

SCJ-SERIES **SELF-LOCKING CUBE JACK**

INCREMENTAL LIFTING SYSTEM WITH AUTOMATIC MECHANICAL LOCKING



▼ SCJ-50, Enerpac Self-Locking Cube Jack



Incremental Lifting System With Automatic Mechanical Locking



Why use Self-Locking Cube Jacks?

The SCJ-50 Self-Locking Cube Jack is a safer, more efficient alternative to the jack-and-pack method with wooden cribbing.

The SCJ-50 is derived from the proven Enerpac Jack-up System. The Cube Jack has a small footprint and is usable in confined spaces, providing heavy lift contractors with a stable lift up to 81.4". The cribbing blocks are lightweight and can be handled manually.

- 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: 1.97-inch screw extension
- Low starting height of 19.4 inches; maximum jacking height up to 81.4 inches
- Can be operated with Enerpac's 10,000 psi hydraulic power units
- Lloyds witness tested to 125% of maximum working load



Markets & Applications

Applications with a minimum starting height of 19.4" and requirement to lift up to 81.4".

- 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.

▼ Typical set-up with 4 Self-Locking Cube Jacks and cribbing blocks to lift a transformer (hydraulic power pack and hoses not shown).



Self-Locking Cube Jack



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:

1. 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.
3. 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:

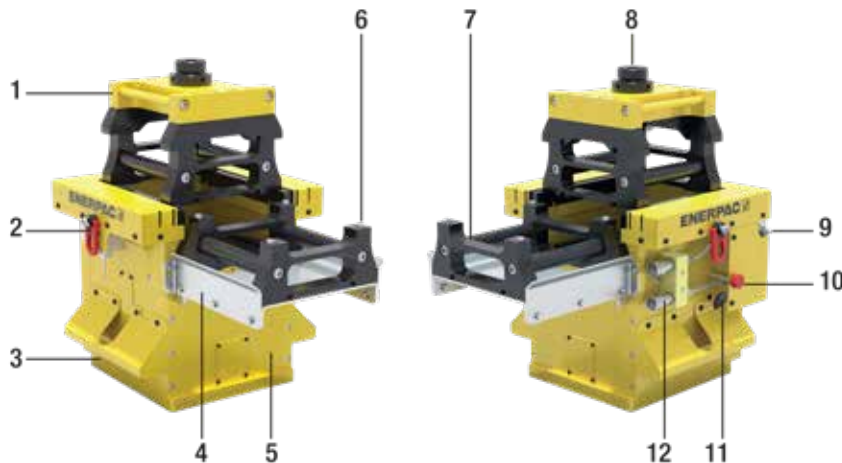
56 ton

Maximum Lifting Height:

81.4 inches

Maximum Operating Pressure:

10,000 psi



SCJ-50 Self-Locking Cube Jack

- | | |
|---------------------------------|--|
| 1 End block with tilting saddle | 7 Steel cribbing blocks |
| 2 Eye-bolts for hoisting | 8 Adjustable tilting saddle |
| 3 Forklift tabs | 9 Flow control |
| 4 Removable insert table | 10 Mode locking pin |
| 5 Cube Jack base frame | 11 Mode selector lever |
| 6 Locating pins | 12 Hydraulic connections (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-50, Enerpac Self-Locking Cube Jack



Incremental Lifting System With Automatic Mechanical Locking



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.

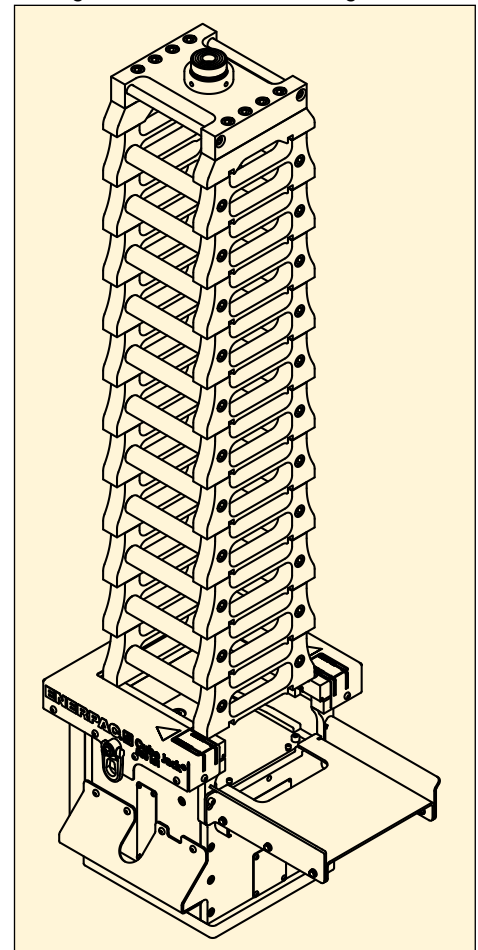
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Included with SCJ-50 are:

- Cube Jack Basic Unit
- End Block with Swivel Saddle
- 11x Cribbing Blocks
- Transportation Frame

▼ SCJ-50 Self-Locking Cube Jack at maximum height of 81 inches with 11 lifting barrels.



