



**HYDRA CAPSULE
LIMITED**

CORPORATE BROCHURE OF HYDRA-CAPSULE CONTRACTUAL SERVICES & PRODUCTS



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HYDRA-CAPSULE LIMITED - GIVING CONSTRUCTION OUR SUPPORT

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01 COMPANY OVERVIEW



40+ YEARS OF SPECIALIST CONTRACT SERVICES

Full UK and international coverage across lifting, jacking, propping, tensioning, and monitoring. Compliant with BS 5975, LOLER, PUWER and ISO 9001:2015. Services include equipment hire, sales, supply and fix, and complete turnkey solutions. UKAS traceable calibration throughout.

OUR SERVICE AREAS

- ✓ Hydraulic Jacking Systems (5-1,600 tonnes)
- ✓ Flat Jacking (circular, rectangular, square)
- ✓ Bridge Jacking & Bearing Replacement
- ✓ Temporary Propping Equipment (Acrow, Aluminium Props, Slimshor & Megashor)
- ✓ Hydraulic Skidding & Sliding
- ✓ Hydraulic Synchronised Lifting
- ✓ Facade Retention
- ✓ Backing-Propping & Support Systems
- ✓ Bridge Propping & Heavy-Duty Towers
- ✓ Propping & Needling
- ✓ Bar and Strand Hydraulic Jacking
- ✓ Heavy Lifting (Climbing Jacks, Cube/Cassette Units)
- ✓ Bolt Tensioning, Torquing & Stressing
- ✓ Real-time Monitoring / Data Logging + Testing & Calibration
- ✓ Grout Bags & Pumps
- ✓ Mechanical Wedge & HarJaks
- ✓ Equipment Hire & Sales



COMPLIANCE & ACCREDITATION

ISO 9001:2015 certified. BS 5975, LOLER & PUWER compliant. UKAS traceable calibration on all equipment. Full RAMS, method statements & CDM compliance documentation provided on every project.



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02 WHY CHOOSE HYDRA-CAPSULE



THE UK'S LEADING SPECIALIST HYDRAULIC CONTRACTOR

For over 40 years, Hydra-Capsule has been the trusted partner for the UK's most complex and demanding structural engineering projects. From motorway bridge replacements to heritage building restoration, our specialist team delivers precision, safety, and reliability every time.

WHY CLIENTS CHOOSE US

- ✓ 40+ years specialist hydraulic experience
- ✓ Largest equipment fleet in the UK
- ✓ In-house design, manufacture & installation
- ✓ PLC-controlled precision ($\pm 0.5\text{mm}$ accuracy)
- ✓ 24/7 emergency response capability
- ✓ UKAS-traceable calibration on all equipment
- ✓ Full RAMS, method statements & CDM compliance
- ✓ Nationwide coverage with international capability

SECTORS WE SERVE

- Highways & Bridges
- Rail Infrastructure
- Nuclear & Power Generation
- Marine & Offshore
- Commercial Buildings
- Construction Development
- Steelwork Installation & Strengthening
- Heritage & Conservation
- Industrial & Manufacturing
- Water & Utilities
- Oil & Gas
- Defence & Ministry of Defence

OUR COMMITMENT

Every project receives a dedicated project manager, bespoke engineering design, full risk assessment documentation, and post-project reporting. We don't just supply equipment - we deliver complete engineered solutions from concept through to completion.

READY TO DISCUSS YOUR PROJECT?

Contact our specialist team today for a free consultation and competitive quotation on any hydraulic jacking and temporary propping service requirement.

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03 CONTRACT SERVICES AT A GLANCE



Hydra Capsule are specialists in a number of contract service areas covering lifting, temporary propping, heavy-lifting, synchronised lifting, sliding + sliding, bolt tensioning + stressing and monitoring across the UK and internationally.

HYDRAULIC JACKING & SYNCHRONISED LIFTING

Hydraulic Jacking & Monitoring, Bridge Jacking, Heavy-Lifting Systems, Mechanical Wedge Jacks

FLAT JACKING & GROUT INJECTION

Flat Jacks are used for pre-loading, steelwork deflection, weighing and settlement control up to 1,380 tonnes

HYDRAULIC SKIDDING, SLIDING LAUNCHING / PULLING SYSTEMS

Hydraulic Skidding & Sliding for heavy structure relocation with PLC accuracy

TEMPORARY PROPPING & SUPPORT

Temporary Propping Systems, Grout Bags & Pumps for structural retention and load transfer

SERVICING, TESTING, CALIBRATION & HIRE + SALES

Offering one of the largest equipment in UK for hydraulic jacking, ancillary equipment & temporary propping

BOLT TENSIONING & TORQUING TESTING AND MONITORING

Bolt Tensioning, Pre-Stressing, Load Testing, Calibration & Wireless Site Monitoring

KEY CAPABILITIES

- ✓ Up to 1,600 Bar operating pressure
- ✓ Largest specialist equipment fleet in the UK
- ✓ 40+ years operating experience
- ✓ Full contractual installation (supply & fix), hire & sales services
- ✓ Offering in-house calibration & load-testing - UKAS traceable and ISO certification
- ✓ Nationwide coverage with international capability

04 HYDRAULIC JACKING & LIFTING



Hydra-Capsule provides precision hydraulic jacking and lifting services from 5 to 1,600 tonnes capacity per cylinder. Our synchronised PLC-controlled systems deliver $\pm 1\text{mm}$ accuracy for the most demanding structural lifting operations.



