

▼ SCJ50, 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% fewer cycles than climbing jacks
- End block with adjustable swivel saddle allows fine adjustment during set-up: 1.97 inches screw extension
- Can be operated with Enerpac's 10,000 psi hydraulic power units
- Lloyds witness tested to 125% of maximum working load.

Incremental lifting system with automated mechanical locking



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 cribbing. The Self-Locking 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 118.3 inches. The cribbing blocks are lightweight and can be handled manually.



Markets & Applications

Applications with a minimum starting height of 19 or 22 inch and requirement to lift up to 81 or 118 inch.

- 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.



◀ Completed in just over one hour, the 160-ton 164 x 23 feet steel racking system was lifted synchronously to a height of 7.2 feet using 16 Enerpac SCJ50 Cube Jacks powered by a single SFP-Series Split-Flow Pump. Lifting large racking systems can be hazardous, complex and difficult involving forklift trucks and chain blocks. Photo by courtesy of PHL Hydraulics Ireland Ltd.

▼ 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

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

Enerpac recommends using the SFP-Series Split-Flow 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.

If synchronous lifting & lowering is required, the SFP-Series Pumps can be configured to accommodate stroke sensors and provide accurate computer controlled lifting function.

SCJ Series



Capacity Per Cube Jack:

56 - 110 tons

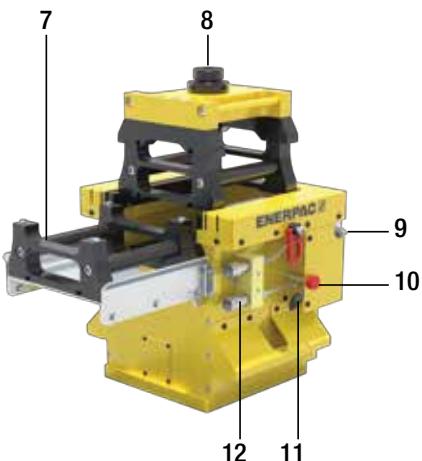
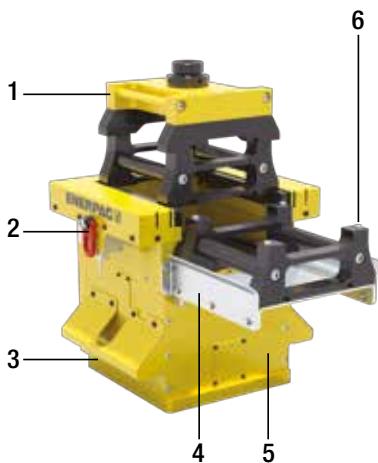
Maximum Lifting Height:

81.4 - 118.3 inches

Maximum Operating Pressure:

10,000 psi

▼ Cube Jack close-up of lifting and lowering valving mode and lock handle.



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
(Advance / Retract)

▼ Optional wire stroke sensor can provide stroke feedback to pump control.



▼ SCJ100, 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 SCJ50
18x on SCJ100
 - Transportation Frame
- Cribbing blocks can be manually inserted into the Cube Jack by one person.



◀ Heat exchanger maintenance job on the piping and condensers at a refinery using a combination of Enerpac Heavy Lifting Technology: SCJ-Series Cube Jacks, the ETT-Series Hydraulic Turntable and LH-Series Low-Height Skidding Systems.

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

1x Cribbing Block, for 56 tons

Model No.