▼ Forklift tabs on Cube Jacks for easy transportation and positioning with a pallet truck.



Self-Locking Cube Jack and Accessories

▼ SCJ5F Transportation Frame



Transportation Frame

- For easy storage and transport of one SCJ-50 unit

Model Number	Overall Dimensions L x W x H	Weight
	(in)	(lbs)
SCJ5F	36.2 x 33.5 x 33.9	243

SCJ Series



Capacity Per Cube Jack:

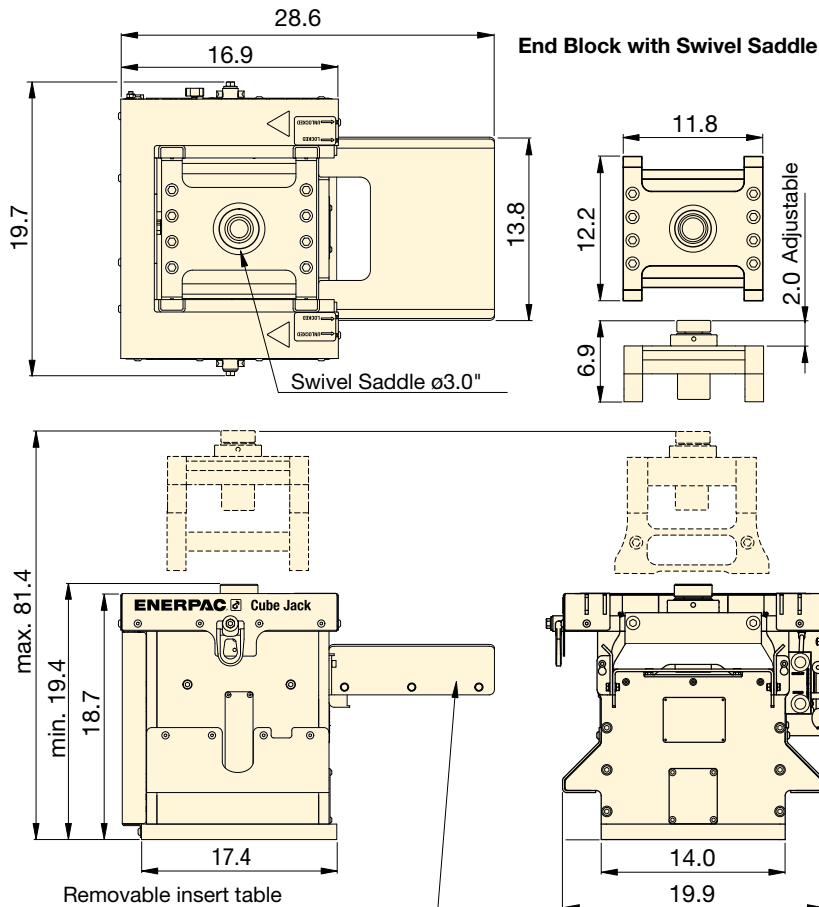
56 ton

Maximum Lifting Height:

81.4 inches

Maximum Operating Pressure:

10,000 psi



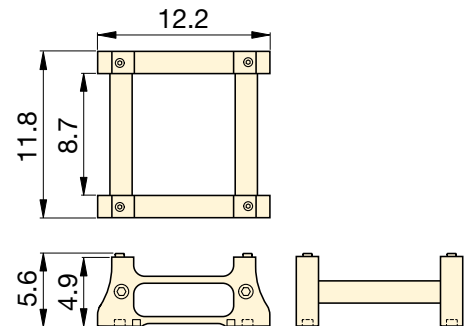
Lightweight Cribbing Blocks

Eleven Cribbing Blocks are included with a SCJ-50 Cube Jack.

A maximum of 11 cribbing blocks can be used on a single Cube Jack.

Cribbing Blocks can be manually inserted into the Cube Jack by one person. Spare cribbing blocks can be ordered separately.

Description	Model No.
1x Cribbing Block	SCJ5B



SCJ5B Cribbing Block

SCJ-50 Basic Unit

Self-Locking Cube Jack

Lifting Capacity per Base Unit	Lifting Stroke	Model Number ¹⁾	Maximum Sideload at 6.5 ft. height	Minimum Height Including End Block	Maximum Height ²⁾	Adjustable Stroke Swivel Saddle	Maximum Allowed Oil Flow	Oil Capacity ³⁾ per Base Unit (in ³)		Weight (lbs)		
ton	(in)			(in)	(in)	(in)	(in ³ /min)	Advance	Retract	Base Unit ⁴⁾	End Block ¹⁾	Cribbing Block ¹⁾
56	6.14	SCJ-50	1.5%	19.4	81.4	2.0	65	75	38	794	88	35

¹⁾ 11x Cribbing Blocks, 1x End Block and 1x Transportation Frame are included with one SCJ50.

²⁾ Maximum height with 11 cribbing blocks and 1.97 in. swivel saddle screw extension.