- ✓ Capacities from 5 to 1,600 tonnes (systems upto 25,000 tonnes)
- ✓ Synchronised PLC systems ($\pm 1\text{mm}$ accuracy)
- ✓ Lock-nut jacks for permanent load holding
- ✓ Bar / Strand jacks for heavy vertical lifts
- ✓ Bridge bearing replacement & pre-loading
- ✓ UKAS-traceable calibrated equipment



PRECISION LIFT

Synchronised lifting up to 128+ points with $\pm 1\text{mm}$ accuracy UKAS traceable calibration Real-time load monitoring

KEY CAPABILITIES

150 – 1,600 bar

Max working pressure

7,500+

Hydraulic jacks & ancillary equipment in stock

24/7

Site support available



04.1 HYDRAULIC JACKING SYSTEMS



With over 7,500+ hydraulic jacks & ancillary equipment in stock (UK largest fleet).
Capacity from 5 upto 1,600 tonnes per (models HC-05 to HC-1600).
Pressure Gauge and Equipment ranging from 4 to 1,600 bar.



Single-Acting Cylinders

Standard hydraulic jacks for general lifting, bearing replacement, and structural support. Lock-nut option for permanent load holding.



Synchronised PLC Systems

Multi-point lifting with $\pm 1\text{mm}$ accuracy across 200+ synchronised points. Real-time load monitoring and data logging.



Lock-Nut Jacks

Mechanical lock-nut for safe permanent load holding without continuous hydraulic pressure. Ideal for bearing replacement.

SYSTEMS OVERVIEW

- ✓ HJ-10 to HJ-1600 range
- ✓ 350-1,600 bar pressure
- ✓ Closed heights 100-950mm
- ✓ Strokes 6mm upto 1000mm
- ✓ Capacity from 1 tonnes to 1,600 tonnes

- Synchronised lifting up to 132+ points with $\pm 1\text{mm}$ accuracy.
- UKAS traceable proof load testing certification & calibration.
- Real-time hydraulic-jacking load and movement monitoring.

+200 Models

5-1600 Tonnes

Capacity Range
Across Full Product Lines

05 FLAT JACKING



Specialist flat jacking services for bridge bearing replacement, structural pre-loading, and load transfer operations. Our flat jacks deliver controlled force in confined spaces where conventional cylinders cannot operate.



- ✓ Type A, B & C flat jacks available (grout, oil, resin options)
- ✓ Capacities up to 1380 tonnes per jack
- ✓ Ultra-low profile for confined spaces (35mm insertion)
- ✓ Bridge bearing replacement, steelwork deflection & pre-loading
- ✓ Ideal for temporary and permanent solution (transfusion operation)
- ✓ Full LVDT monitoring during operations (uplift, deflection and stroke reporting)

KEY CAPABILITIES

150 bar

Max operating
pressure

25 – 50 mm

Stroke
range

1,380 T

Max capacity
per jack



05.1 FLAT JACKING TYPES & MODELS



Capacity: 8-1,500 tonnes. UK manufactured and tested to full rated capacity.
Minimum installation gap: 35mm. Three pipe arrangements (Type A, B, C).



Circular Flat Jacks

Models FJ-12 to FJ-108. Ideal for bridge bearing replacement and pre-loading in circular bearing pockets.



Rectangular Flat Jacks

Models RFJ20-25 to RFJ68-73. For wider load distribution across rectangular bearing shelves and plinths.



Square Flat Jacks

Models SFJ20-20 to SFJ60-60. Compact square profile for confined spaces and uniform load distribution.

SYSTEMS OVERVIEW

- ✓ Type A: Single inlet/outlet
- ✓ Type B: Dual inlet/outlet
- ✓ Type C: Multi-port inlet/outlet and manifold
- ✓ Models: Water, Oil, Grout and Transfusion available
- ✓ Models: Circular, Square and Rectangle sizes
- ✓ All UK manufactured & tested to UKAS traceability

+24 Models

5-1380 Tonnes

Capacity Range
Across Full Product Line

Applications: steelwork pre-loading, bridge bearings, settlement control & weighing.
Recommended working range: 25-75% of rated capacity.

