

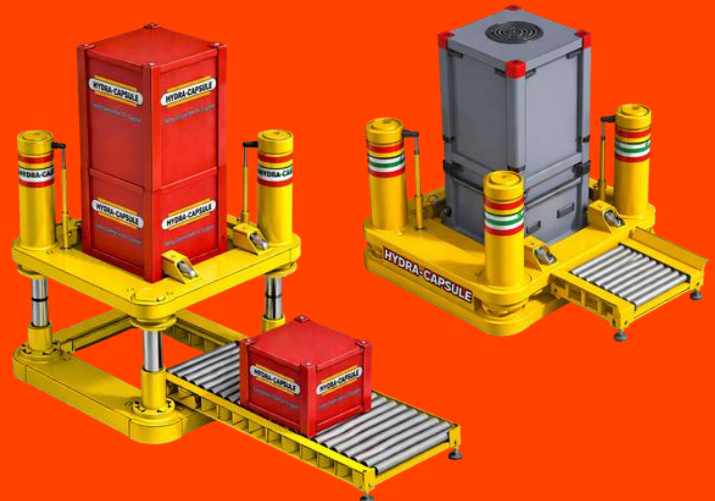
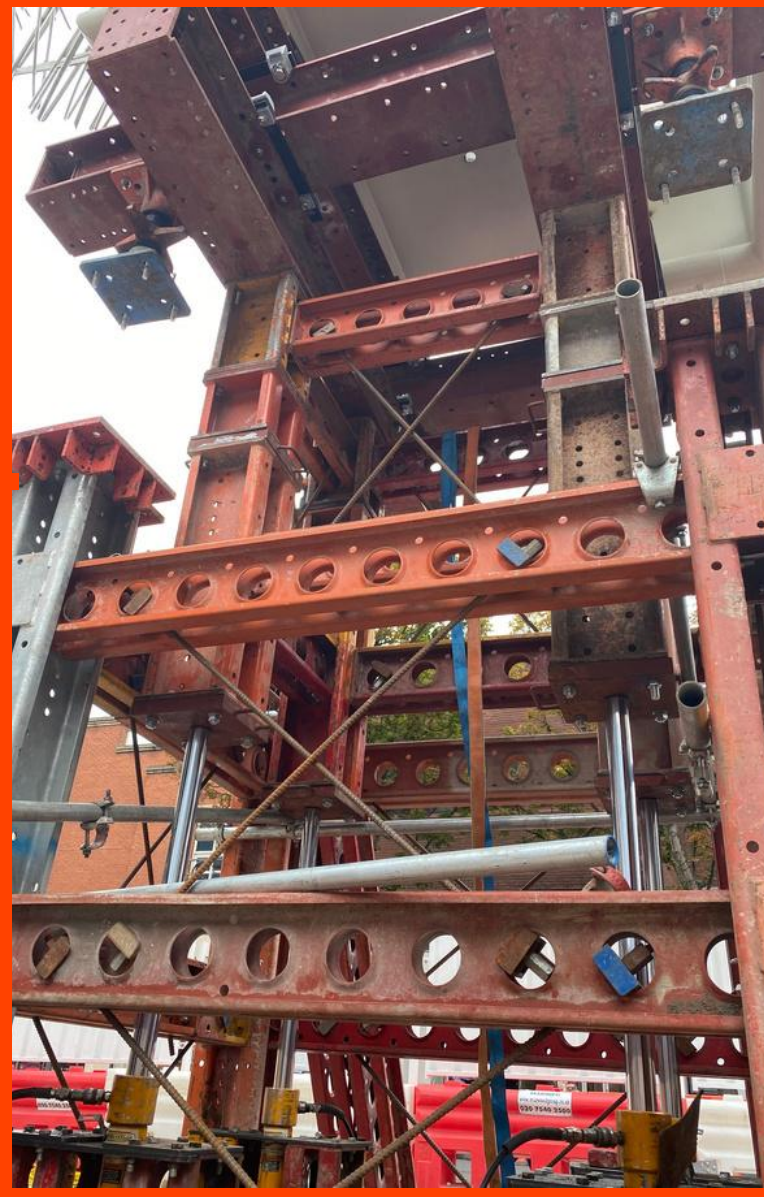


**HYDRA CAPSULE
LIMITED**

HYDRAULIC HEAVY LIFTING JACK-UP SOLUTIONS

OUR SERVICES

- Bar Jacking Systems
- Climbing Jacks
- Cassette Jack-Up Units
- Hydraulic Turntables
- Strand Jacking
- Hydraulic Power Pumps
- Synchronised Bridge Lifting



