Storage/Processing Facilities.

With this in mind, CoreCut Nuclear has worked closely with its supply chain to develop the PROSHAVE remotely operated concrete shaving system.

This system has been developed to be highly flexible and its “Sized to Fit” design allows it to be deployed in a variety of configurations to suit our clients requirements. The PROSHAVE system comes in 2 specifications – The PROSHAVE 210 which is electrically powered and The PROSHAVE 150 which is hydraulically driven.
Why Choose PROSHAVE?

SAFETY BENEFITS
Remote Operation with integrated camera system ensures Operative Dose uptake is kept ALARP, and reduces the risk of injury to Operatives due to Hand Arm Vibration.

TECHNICAL BENEFITS
- Provides a clean smooth surface
- Precision shaving of selected material to a specific depth ensures only the target material is removed, reducing waste disposal costs
- Dust Free – Highly effective dust containment and extraction system can be connected to clients site systems or CORECUT Nuclear can provide a self contained Dust Extraction Unit with a continuous bagging system.

VERSATILITY
The use of the PROSHAVE remote controlled system allows works to be undertaken to Walls, Floors and inverted to Soffits.

The modular design utilises industry standard components, proven in the most arduous of civil engineering environments, and allows PROSHAVE to be deployed in a variety of ways including;
- Rail Mounted
- One Piece Deployment Frame (regular areas with multiple moves)
- Mechanical or Vacuum fixing Methods
- Fitted to Proprietary RMD type Deployment Frame
- Manual Deployment (small areas)
- Highly Productive
  - Shave depths of 1mm – 10mm in a single pass
  - Maximum Shave Depths of up to 50mm in multiple passes
  - Output rates in excess of 2m²/hour @ 10mm deep
- Fully trained CSCS/Classified Operatives
- Fully equipped mobile workforce covering the UK and Europe
The Final Word

Director Finlay Crocker says: “We are very aware that it takes many years of hard work to build up a good reputation and only minutes to lose it. That’s why every job we do, no matter how small or large, is afforded the highest standards of workmanship and precision. We know the commercial and contractual pressures our clients are under, so meeting their timescales and schedules is our top priority.

As members of the Drilling and Sawing Association, we are committed to embracing the associations’ Code of Safe Working Practices.”

www.corecut.co.uk
The UK's Hydrodemolition Experts by ROBOJETTING
The Company

With over 35 years experience in the construction industry, our specialist concrete drilling and cutting expertise has helped us become one of Britain's leading specialists in Diamond Drilling, Sawing, and Controlled Demolition work.

Over recent years, we have expanded our area of operations to include Hydrodemolition.

Family owned and run, our business head office is in Broxburn, West Lothian, Scotland, with a regional office in Sheffield, South Yorkshire, England. We are proud of our reputation within the UK construction industry and like most family run enterprises, take pride in offering a personal service that competitors strive to match.

We are a member of the DSA (Drilling & Sawing Association, UK), the CSDA (Concrete Sawing & Drilling Association, USA), and have ISO 9001 and ISO 14001 Quality Assurance accreditation.

A natural extension of our continued growth and development is Corejet.

Our Corejet Site Philosophy

Modern industry requires and demands the highest levels of safety for those working within construction and industrial sites.

At Corejet, safety is our overriding priority.

We foster a safety culture within the company that permeates throughout our workforce; a workforce experienced in working in construction sites and in industrial environments.

A good construction safety culture is formed with beliefs, good habits and attitudes and this forms part of our management and employee training which was reflected in our achieving Gold Status CSCS Accreditation in 2009.

Key Services /Capabilities

- Hydrodemolition
- Precision Cold Cutting
- Pipe and Tube Cleaning
- Surface Preparation
- Cleaning of Heat Exchangers and Condensers
- Tank and Vessel Cleaning
- Line Marking and Coating Removal
- Ship Cleaning and Paint Removal
- UHP Surface Cleaning
- Tyre Rubber Removal from Airport Runways
Hydrodemolition

Hydrodemolition is a specialist technique that uses the force of High Pressure or Ultra High Pressure water for the cutting and removal of concrete and is often specified by structural engineers as the preferred method for the non-percussive removal of defective concrete, which does not damage the existing reinforcement.

The result is a clean surface with an excellent profile for bonding of replacement material.

Why choose Hydrodemolition?

- **Safety Benefits** –
  Reduces the risk of injury to operatives due to the exposure to Hand Arm Vibration (HAV’s)

- **Technical Benefits**
  - Vibration Free
  - Does not cause micro-cracking to structure
  - Provides a clean surface with an excellent profile for the application of coatings and new material
  - Cleans the existing reinforcement
  - Precision removal of selected material

- **Effluent and Residue Control**
  - In line with our ISO 14001 Environmental Accreditation we can provide a full efficient filtration and treatment solution using our Siltbuster Filtration and pH Adjustment Units.