06 HYDRAULIC BRIDGE JACKING & PROPPING



Complete bridge jacking and temporary propping solutions for bearing replacement, structural assessment, and maintenance operations. We provide full design, installation, monitoring, and removal services.



- ✓ Temporary Propping 10 kN to 50,000 kN
- ✓ Bridge Deck Lifting, Bearing Replacement & Repairs
- ✓ Hydraulic & Mechanical Propping Systems
- ✓ Real-time Load Monitoring Throughout
- ✓ Full Temporary Works Design Service
- ✓ Rapid Mobilisation Across The UK



DURABLE BUILD

Universal Configuration to Adapt to All Your Temporary Propping and Hydraulic Jacking Requirements

KEY CAPABILITIES

30m

Max propping height

Multi-span

Simultaneous operations

Various Models

Range of cylinders with mechanical locking device

25,000+

Tonnes jacking capability and associate equipment

One-Stop

Full in-house solution for project management

NR & HE

Network Rail & Highways approved

06.1 HYDRAULIC BRIDGE JACKING SYSTEMS



Hydraulic bridge jacking up to 1,600+ tonnes with full propping systems. 40+ years experience, 100% in-house design and installation across the UK and internationally.



HJ Cylinder Range

HJ10-HJ1600 cylinders (100 kN-16,000 kN). Synchronised multi-point lifting with $\pm 1\text{mm}$ accuracy for bearing replacement and deck lifting.



TP Propping Towers

Propping towers up to 500 tonnes capacity. Applications include structural failure support, demolition staging, and facade retention.



MB Monitoring & Control

Real-time PLC-controlled load monitoring with data logging. Full temporary works design and CDM compliance documentation.

SYSTEMS OVERVIEW

- ✓ Bridge Bearing replacement and Strengthening Works
- ✓ Deck lifting & lowering (upto 132no. jacking points)
- ✓ Structural assessment
- ✓ Emergency hydraulic jacking and temporary propping works
- ✓ Pre-loading and Load-Transfer Operation
- ✓ Allowance for concrete repairs and remedial works

Hydra Capsule offers: Full design, installation, monitoring, and removal. Network Rail and Highways England approved contractor.

07 TEMPORARY PROPPING & SUPPORT WORKS

HYDRA-CAPSULE

BS 5975 compliant temporary propping solutions from 10 kN Acrow props to 5,000 kN Megashor Plus Towers. Offering a full supply & fix, sales and hire options with 24/7 emergency response for the full UK coverage.



KEY CAPABILITIES

- ✓ Acrow Props: 10-35 kN capacity
- ✓ Aluminium Props: 100-150 kN capacity
- ✓ Superslim Shores: 120-300 kN capacity
- ✓ Megashor: 500-1,350 kN capacity
- ✓ Megashor Plus Towers: up to +5,000 kN
- ✓ Facade retention up to +30m height

BS 5975

Fully compliant

5,000 kN

Max tower capacity

24/7

Emergency response

APPLICATIONS

- ✓ Propping & Needling
- ✓ Facade Retention
- ✓ Jacking & Propping
- ✓ Bridge Propping
- ✓ Raking Support
- ✓ Back Propping



07.1 TEMPORARY PROPPING EQUIPMENT



BS 5975 compliant temporary propping solutions from 10 kN Acrow props to 5,000 kN Megashor Plus Towers. 24/7 response. Full UK and international coverage.



Acrow & Aluminium Props

Acrow Props: 10–35 kN capacity. Aluminium Props: 50–150 kN capacity. Lightweight, rapid deployment for back-propping and general support.



Megashor Systems

Megashor: 500–1,350 kN capacity. Megashor Plus Towers: up to 5,000 kN. Heavy-duty propping for major structural works (and facade retention to bridge propping).



Slimshor Systems Needling, Back propping & Facade Retention

Slimshor: 100 up to 300 kN capacity. Facade retention up to 30m height. Needling spans up to 12m. Structural back-propping & raking propping for demolition + refurbishment.

SYSTEMS OVERVIEW

- ✓ BS 5975 design compliant
- ✓ 24/7 emergency response – one-stop solution
- ✓ Facade retention up to +30m
- ✓ Needling spans to 12m and vast stock of UC sections
- ✓ Hydraulic Bridge Jacking and Temporary Propping

Applications: back-propping, facade retention, structural propping and needling, to ground excavation and raking propping.

With Full design service included from CAT-1 to CAT-3 independent checking and sign-off

08 HYDRAULIC SKIDDING, SLIDING & PULLING SYSTEMS



Heavy structure movement up to 50,000+ tonnes with $\pm 1\text{mm}$ positional accuracy. PTFE/stainless steel slide paths delivering 2-5% friction for bridge launches, module skidding, and building relocation.