+44 (0)1885 490405



sales@hydra-capsule.com



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HYDRA-CAPSULE LIMITED – GIVING CONSTRUCTION OUR SUPPORT

CONTENTS



01 BAR JACKING SYSTEMS

02 CLIMBING JACKS

03 CASSETTE JACK-UP UNITS

04 HYDRAULIC TURNTABLES

05 STRAND JACKING

06 HYDRAULIC POWER PUMPS

07 CONTACT

00 HEAVY-LIFTING JACKING SYSTEMS



Hydra-Capsule provides engineered hydraulic sliding, pushing (skidding), bar jacking, hydraulic turntable, Hillman roller and PTFE load-transfer solutions for the controlled movement, rotation, lifting and precision placement of heavy structures.

Applications include bridge launches, modular installation, plant relocation and situations where crane lifting is impractical or unsafe.

OUR SYSTEMS

Bar Jacking – Controlled lifting/lowering via high-tensile threaded bars and hollow jacks

Climbing Jacks – Multi-stage vertical lifting with mechanical locking at each stroke

Cassette Jack-Up Units – Modular stackable frames for scalable stroke height

Hydraulic Turntables – Precise rotation of heavy structures around a central pivot

Strand Jacking – High-capacity lifting using multiple steel strands for mega-lifts

Hydraulic Power Pumps – Centralised power supply for all jacking & movement systems



KEY CAPABILITIES

- ✓ Loads from tens to thousands of tonnes
- ✓ Millimetre positioning accuracy
- ✓ Crane-free heavy lifting solutions
- ✓ Synchronised multi-point control
- ✓ Confined space & restricted access operations



Hydraulic Lifting &
Weighing with
Monitoring Systems

01 HYDRAULIC BAR JACKING SYSTEMS



Used for controlled lifting, lowering or pulling of heavy loads using high-tensile steel bars and hollow jacks. Allows continuous or staged movement with millimetre accuracy.

KEY CAPABILITIES

500T

PER JACKING
HYDRAULIC POINT

±1mm

PRECISION

48+

SYNCHRONISED
LIFTING POINTS

100+

METRES LIFT
COMPLETED

KEY BENEFITS

- ✓ Continuous vertical lifting without crane reliance
- ✓ High-capacity load control (hundreds of tonnes)
- ✓ Accurate structural alignment to millimetre tolerance
- ✓ Safe bearing replacement under live loads
- ✓ Suitable for confined or restricted access areas



SYSTEM COMPONENTS

- ✓ High-tensile threaded bars
- ✓ Hollow hydraulic jacks
- ✓ Reaction frames & anchorages
- ✓ Mechanical locking collars
- ✓ Synchronized hydraulic control units

APPLICATIONS

- ✓ Bridge lifting & bearing replacement
- ✓ Structural elevation & adjustment
- ✓ Heavy component installation
- ✓ Controlled structural lowering
- ✓ Infrastructure realignment

02 CLIMBING HYDRAULIC JACKS (JACK & PACK)

HYDRA-CAPSULE

Climbing jacks provide multi-stage vertical lifting capability for heavy structures where conventional cranes cannot be used. They operate by gripping and climbing high-tensile bars or columns in sequential strokes with mechanical locking at each stage.

KEY CAPABILITIES

+800T

Maximum
Capacity Unit

±1mm

Heavy Lifting
Precision

Multi-Point

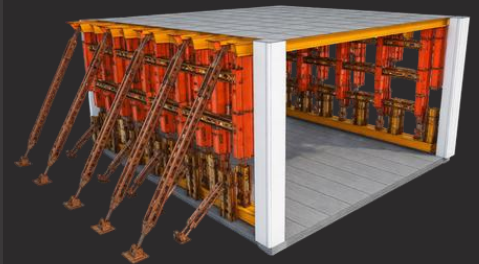
Full Synchronised
Lifting

500mm

Stroke Capacity
Range

KEY BENEFITS

- ✓ Unlimited stroke height through sequential climbing
- ✓ Mechanical locking provides fail-safe holding
- ✓ No crane required for tall vertical lifts
- ✓ Precise load control throughout the lift
- ✓ Modular design for various load capacities



SYSTEM COMPONENTS

- ✓ Hydraulic climbing jack units
- ✓ High-tensile climbing bars and steel grillage stacking
- ✓ Mechanical locking devices
- ✓ Synchronised hydraulic power
- ✓ Load monitoring & control systems

APPLICATIONS

- ✓ Modular building elevation
- ✓ Bridge & structural lifts
- ✓ Jack-up operations where stroke height is critical
- ✓ Heavy industrial module installation
- ✓ Offshore platform construction

03 CASSETTE & CUBE JACK-UP UNITS



Cassette jack-up units are modular hydraulic lifting systems designed for large vertical lifts where stroke height is critical. They use stackable cassette frames to extend the lifting range incrementally, providing a safe and controlled alternative to crane operations.

