

SCJ-SERIES SELF-LOCKING CUBE JACKS

INCREMENTAL LIFTING SYSTEM WITH AUTOMATED MECHANICAL LOCKING





SCJ-Series, Self-Locking Cube Jacks

ENERPAC.

▼ SCJ-50, Enerpac Self-Locking Cube Jack



- System is automatically mechanically locked after the lifting or lowering stroke
- Self-aligning steel cribbing blocks save time, improve side load, and eliminate the need for wooden cribbing materials
- Jobs are completed more efficiently due to simplified operation sequence with 50% less cycles than climbing jacks
- End block with adjustable swivel saddle allows fine adjustment during set-up: 50 mm screw extension
- Can be operated with Enerpac's 700 bar hydraulic power units
- Maximum sideload 1,5% at full extension
- Lloyds witness tested to 125% of maximum working load.
- ▼ Typical set-up with 4 Self-Locking Cube Jacks and cribbing blocks to lift a transformer (hydraulic power pack and hoses not shown).



Incremental lifting system with automated mechanical locking



cribbing.

Why use Self-Locking Cube Jacks?

The Self-Locking Cube Jack is a safer, more efficient alternative to the jack-and-pack method with wooden

The Cube Jack is derived from the proven Enerpac Jack-up System. The Cube Jack has a small footprint and is useable in confined spaces, providing heavy lift contractors with a stable lift up to 2-3 metres. The cribbing blocks are lightweight and can be handled manualy.



Markets & Applications

Applications with a minimum starting height of 494 or 558 mm and requirement to lift up to 2067 or 3006 mm.

- Power Generation transformer jacking
- Mining equipment maintenance
- Heavy Transport vehicle unloading
- Oil & Gas module jacking
- Construction bridge jacking
- Industrial Movers lifting, lowering and levelling of heavy equipment.

Self-Locking Cube Jacks



Self-Locking Cube Jack

Easy-to-use, compact and portable jacking system that utilizes base lifting frames and

self-aligning, lightweight steel cribbing blocks, instead of wooden cribbing materials.

Operation is simple:

- Connect the Cube Jacks to the Enerpac Split-Flow Pump and select lifting mode on each base lifting frame.
- 2. Insert a cribbing block and actuate the Cube Jack until the cribbing block engages the lock mechanism.
- Retract the jack and repeat the process until the desired lifting height is reached. For the lowering operation select lowering mode on each base lifting frame and reverse the process.

The Cube Jack End Block is equipped with an adjustable saddle for initial alignment with the load. All controls except for the main directional valve, which is on the hydraulic power unit, are included on the Cube Jack.

Manual cribbing block insertion

Cribbing blocks are easily managed by hand and the Cube Jack includes integrated fork pockets and lifting rings for effortless positioning.

Synchronous Lifting & Lowering

If synchronization is required, the Cube Jack can accommodate stroke sensors and be used with any Enerpac Computer Controlled Synchronous Lifting System.

SCJ Series



Capacity Per Cube Jack: 500 - 1000 kN Maximum Lifting Height: 2067 - 3006 mm Maximum Operating Pressure: 700 bar



Self-Locking Cube Jack

- 1 End block with tilting saddle
- 2 Eye-bolts for hoisting
- 3 Forklift tabs
- 4 Removable insert table
- 5 Cube Jack base frame
- 6 Locating pins



- 7 Steel cribbing blocks
- 8 Adjustable tilting saddle
- 9 Flow control
- 10 Mode locking pin
- 11 Mode selector lever
- 12 Hydraulic connections with CR-400 female half couplers (Advance / Retract)



- Cube Jack close-up of lifting and lowering valving mode and lock handle.
- Optional wire stroke sensor can provide stroke feedback to pump control.



SCJ-Series, Self-Locking Cube Jacks

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▼ SCJ-100, Enerpac Self-Locking Cube Jack



Included with the Cube Jack are:

- Cube Jack Basic Unit
- End Block with adjustable swivel saddle
- Multiple cribbing blocks: 11x on SCJ-50 18x on SCJ-100
- Transportation Frame
- Cribbing blocks can be manually inserted into the Cube Jack by one person.

Incremental lifting system with automated mechanical locking



Transport Frame

Provided with purchase of each Cube Jack. Provides storage and transport for base unit, end block, and all included cribbing blocks.



Lightweight Cribbing Blocks

Provided with purchase of each Cube Jack. Cribbing blocks can be manually inserted into the Cube Jack by one person. Spare cribbing

blocks can be ordered separately.

Description	Model Nr.
1x Cribbing Block, 50 ton	SCJ5B
1x Cribbing Block, 100 ton	SCJ10B



Split-Flow Pumps

Enerpac recommend to use the SFP-Series Pumps with multiple outlets with equal oil flow. For lifting and lowering

applications on multiple points, Split-Flow Pumps are a far better alternative than using separately operated pumps.

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▼ Forklift tabs on Cube Jacks for easy transportation and positioning with a pallet truck. See dimensions D and I to select the right pallet truck size.



Self-Locking Cube Jacks

Lifting Capacity per Base Unit	Lifting Stroke	Model Number	Maximum Sideload at full extension	Oil Capacity per Base Unit (cm³)		
ton (kN)	(mm)			Advance	Retract	
50 (500)	156	SCJ-50	1,5%	1229	623	
100 (1000)	156	SCJ-100	1,5%	2500	1400	

Self-Locking Cube Jacks and Accessories





 SCJ-100 Self-Locking Cube Jack at maximum height of 3006 mm with 18 cribbing blocks.