- ✓ Push-pull hydraulic jacking cylinders from 30-1,200 tonnes
- ✓ PTFE sliding pads/sledges and jacking skate shoes for low-friction movement
- ✓ From Hillman and heavy-duty rollers 10-750 tonnes per/unit
- ✓ PLC-controlled synchronised movement
- ✓ Bridge launches & module skidding, sliding and launching systems available
- ✓ Sliding and Launching capability in excess of 25,000 tonnes

KEY CAPABILITIES

25,000 T

Excess Max structure
weight

$\pm 1\text{mm}$

Positional
accuracy

2-5%

Friction
coefficient



08.1 HYDRAULIC SKIDDING & SLIDING / ROLLER SYSTEMS



PTFE/stainless steel slide paths with push-pull cylinders for controlled heavy structure movement. PLC synchronised with $\pm 1\text{mm}$ positional accuracy. Skidding systems offer a reliable solution; meeting the demands of construction challenges.



Push-Pull Cylinders

30-1,000 tonne capacity cylinders for controlled horizontal movement. Synchronised PLC operation for multi-point skidding.



PTFE Slide Systems

Low-friction PTFE pads on stainless steel tracks provide a friction coefficient of 2-5%. These pads are designed to handle loads exceeding 50,000 tonnes.



Hydraulic Jacking Rollers

10-500 tonne capacity roller systems for heavy structures with jackable shoes for lifting, launching and adjustment control. Steerable and lockable configurations available.

SYSTEMS OVERVIEW

- ✓ Superstructures & Bridges to Steelwork Launches
- ✓ Module Sliding and Skidding
- ✓ Building & Superstructure Relocation
- ✓ Transformer Units for Sliding and Positioning
- ✓ Heavy Lifting and Re-alignment
- ✓ Maintenance Shutdown and Data-Centres

+20 Models

5-750 Tonnes

Capacity Range
Across Full Product Line

All systems are PLC-controlled with real-time position monitoring and $\pm 1\text{mm}$ accuracy across all points.

- ✓ One of the most extensive fleets in the UK, featuring a significant number of units. Each with substantial capacity (+30te - 750te), complemented by a vast number of high-capacity sliding tracks.

09 HEAVY LIFTING STRAND & BAR SYSTEMS



Hydraulic strand and bar jacking to gantry systems for vertical heavy lifts from 10 to 10,000+ tonnes. Offering one-stop solution for a full design, supply, installation, and operation of lifting systems for all infrastructure, offshore, and civil/construction projects.



- ✓ Strand/Bar Jacking Systems: 10 – 10,000+ tonnes
- ✓ Lifting Systems In Excess of 100+ metres Capability
- ✓ Synchronised Multi-point Lifting
- ✓ On/off-shore Module Installation
- ✓ Infrastructure & Bridge lifts
- ✓ Full Temporary Works Design Included



SELF-LOCKING

Load sustained permanently without the need for continuous pressure force.

KEY CAPABILITIES

+15,000 T

Max lift
capacity

136+

Sync lift
points

Global & UK

Project
coverage



09.1 ADVANCED HEAVY LIFTING SYSTEMS



Scalable, high-capacity lifting solutions engineered for bridge launches, offshore module installations, and high-rise construction programmes.



Bar Jacking & Strand Jacks

High-tensile threaded bar and strand wire systems with hollow-plunger jacks to enable precise control, incremental vertical lifting – upto 100 metres lifts, launches and pulling.



Climbing Jacks

Multi-stage vertical lifting systems with mechanical locking at each stroke increment for continuous elevation. These systems ensure seamless operation and enhanced safety.



Cassette Jack-Up

Modular, scalable stroke units enabling flexible jack-up configurations for varied load and height requirements. The modular nature; allows for quick assembly and disassembly safely.

SYSTEMS OVERVIEW

- ✓ Bar Jacking
- ✓ Climbing Jacks
- ✓ Strand Jacking
- ✓ Hydraulic Turntables
- ✓ Hydraulic Jack and Pack Solution
- ✓ Bespoke Engineered Solutions (residential lifting to large-scale load-transfer tensioning, heavy-lifting operation)

+14 Models

50–800 Tonnes

Capacity Range
Across Full Product Line

Combined, these systems deliver mega-lift capability with centralised PLC-synchronised control and $\pm 1\text{mm}$ positional accuracy over heights exceeding 15 metres.

10 BOLT TENSIONING & BAR STRESSING



Hydraulic bolt tensioning, torquing, and post-tensioning stressing services for construction, energy, and industrial sectors. UKAS-traceable equipment with full calibration certification.