KEY CAPABILITIES

+250T

Maximum Per
Capacity Unit

Modular

Configuration
Adaptions Sets

±1mm

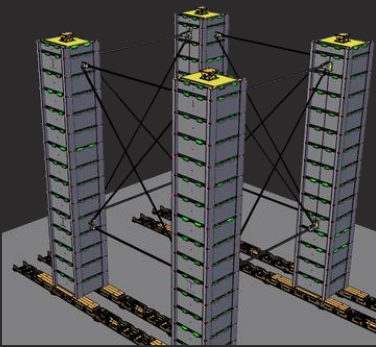
Synchronised
PLC Control Lifting

Scalable

Stroke Height
Lifting upto 15m

KEY BENEFITS

- ✓ Scalable stroke height via stackable cassettes
- ✓ Mechanical locking at each increment for fail-safe holding
- ✓ Eliminates need for large mobile cranes
- ✓ Precise synchronised lifting of multiple points
- ✓ Suitable for confined sites with limited access
- ✓ Rapid mobilisation and setup



SYSTEM COMPONENTS

- ✓ Modular cassette lifting frames
- ✓ Hydraulic jack units (synchronised)
- ✓ Mechanical locking pins stages
- ✓ Load distribution headers
- ✓ Centralised hydraulic power packs
- ✓ Real-time load monitoring

APPLICATIONS

- ✓ Bridge deck lifting & installation
- ✓ Modular jack-up operations
- ✓ Heavy plant & equipment elevation
- ✓ Offshore module lifts
- ✓ Infrastructure replacement works
- ✓ Heavy lifting of Superstructures

04 HYDRAULIC POWERED TURNABLES



Used for precise, controlled rotation of heavy structures around a central pivot point. Hydraulic turntable systems enable safe swing-in operations for bridges, plant modules and urban infrastructure.

KEY CAPABILITIES

360°

Full Control
Rotation

+1000T

Maximum
Capacity Unit

±0.1°

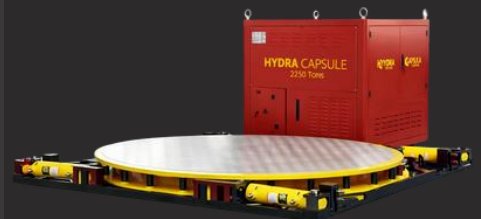
Upto Precision
Accuracy

Variable

Speed
Control

KEY BENEFITS

- ✓ Precise angular positioning of heavy structures
- ✓ Minimises disruption to live traffic/rail networks
- ✓ Safe operation in confined urban environments
- ✓ Eliminates need for large crane operations
- ✓ Controlled speed and load monitoring throughout



SYSTEM COMPONENTS

- ✓ Central pivot bearing or rotation hub
- ✓ Circular/segmented skid track
- ✓ Hydraulic push cylinders or drive units
- ✓ Load distribution grillage
- ✓ Real-time monitoring & control systems
- ✓ PTFE sliding interfaces

APPLICATIONS

- ✓ Bridge rotation (rail & highways)
- ✓ Swing-in operations for pre-built structures
- ✓ Heavy plant rotation & positioning
- ✓ Urban infrastructure installations
- ✓ Offshore module orientation

05 HYDRAULIC STRAND JACKING



Strand jacking uses tensioned steel strand bundles and hydraulic anchor heads to lift or lower extremely heavy loads. Capable of handling thousands of tonnes, strand jacks are used for bridge erection, offshore installations and heavy industrial lifts.