	Dimensions (mm)												Model					
	А	В	С	D	Е	F	G	Н	Ι	J	К	L	М	Ν	•		Q	Number
															Min.	Max.		
	494	2067	476	356	505	443	556	428	91	125	726	351	300	310	175	225	125	SCJ-50
-	558	3006	526	506	655	636	772	598	101	170	1046	504	450	460	189	239	125	SCJ-100

* Dimensions Transport Frame L x W x H: SCF5F: 920 x 850 x 860 mm

SCF10F: 1600 x 1200 x 1500 mm

SFP-Series, Split-Flow Pumps

Shown from left to right: SFP404SW and SFP613SW



- Smart valve technology allows both controlled lifting and lowering of multiple points
- 4, 6 or 8 split-flow outlets with equal oil flow
- Valve operation with advance/hold/retract function
- Remote pendant (24 V solenoid) control
- Oil flow per outlet from 0,45 to 1,30 l/min at 700 bar
- Pressure compensated flow control per circuit
- · Adjustable pressure relief valve per circuit
- All models include pressure gauge per circuit.





Split-Flow Pumps

SFP-Series Pumps with multiple outlets with equal oil flow. For lifting and lowering applications on multiple points, Split-Flow Pumps are a

far better alternative than using separately operated pumps.



Remote Control Pendant

Split-Flow pumps with solenoid valves include a remote pendant with selector switches for each individual outlet, allowing single

or multiple cylinder operation.



Synchronous Lifting Systems

If synchronization is required, the Cube Jack can be used with any Enerpac Computer Controlled Synchronous Lifting System from

the basic EVOB-Series up to 8 lifting points. For more than 8 lifting points Enerpac recommend the EVO-Series. See enerpac.com.

Typical set-up with 4 Self-Locking Cube Jacks and cribbing blocks to lift a transformer. Enerpac recommends to power the Cube Jack using SFP-Series Split-Flow Pump.



SFP-Series, Split-Flow Pumps

HC-7206 Thermo-Plastic Hose

Thermo-Plastic Safety Hoses

Hose

Internal

Diameter

(mm)

6,4



Hose End Assemblies

with male half couplers

End two

CH-604

End one

CH-604

Thermo-Plastic Safety Hoses

- · For demanding applications, featuring a 4:1 safety factor
- Max. working pressure 700 bar
- Outside jacket is polyurethane, to provide maximum abrasion resistance.

Model

Number

HC-7220C

HC-7250C

Weight

(kg)

3,1

7,0

Hose

Length

(m)

6,1

15,0

SFP Series



Reservoir Capacity: 40 and 150 litres

Split-Flow Outlets:

4, 6 and 8 outlets

Flow at Rated Pressure: 0,45 to 1,30 l/min

Maximum Operating Pressure:

700 bar



Pump Cart

Easily tows pump around jobsite. Can be used with all models of Split-Flow pumps.

Dimensions (LxWxH): 1219 x 762 x 419 mm Weight: 64 kg

Description	Model Nr.
Pump Cart	LHPC

- (1) Manifold with split-flow outlets and CR-400 female half couplers
- (2) Adjustable pressure relief valve per circuit
- ③ Solenoid 4/3 control valves (24 VDC)
- ④ Power receptacle
- (5) Oil sight gauge(s)
- 6 Remote control pendant with 5 m cord
- Return flow control valve in each circuit 1
- Hydraulic pressure gauge in each circuit (8)

Number of Split-Flow Outlets	Reservoir Size	Oil Flow per Outlet @ 700 bar	Model Number * (400V, 3ph, 50Hz)	Motor Size	Dimensions (mm)			À	System Lifting Speed (m/hr)	
	(litres)	(l/min)		(kW)	A	В	C	(kg)	SCJ-50	SCJ-100
4	40	0,45	SFP 404SW	5,5	1019	660	900	240	2,4	1,2
4	150	0,90	SFP 409SW	5,5	1372	605	1130	476	4,5	2,2
6	40	0,45	SFP604SW	5,5	1019	660	900	240	2,4	1,2
o	150	1,30	SFP613SW	11	1372	805	1200	551	6,0	3,0
8	150	1,30	SFP813SW	15	1372	805	1200	591	6,0	3,0

* 4/3 Solenoid (24V) valve operation with Advance/Hold/Retract. With Remote Control Pendant.

www.enerpac.com

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▲ SFP-Series with 150 litres reservoir (shown with 4 split-flow outlets)

Split-Flow Pumps



LIFTING SYSTEMS

We design and manufacture heavy lifting equipment. For more than 60 years, we've combined high pressure hydraulics and controls to deliver intelligent and innovative solutions that maintain the highest level of quality, reliability and safety. We will be your supplier and partner; we will support you throughout the entire life of your project, your success is ours.

Heavy Lifting Technology



SFP-Series, Split-Flow Pumps



JS-Series Jack-Up Systems



EVOB-Series, Basic Synchronous Lifting Systems



SL, SBL-Series, Telescopic Hydraulic Gantries



EVO-Series, Standard Synchronous Lifting Systems



HSL-Series, Strand Jack Systems



SCJ-Series, Self-Locking Cube Jacks



SHS, SHAS-Series, Synchronous Hoisting Systems



SPMT-Series, Self-Propelled Modular Trailers



LH, HSK-Series Skidding Systems



ETT-Series, Turntables



ETR-Series, Trolley Systems