- ✓ Bolt tensioning M16 to M120+
- ✓ Hydraulic torquing to 72,000 Nm
- ✓ Post-tensioning stressing services
- ✓ Pre-loading and Stressing Macalloy, Dywidg and all manufacturers' bars
- ✓ Flange management & joint integrity
- ✓ Leading in steelwork crane base grillages and project management
- ✓ UKAS-traceable calibration certificates

KEY CAPABILITIES

72,000 Nm

Max torque
capacity

M120+

Max bolt
diameter

UKAS

Traceable
calibration



10.1 TENSIONING, TORQUING & STRESSING EQUIPMENT

HYDRA-CAPSULE

Hydraulic bolt tensioners, torque wrenches, and post-tensioning stressing equipment are all available to meet your specific project needs.

We understand how important it is for our clients to have reliable and precise tools, which is why we ensure that each item is UKAS-traceable and comes with complete calibration certification for your peace of mind.

BT

Hydraulic Bolt Tensioners

Topside, spring-return and subsea tensioners M16-M100+. Operating pressures 1,000-1,500 bar. Simultaneous multi-stud tensioning capability.

HTQ

Hydraulic Torque Wrenches

Low-profile and standard square drive and hex cassette wrenches to accommodate all applications. Torque range 100-72,000 Nm with $\pm 3\%$ accuracy.

PT

Post-Tensioning Jacks

Mono-strand and multi-strand stressing jacks. Capacities 25-600 tonnes for bridge & building post-tensioning. With hydraulic power-pack units to complete full operational systems.

SYSTEMS OVERVIEW

- ✓ Wind Turbines to Steelwork Connections
- ✓ Crane Base Grillages and Flange Management
- ✓ Subsea Bolting, Torquing and Tensioning
- ✓ Bridge Post-Tensioning and Stressing

Full bolt / threaded bar load verification with digital measurement. ECITB and CompEx certified operators available.

+28 Models

0-72,000 N/m

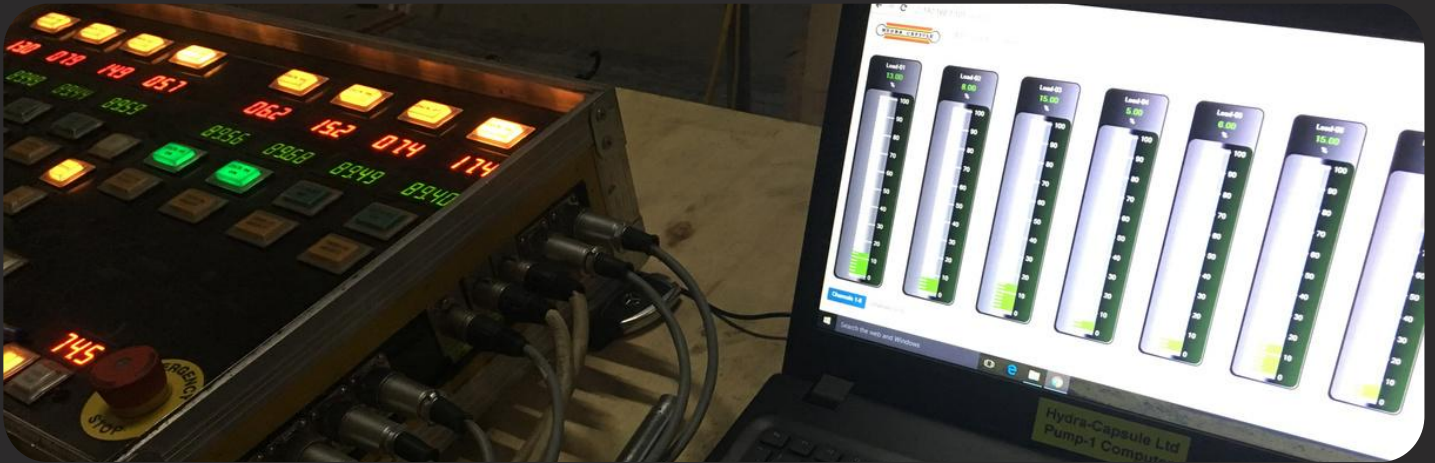
10-410 tonnes

Capacity Range
Across Full Product Line

11 MONITORING, TESTING & CALIBRATION SERVICES



Real-time structural monitoring, load testing, and UKAS-traceable calibration services. PLC-controlled data acquisition with live reporting for critical construction operations.



- ✓ LVDT / movement sensor & displacement monitoring
- ✓ Load cell monitoring & data-logging + recording
- ✓ Pile load testing (static & dynamic)
- ✓ Proof load testing 1,200+ tonnes to BS/EC standards
- ✓ UKAS-traceable jack inspection, servicing/repair and calibration
- ✓ Real-time data-logging with live reporting (wired, wireless and automated)

KEY CAPABILITIES

±0.01mm

LVDT
resolution

Real-time

Live data-logging
& reporting

UKAS

Accredited service
for service & calibration



11.1 MONITORING & LOAD TESTING SYSTEMS



Real-time wireless monitoring, load testing, and UKAS-traceable calibration across all load, pressure, and displacement parameters on site. These advanced systems offer unparalleled accuracy and efficiency, ensuring that every aspect of construction meets rigorous safety and performance standards



Pull & Load Testing

Anchor, Fixings and Bar proof-loading systems up to 3,000 kN.
Foundation and load-testing up to 12,000 kN per unit (1,200 tonnes)
Larger systems can be designed using combination of multi-set units



Wireless Monitoring

Hydra-Log system providing real-time load, pressure and displacement data on site. Multi-channel data acquisition.
this is an invaluable tool to provide insights & comprehensive data.