SCJ5B

1x Cribbing Block, for 110 tons

SCJ10B



Split-Flow Pumps

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

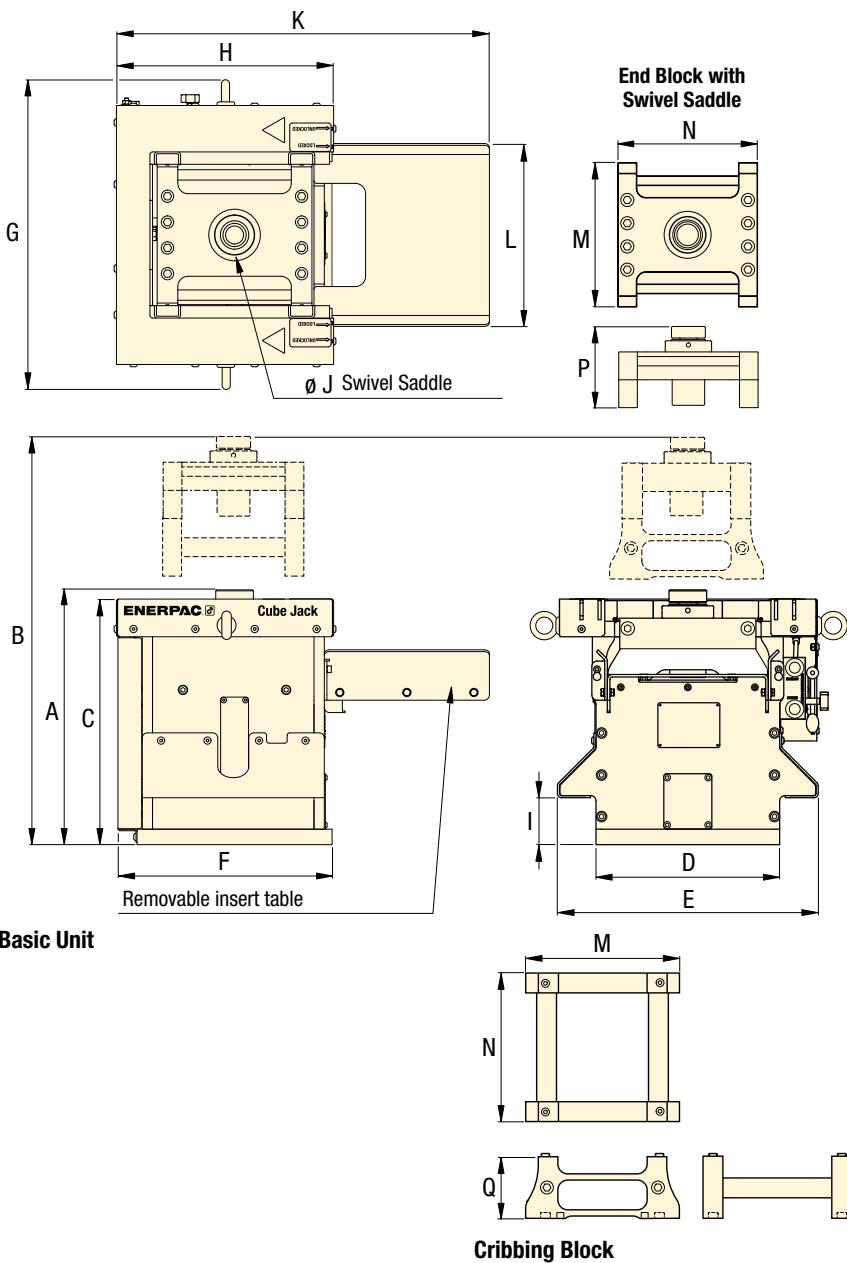
applications on multiple points, Split-Flow Pumps are a far better alternative than using separately operated pumps.

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Self-Locking Cube Jacks

Lifting Capacity per Base Unit (tons)	Lifting Stroke (in)	Model Number	Maximum Sideload at full extension	Maximum Pump Oil Flow Rate (in³/min)	Oil Capacity per Base Unit (in³)	
					Advance	Retract
56	6.14	SCJ50	1.5%	65	75	38
110	6.14	SCJ100	1.5%	110	152	85

Self-Locking Cube Jacks and Accessories



SCJ Series



Capacity Per Cube Jack:

56 - 110 tons

Maximum Lifting Height:

81.4 - 118.3 inches

Maximum Operating Pressure:

10,000 psi

▼ Typical set-up with 4 Self-Locking Cube Jacks and cribbing blocks in a Factory Acceptance Test (FAT). Enerpac recommends to power the Cube Jack using SFP-Series Split-Flow Pump.



Base Unit		End Block		Cribbing Block		Transport Frame *	
Model Number	Model Number	Model Number	Model Number				
SCJ50	794	SCJ5EB	88	SCJ5B	35	SCJ5F	243
SCJ100	1804	SCJ10EB	220	SCJ10B	52	SCJ10F	550

A	B	C	D	E	F	G	Dimensions (in)								Model Number		
							H	I	J	K	L	M	N	P	Min.	Max.	
19.4	81.4	18.7	14.0	19.9	17.4	21.9	16.9	3.6	4.92	28.6	13.8	11.8	12.2	6.9	8.9	4.9	SCJ50
22.0	118.3	20.7	19.9	25.8	25.0	30.4	23.5	4.0	6.69	41.2	19.8	17.7	18.1	7.4	9.4	4.9	SCJ100

* Dimensions Transport Frame L x W x H: **SCF5F**: 36.25 x 33.5 x 34 inches.
SCF10F: 63 x 47.25 x 59 inches.