KEY CAPABILITIES

+500T

Maximum
Capacity Unit

±1mm

Heavy Lifting
Precision

Multi-Point

Full Synchronised
Lifting

500mm

Stroke Capacity
Range

KEY BENEFITS

- ✓ Extremely high capacity (up to 5,000+ tonnes)
- ✓ Long stroke capability (100m+)
- ✓ Precise synchronised multi-point control
- ✓ Fail-safe strand gripping mechanism
- ✓ Suitable for remote & offshore locations



SYSTEM COMPONENTS

- ✓ High-tensile steel strand bundles
- ✓ Hydraulic strand jack units
- ✓ Anchor heads & wedge grips
- ✓ Synchronised hydraulic power packs
- ✓ Real-time load monitoring &

APPLICATIONS

- ✓ Bridge erection & deck installation
- ✓ Offshore platform topsides lifting
- ✓ Heavy industrial module installation
- ✓ Dam gate & lock gate operations
- ✓ Power station heavy component placement

PLC control

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06 HYDRAULIC POWER PACK PUMP UNITS



Hydraulic power pumps are the centralised power source driving all jacking operations. Our range includes electric, diesel and air-powered units configured for single or multi-point synchronised systems with full monitoring capability.

KEY CAPABILITIES

1600 Bar

& 700 Bar Max.
Capacity Unit

Electric

Diesel, Battery &
Petrol Power Units

Multi-Out

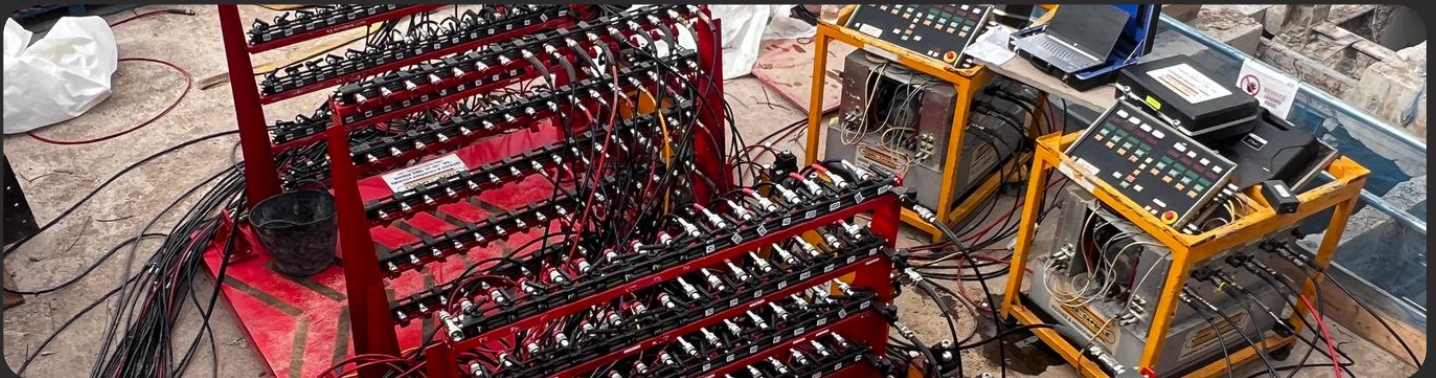
Control & Monitor
Flow-Manifolds

PLC

Computerised
Pump Control

KEY BENEFITS

- ✓ Multi-point synchronised output
- ✓ Variable flow & pressure control
- ✓ Remote operation capability
- ✓ Built-in safety relief systems
- ✓ Real-time pressure monitoring



SYSTEM COMPONENTS

- ✓ Electric hydraulic power packs
- ✓ Diesel-driven pump units
- ✓ Air-powered hydraulic pumps
- ✓ Multi-outlet manifold systems
- ✓ Synchronised Lifting Systems
- ✓ PLC control & pressure monitoring

APPLICATIONS

- ✓ Hydraulic bar jacking & heavy lifts
- ✓ climbing jack systems
- ✓ Post-Tensioning & Stressing Units
- ✓ Cassette jack-up unit hydraulics
- ✓ Heavy-lifting Synchronised
- ✓ Skidding & sliding operations

07 CONTACT US



HYDRA-CAPSULE LIMITED

Hydra House

Bishops Frome

Worcestershire

WR6 5BP

United Kingdom



+44 (0)1885 490405



sales@hydra-capsule.com



www.hydra-capsule.com

OUR SERVICES

- ✓ Hydraulic Jacking System with Jack-Up Units
- ✓ Synchronised Lifting & Monitoring Systems ($\pm 1\text{mm}$ accuracy)
- ✓ Hydraulic Strand-Jacking and Hydraulic Bar-Jacking Systems
- ✓ Large Selection Range (Climbing, Cassette Jack-Up and Hydraulic Turntables)
- ✓ Heavy-Lifting and Hydraulic Skidding + Sliding Solutions
- ✓ Contractual Service + Equipment Hire & Sales