UKAS Calibration

Traceable calibration to 15,000 kN and 1,600 bar.
LOLER inspections, testing certification included.
Full purpose-built units for pressure monitoring 5-1,600 bar.

SYSTEMS OVERVIEW

- ✓ Pull and Anchor Testing: PT Model 5-60 kN, and Pull-Ram Cylinder / Clevis
- ✓ Pull-Testing from 75-5,000 kN
- ✓ Foundation Testing: Hydra-Test System 300-12,000 kN
- ✓ Load Cells: Compression 5T-1,600T | Centre-hole 50-5,000 kN
- ✓ Wireless HydraLog: Real-time load | Pressure & Displacement
- ✓ Proof-Loading and Dynamic Testing: Calibration upto 16,000 kN (1,600 Te)

UKAS traceable calibration up to 25,000 kN & 1,600 bar. LOLER inspections included. LVDT sensors for displacement monitoring full inspected to ISO and British Standard as a minimum requirement

11.2 TESTING, LOAD-CELL & CALIBRATION SERVICES



Our services ensure that all structural components meet safety and performance standards, providing detailed reports and certifications per BS/ISO & EC guidelines. Skilled technicians offer expert advice for construction projects, using advanced equipment and real-time data logging for precise testing and calibration, supported by Hydra capsules with capacities from 20 kN to 16,000 kN.



Pull Testing Systems

We stock pull-testing, clevis anchors, pre-stressing systems from: Light-Duty: 1-30 kN | Medium-Duty: 35-300 kN | Heavy-Duty: 100-1,000 kN

Anchor bolt, resin, & mechanical fixing verification to BS/EC standards.



Foundation Testing

Proof-load system: 500-5,000 kN capacity.

Static and dynamic pile load testing.

Kentledge and reaction beam configurations available.



Load Cell Systems

Compression: 5T-1,600T (50 - 16,000 kN)

Centre-hole: 50-5,000 kN | Tension: 1-3,000 kN

Multi-channel data acquisition with real-time logging.

SYSTEMS OVERVIEW

- ✓ Anchor bolt pull testing
- ✓ Pile load testing (static & dynamic)
- ✓ Proof load testing to BS/EC
- ✓ Real-time data logging & reporting

All testing equipment UKAS-traceable. Full test reports and certification provided. 24/7 availability for critical operations.



FULL TEST CAPABILITY

A Comprehensive Selection of Equipment for Every Scenario and Connection

11.3 CALIBRATION EQUIPMENT SERVICES



UKAS-traceable calibration laboratory services are available for a comprehensive range of equipment, including hydraulic jacks, load cells, pressure gauges & torque equipment. Our services ensure that your equipment functions with the highest level of accuracy and reliability.



Jack Calibration

Hydraulic jack calibration up to 15,000 kN capacity.
Compression and tension testing in-house rigs and data-logging
Full UKAS-traceable certification with 6 to 12-month validity.



Pressure Calibration

Pressure gauge and transducer calibration from 5–1,600 bar.
Dead-weight tester verification.
Digital and analogue instruments supported.



Torque Calibration

Torque wrench / tensioning calibration 10–72,000 Nm.
Clockwise and anti-clockwise verification, with service inspections
BS EN ISO 6789 compliant proof-testing.

In addition to calibration, we also offer inspections and certification in compliance with the Lifting Operations and Lifting Equipment Regulations (LOLER).

SYSTEMS OVERVIEW

- ✓ UKAS traceable to 25,000 kN
- ✓ Pressure calibration from 1 bar up to 1,600 bar
- ✓ LOLER inspections, proof-loaded and certificates included
- ✓ 6 or 12-month calibration certificates for cylinders or gauges available

Fast turnaround calibration service. On-site calibration available for large equipment.
Emergency calibration within 24 hours.

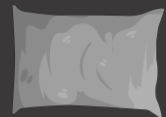
12 GROUT BAGS & GROUT INJECTION PUMPS

HYDRA-CAPSULE

Hydra-Capsule manufactures and supplies grout bags and pumping systems for void filling, bearing bedding, and structural grouting. UK manufactured to bespoke specifications with rapid turnaround.



