



**HYDRA CAPSULE
LIMITED**

HYDRAULIC BRIDGE JACKING & PROPPING OPERATIONS

OUR SERVICES

- Bridge Jacking & Propping
- Hydraulic Lifting Systems
- Heavy-lifting and Weighing
- Bridge Bearing Replacement
- Hire, Sales & Contractual Service



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HYDRA-CAPSULE LIMITED - GIVING CONSTRUCTION OUR SUPPORT

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01 BRIDGE JACKING & PROPPING OVERVIEW



Hydra-Capsule delivers a comprehensive service in bridge jacking, bridge propping and hydraulic jacking operations, built on over 40 years of specialist experience across highways, rail and civil engineering projects.

KEY CAPABILITIES

1600+

UPTO TONNE
CAPACITY

40+

YEARS
EXPERIENCE

100%

IN-HOUSE
DESIGN & INSTALL



ADVANTAGES

- ✓ Complete one-stop solution: design, hire, sales & contract works
- 🚧 Controlled lifting and holding operations for safe bridge interventions
- 🔧 Full systems for bearing replacement and structural adjustments
- 📦 Extensive stock of hydraulic cylinders & skidding systems upto 1,600 tonnes
- 🏗️ Vast range of temporary propping systems upto 500 tonnes support towers
- 🌐 Our company provides comprehensive services across the UK and Europe

02 APPLICATIONS



Bridge Deck Lifting & Bearing Replacement



Temporary Bridge Propping & Supports



Controlled Hydraulic Jacking & Load Monitoring Systems



Structural Failure & Emergency Support



Pre-loading, Steelwork Deflection & Load Transfer



Demolition & Concrete Repair Supports

BRIDGE JACKING & PROPPING APPLICATIONS

From light-duty structural works to heavy-duty bridge lifting operations exceeding 1000 tonnes. Hydraulic jacking, geodetic monitoring and engineered propping towers for highways, rail and infrastructure.



03 HYDRAULIC JACK CYLINDERS SELECTION



MODEL	CAPACITY (kNs)	DIAMETER (mm)	CLOSED HT (mm)	STROKE (mm)	MAX PSI (Bar)
HJ10 / HJ25	100 – 250	75 – 90	100 – 315	45 – 150	700
HJ30	300	100	150 – 325	50 – 200	700
HJ50	500	135	175 – 470	50 – 300	700
HJ60	600	140	125	50	700
HJ80	800	152	200	100	700
HJ90	900	170	195	55	700
HJ100	1000	170 – 190	137 – 445	45 – 300	700
HJ130	1300	200	230	100	700
HJ150	1500	200 – 225	115 – 290	15 – 150	700
HJ160	1600	220	148	45	700
HJ180	1800	230	195 – 465	40 – 300	700
HJ200	2000	204 – 260	300 – 350	100 – 150	700
HJ250	2500	240 – 290	159 – 380	45 – 200	700
HJ300	3000	290 – 310	190 – 625	50 – 300	700
HJ360	3600	310 – 330	175 – 290	50 – 100	700
HJ400	4000	310 – 370	175 – 920	45 – 300	700
HJ520	5200	400 – 420	195 – 520	45 – 300	700
HJ650	6500	460	470	200	700
HJ800	8000	460	275	45	700
HJ1600	16000	460	275	40	1600

- Hydraulic jacking cylinders from 5 to 1600 tonnes capacity, operating up to 1600 bar.
- Available for hire, sales or full contract works. Full details and brochure available on Downloads

04 PROPPING SYSTEM SPECIFICATIONS



MODEL	CAPACITY (kN)	PLAN SIZE (mm)	LENGTHS (mm)	TYPE	APPLICATION
ARC Leg	55	48 x 60 Dia.	300 – 4870	Acrow	General Prop
SS Beam	upto 40	170 x 60 Std. Variations	540 – 3600	Prop Beam	Needle Beam
ACR-PP	150	48x60 Dia.	1140 – 4875	Acrow	Raking Prop
RPD Leg	150	60.3 Dia.	675 – 3000	Rapidshor / Kwikshor	Shoring System
ALS+ Leg	150	80 Dia.	1250 – 5250	Alshor+ Plus	Aluminium Shoring
ATP Leg	150	100 Dia.	1245 – 4210	Titan SuperProp	Aluminium Propping
ATP Beam	Varies	150 x 100 225 x 100	900 – 7200	T150 + T225	Needling & Formwork
SS Leg	150	225 x 175	10 – 3600	Superslim	Needling, Back Prop & Facade
NB Beam	Varies	152UC – 355UC	500 – 6000	Needle Beam	Needling & Spreader
MS Leg	750	290 x 280	10-5400	Megashor	Heavy Duty & Facade
MS Leg	1000	290 x 280	40-5400	Megashor	Bridge & Facade
MS Beam	Varies	Universal & Tri-Beam	600 – 6000	Heavy-Duty Beams	All Solutions
MS+ Leg	>1350	Enhanced	40-5400	MS Plus	Heavy-Duty
MS+ Tower	>1350	Enhanced	Custom	MS Plus	Heavy-Duty
MS+ Strut	>1350	Enhanced	Custom	MS Plus	Heavy-Duty

APPLICATIONS

- ✓ Bridge Propping & Hydraulic Jacking
- ✓ Back-Propping & Structural Propping
- ✓ Facade Retention Systems
- ✓ Needling Systems & Ground Shoring
- ✓ Heavy-Duty Trusses & waler beams
- ✓ Demolition & Emergency stabilisation
- ✓ Heavy Lifting Skidding & Sliding Systems



05 SUPPLY, SALES & EQUIPMENT HIRE



EQUIPMENT SUPPLY & HIRE

Nationwide supply and hire of hydraulic jacking cylinders, propping systems, pumps and accessories from Acrow, Titan, Slimshor / Steel Soldiers and Megashor. Available for short or long-term hire with full technical support.

- Acrow props & beams
- Titan SuperProps & aluminium systems
- Slimshor / Steel Soldiers needling
- Megashor heavy-duty legs & towers
- Hydraulic jacking cylinders & pumps
- Hydraulic skidding and sliding systems



PERMANENT SALES

Permanent equipment sales for clients building their own propping and jacking fleet. New and refurbished systems available from all major manufacturers.

- Acrow props (55kN - 150kN)
- Titan SuperProps (150kN aluminium)
- Slimshor steel needling beams
- Megashor legs, towers & struts (750kN+, 1000 kNs to 1350 kNs)
- Heavy Duty Waler and Needle Beam
- Equipment sales (new & refurbished)



BESPOKE & CONTRACT WORKS

Offering a 'one-stop' solution for contract delivery; including design, supply, installation and project management. Using our bespoke temporary propping and hydraulic jacking solutions engineered to project-specific requirements.

- Full design & installation service
- Hydraulic Jacking & Monitoring Operations
- Bespoke propping configurations
- One-Stop Solution & In-House Design
- Hydraulic Jacking Solutions
- Equipment sales (New, Ex.Hire & Refurb)



06 CONTACT US



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OUR SERVICES

- ✓ Hydraulic Jacking, Flat-Jacking & Monitoring Systems
- ✓ Synchronised Lifting Systems ($\pm 1\text{mm}$ accuracy)
- ✓ Temporary Bridge Propping, Lifting & Pre-loading
- ✓ Hydraulic Sliding, Skidding & Skating Systems
- ✓ Bridge Bearing Replacement
- ✓ Contractual Service + Equipment Hire & Sales