- **Versatility** –
  The use of Remote Controlled Robojet equipment allows access to works at height, inverted to Soffits, Underwater, Bridge Parapets and Slab Edges. Pre programmed parameters allows the removal of concrete to be undertaken from a variety of shapes and depths.

- **Use of Hand Lancing for difficult to access areas or small precision projects**

- **Highly productive** –
  Outputs of up to 12m³/day achievable in certain materials/applications using Robojetting Equipment.

- **Fully trained CSCS / WJA accredited operators**

- **Fully equipped mobile workforce covering the UK and Europe**

*Siltbuster Filtration and pH Adjustment Unit*
Robojetting

The Computer Controlled Hydrodemolition Robot is completely portable having its own diesel engine and hydraulic control system.

Electric powered options are also available for work in enclosed areas where exhaust fumes are an issue. It is ideal for mass removal of concrete. Other applications for these Robots include Surface Preparation tasks such as scabbling or Bridge Deck Waterproofing removal which can incorporate an optional Vacuum Waste Recovery. Robots are in most cases controlled by a single operator thus making them a competitive concrete removal option.

The design of the Hydrodemolition Robot ensures that high removal rates are maintained over long periods with risk to operators minimised due to the remote control nature of the equipment. In addition to the mass removal of concrete this robotic system can be used for scabbling, laitance and coatings removal as well as UHP Surface Cleaning.

AQUA CUTTER 710V EVOLUTION

At Corejet we use Aquajet Systems’ AQUA CUTTER 710V Evolution robot, which is the most versatile Hydrodemolition machine on the market. It is now faster, easier to use and more economical than ever, meaning a more efficient and cost-effective solution for our clients. The versatility and flexibility of the Robot allows for virtually all possible operations whether it be horizontal, vertical, over-head or below.

POWER PACKS – 480kW

We also make use of Aquajet Systems’ 480kW self-contained trailer mounted Power Packs which means we can easily bring Robojetting and any required accessories to site. These Packs contain everything needed to complete a job and require little time, space or effort to set-up and again being remotely operated, can be located away from the work face.

Our environmentally friendly Power Pack uses a low-emission diesel engine and is both vibration and sound isolated, thus lowering noise pollution by around 50% so is perfect for use in populated areas. The low emissions also help with lower fuel consumption making it an economically viable choice as well.

ACCESSORIES

Corejet has invested in a range of accessories which help provide the best solution for every application. These include items such as Rotolance and Jetframe. The Rotolance is a tool for cleaning, preparing and the light removal of paint, rubber and other layers from concrete and steel. The Jetframe facilitates the use of Robojetting equipment in bespoke environments removing the requirement for Hand Lancing.
Hand Lancing

Hand Lancing is another method of Hydrodemolition available from Corejet. It is ideal for smaller precision projects in areas where access for our Robojet equipment may be restricted. There are a range of accessories available to enhance the equipment to suit individual requirements and this allows us to offer the highest quality, efficiency and reliability on every project.

Due to the light weight and small size of the Hand Held Safety Lance it is particularly suited to the removal of small volumes of material, ideal in restricted or difficult to access where precision concrete cutting is required. High Pressure Water is provided by a Trailer Pump with flow rates of between 20 to 250 litres per minute and pressures up to 3000 bar enabling us to cut the aggregate within the concrete meaning we can work to a greater accuracy in some cases to the millimetre (mm). Our portable pump units use either diesel engines or electric motors.

**Benefits of Hand Lancing Include:**
- It is dust-free so other activities, like painting, won’t be interrupted
- It reduces clean up times
- It is not weather dependant
- High levels of precision
- There is no unwanted erosion
- It has the highest level of cleanliness compared to other methods
- Provides a surface finish suitable for coating applications

**MULTIJET**

At Corejet we can offer a combination of Hand Lancing / Robojetting Systems which can perform High and Ultra High Pressure waterjetting applications in industrial facilities, construction sites, petrochemical works, food processing plants, nuclear sites and marine fabrication and refurbishment facilities.
AQUA CUTTER 710V Evolution
Technical Specification

- Length min. 2.6m
- Length max. 2.85 m
- Total width 2m
- Min. width 1.04m
- Working width range standard 0 – 2.45m
- Working width extended 4m
- Width of track 1.04 – 1.64m
- Weight 2350 kg
- Height std 1.6m (@ 2m width)
- Height min. 1.42m (hood only 1.3m)
- Operating height standard 7m
- Drive source can be either Diesel or Hybrid Electric Drive