- ✓ Bespoke sizes available and manufactured in-house
- ✓ Ideal for bridge bearing bedding bags
- ✓ Void filling & structural grouting
- ✓ Compatible grout pumps available
- ✓ Pressure ratings up to 10 bar
- ✓ Rapid UK manufacturing turnaround



VOID FILLING

Complete void elimination with permeable fabric ensuring no air pockets for full structural contact.



KEY CAPABILITIES

Bespoke

UK Designed & Manufactured

10 bar

Maximum Grout Pressure

Same Day

Stocked Items
Typical Turnaround

40+ Yrs

Industry
Experience

12.1 GROUT BAGS & GROUT PUMP SPECIFICATIONS



Rectangular Grout Bags: GB-101 to GB-110 and Beam Grout Bags: GB-201 to GB-215
These products are manufactured in the UK to custom specifications, and grout pumps are also available.

GB1

Rectangular Grout Bags

GB-101 to GB-110: 0.7-7.2 tonnes lift at 4 bar. Standard sizes for bridge bearing bedding and void filling applications.
Bespoke options available

GB2

Beam Grout Bags

GB-201 to GB-215: 0.8-26.7 tonnes lift. Cured capacity 25-900 tonnes. Lengths 500-7,500mm for void filling alternative and potential of structural pre-loading.

GP

Grout Pumps

Piston, progressive cavity, peristaltic & centrifugal types up to 2,000 kPa. Compatible with all Hydra-Capsule grout bag systems. Offering manual and electric options

SYSTEMS OVERVIEW

- ✓ Underpinning & Dry-packing
- ✓ Beam Pre-loading and Deflection facility
- ✓ Void filling
- ✓ Permeable fabric to ensure no air voids/pockets
- ✓ Groundworks and Construction applications

+25 Models

25-900 tonnes

Capacity Range
Across Full Product Line

All bags UK manufactured. Bespoke sizes available with rapid turnaround. Pressure ratings up to 4 / 10 Bar (Bags / Pumps)

More details can be found on technical data-sheet documentation.

13 MECHANICAL WEDGE & HARJACKS



Mechanical wedge jacking and HarJak systems for permanent load transfer and levelling operations. Self-locking mechanical advantage with no hydraulic power required for holding.



- ✓ HarJak mechanical jacking systems
- ✓ Self-locking wedge design
- ✓ No hydraulic power for load holding
- ✓ Permanent load transfer capability
- ✓ Precision levelling operations
- ✓ Compact design for confined spaces

7 Models

5-200 Sizes

Tonne Capacity Range
Across Full Product Line

KEY CAPABILITIES

Self-lock

No power to
hold load

Compact

Confined space
access

Permanent

Load transfer
capability



13.1 MECHANICAL WEDGE MODELS



HarJak mechanical jacking systems are designed for permanent load transfer and precision levelling applications. These systems feature a self-locking wedge design that eliminates the need for hydraulic power when holding loads securely in place.



HarJak Standard

Standard mechanical wedge jacks for general levelling and load transfer. Capacities 5-100 tonnes. Self-locking at any position within stroke.



HarJak Heavy Duty

Heavy-duty models for major structural works. Capacities 100-500 tonnes. Extended stroke options for greater adjustment range.



HarJak Compact

Compact profile for confined spaces. Capacities 5-50 tonnes. Minimum insertion height from 35mm. Ideal for steelwork pre-loading and deflection operations.

SYSTEMS OVERVIEW

- ✓ Self-locking wedge design (mechanical locking of device)
- ✓ No hydraulic power requirement for holding and operating
- ✓ Capacities of 5-200 tonnes
- ✓ Minimum height from 35mm for confined spaces

All HarJak systems manufactured in-house. Bespoke configurations available. Full technical support and installation guidance included.

14 HIRE & SALES

HYDRA-CAPSULE

Our comprehensive services include a full hire fleet and sales of hydraulic jacking equipment, propping systems, bolt-tensioning to post-tensioning and monitoring instrumentation – with wide range of ancillary items.

We offer both short and long-term hire options, ensuring flexibility to meet your project needs. Our expert team provides full technical support to assist you at every stage, guaranteeing seamless technical support and delivery across the UK.



- ✓ Hydraulic jacks from 5-1,600 tonnes
- ✓ Propping systems & towers
- ✓ Hydraulic Pumps, hoses & manifolds
- ✓ Monitoring & instrumentation
- ✓ Short & long-term hire available
- ✓ Full technical support & delivery

KEY CAPABILITIES

20,000+

Over Items
In Hire / Sales Fleet

UK-wide

Largest Stocks &
Delivery Service

Technical

24/7 Support
Included



14.1 HIRE FLEET & EQUIPMENT SALES



Full hire fleet and sales catalogue covering hydraulic jacks, bolt/stressing tensioners, climbing jacks, hydraulic skidding and sliding to temporary propping systems, pumps, hoses, monitoring equipment, and ancillary items. UK delivery with full technical support. Visit our shop online or Hire and Sales Brochure – link attached.