³⁾ Minimum pump useable oil capacity must be 2.6 gal.

⁴⁾ Weight per base unit, excluding cribbing block or end block.

▼ Shown from left to right: **SFP404SW** and **SFP613SW**



Multiple Outlets with Equal Oil Flow

- **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**
- **Flow per outlet from 33 to 94 in³/min at 10,000 psi**
- **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. Visit 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 (pump and hoses not shown).



SFP-Series, Split-Flow Pumps

▼ HC-7206 Thermo-Plastic Hose



Thermo-Plastic Safety Hoses

- For demanding applications, featuring a 4:1 safety factor
- Max. working pressure 10,000 psi
- Outside jacket is polyurethane, to provide maximum abrasion resistance

Thermo-Plastic Safety Hoses

Hose Internal Diameter	Hose End Assemblies and Couplers		Hose Length	Model Number	Weight
(in)	End one	End two	(ft)		(lbs)
0.25	3/8" NPTF	CH-604	3	HC-7203	1.8
			5.9	HC-7206	2.2
			3.0	HC-7210	3.3
			9.8	HC-7220	6.4
	CH-604	CH-604	20	HC-7220C	6.8
			49	HC-7250C	15.4

SFP Series



Reservoir Capacity:

10 and 40 gallons

Split-Flow Outlets:

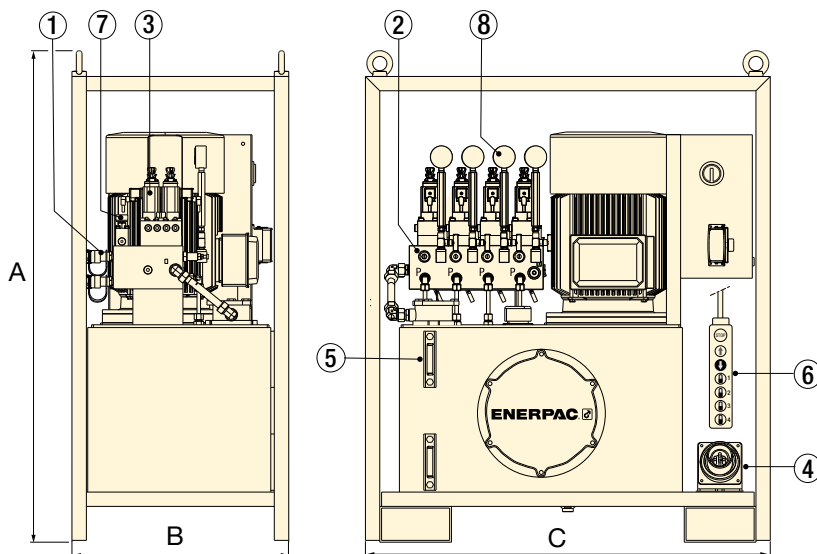
4, 6 and 8 outlets

Flow at Rated Pressure:

33 to 94 in³/min

Maximum Operating Pressure:

10,000 psi



- ① Manifold with split-flow outlets and CR-400 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 16 ft. cord
- ⑦ Return flow control valve in each circuit
- ⑧ Hydraulic pressure gauge in each circuit



Cube Jack Maximum Oil Flow

The recommended maximum pump oil flow to the Cube Jack is 65 in³/min.

▲ SFP-Series with 40 gallon reservoir (shown with 4 split-flow outlets)

Split-Flow Pumps

No. of Split-Flow Outlets	Reservoir Size	Oil Flow per Outlet @ 10,000 psi	Model Number * (460V, 3ph, 60Hz)	Motor Size	Dimensions (in)			Wt. (lbs)	System Lifting Speed (ft/hr)
	(gal)	(in ³ /min)			A	B	C		
4	10	33	SFP 404SJ	7.5	40.1	26	35.4	529	8
	40	65	SFP 409SJ	7.5	54	23.8	44.5	1047	15
6	10	33	SFP 604SJ	7.5	40.1	26	35.4	529	8
	40	94	SFP 613SJ	15	54	31.7	47.2	1213	20
8	40	94	SFP 813SJ	20	54	31.7	47.2	1300	20

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



Pump Cart

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

Dimensions (LxWxH): 48 x 30 x 16.5 inches
Weight: 140 lbs.

Description	Model No.
Pump Cart	LHPC



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.



SFP-Series,
Split-Flow Pumps



EVOB-Series, Basic
Synchronous Lifting Systems



EVO-Series, Standard
Synchronous Lifting Systems



SCJ-Series,
Self-Locking Cube Jack



JS-Series
Jack-Up Systems



SL, SBL, MBL-Series,
Telescopic Hydraulic Gantries



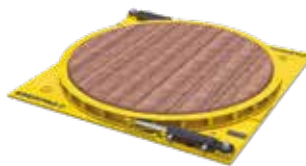
HSL-Series,
Strand Jack Systems



SHS, SHAS-Series,
Synchronous Hoisting Systems



LH, HSK-Series
Skidding Systems



ETT-Series, Turntables



ETR-Series, Trolley Systems



SPMT-Series, Self-Propelled
Modular Trailers

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