Hydraulic Cylinders, Jack & Bolting Tensioner Tools

Hydraulic Cylinders: 5–2,000 tonnes | Bolt-Tensioners: 10–500 tonnes
Sliding/Skidding Systems: 30–1,000 tonnes | Roller/Skates: 10–750 tonnes
Harjaks: 5–200 tonnes | Climbing/Jack-Up Systems: 50–800 tonnes



Hydraulic Pumps and Ancillary Equipment

Pumps: Electric, Air, Petrol, Battery and Manual Operated options
Hydraulic Hoses | Manifolds | Sync-Control | Accessories: Fittings, Valves, Connectors and Couplers to 5–1600 bar | Pressure Gauges



Temporary Propping & Supports

Acrow props | Rapidshor/Kwikform | Alshor+ Plus | Titan Aluminium Superprops | Superslim Soldiers | Megashor Props | Megashor+ Gantry Systems | Needling & Beam Supports | Available 24/7 Service



Monitoring & Ancillary

HydraLog wireless data acquisition systems | Load cells 5–1000 tonnes
LVDTs Movement Sensors 0.01–2000mm | Digital Pressure 5–2000 Bar | Calibration, Inspection & LOLER Services included with all equipment.

SYSTEMS OVERVIEW

- ✓ Offering Short and Long-Term Hire
- ✓ UK-wide and Europe delivery service
- ✓ Full technical support and customer portal
- ✓ LOLER, PUWER and UKAS Calibration included

50,000+ items in hire fleet. Same-day dispatch available for urgent requirements. Competitive rates with volume discounts.

Hydra-Hire Ltd Market Leader

Family-owned and largest selection of temporary propping, hydraulic jacks & equipment

15 PROJECT SHOWCASE



Delivering complex lifting and support solutions across the UK and internationally. Our integrated contract services combine hydraulic jacking, real-time monitoring, and temporary propping to deliver precision outcomes on the most demanding civil and structural projects.

INTEGRATED SERVICES IN ACTION

✓ Bridge jacking, propping, and live load monitoring deployed simultaneously on a major UK infrastructure project.

ONE-STOP SOLUTION CAPABILITY

✓ Hydra-Capsule's continuous investment in people, plant, and technology enables a fully integrated service — from initial design and engineering through to on-site installation and real-time monitoring — all delivered under one roof.

PRECISION & SAFETY

✓ $\pm 1\text{mm}$ synchronised accuracy with real-time HydraLog wireless (or wired) monitoring systems, across all active lift points.

PROJECT DELIVERY

✓ End-to-end project management: design, supply, installation, monitoring, and 24/7 on-site support to ensure project deliveries are achieved.



16 KEY STATISTICS



Hydra-Capsule's track record in numbers. Over four decades delivering precision hydraulic jacking and temporary propping solutions in the UK industry. Hydra-Capsule's capabilities continue to grow with every project completed.

50,000+

TONNES LIFTED
ANNUALLY

7,500+

HYDRAULIC CYLINDERS &
FLAT JACKS IN STOCK

±1mm

SYNCHRONISED
ACCURACY

1,600

BAR UTO
MAX PRESSURE

132+

SYNCHRONISED
CONTROL POINTS

40+

YEARS IN THE
UK MARKET

PERFORMANCE

- ✓ **7,500+ HYDRAULIC JACKS IN STOCK** - UK's largest fleet, up to 1,600 tonnes per cylinder
- ✓ **1,380+ TONNES FLAT JACKS IN** - Market leading in all types, largest sizes in the world
- ✓ **1,000+ TONNES OF TEMPORARY PROPPING** - Acrow, Push/Pull, Rapidshor, Alshor+ Plus, Titan Superprops, Superslim, Megashor and Megashor+ Plus all available for hire/sales
- ✓ **72,000 Nm TORQUE CAPACITY** - All industrial bolt sizes and flange configurations
- ✓ **85% CLIENT RETENTION RATE** - Long-term partnerships built on reliability

CREDENTIALS

- ✓ UKAS traceable calibration up to 25,000 kN
- ✓ ISO 9001 quality management
- ✓ Over 35,000 tonnes weight-lifts completed
- ✓ LOLER examination accredited
- ✓ Largest inventory of hydraulic jacks, heavy-lifting and ancillary equipment in the UK

17 CONTACT US



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OUR SERVICES

- ✓ Hydraulic Jacking & Tensioning Systems (5-50,000 Tonnes)
- ✓ Synchronised Lifting & Jack-Up Systems ($\pm 1\text{mm}$ accuracy)
- ✓ Flat Jacking and Grout Injection
- ✓ Hydraulic Sliding, Skidding & Skating Systems
- ✓ Temporary Bridge Propping, Lifting & Pre-loading
- ✓ Contractual Service + Equipment Hire & Sales

