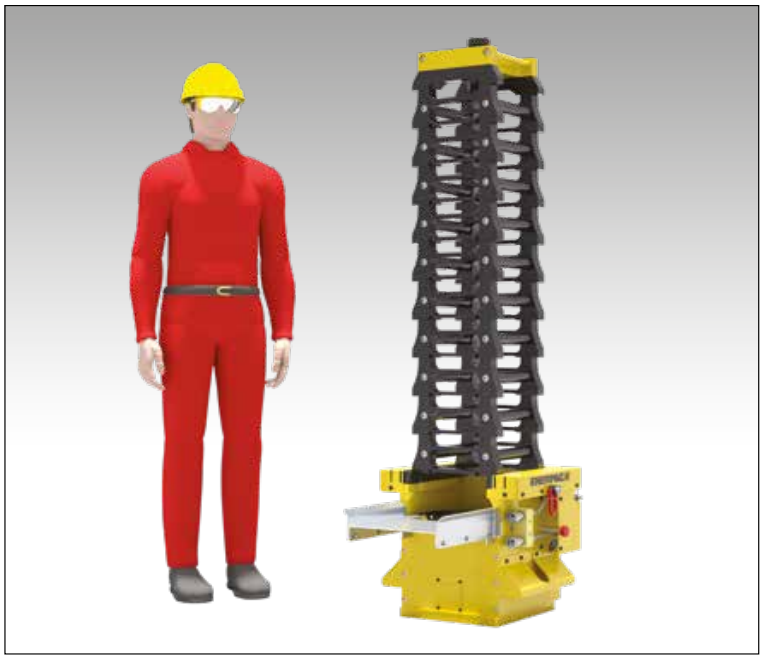
SCJ-Series, Self-Locking Cube Jack

ENERPAC

▼ SCJ50, Enerpac Self-Locking Cube Jack



Incremental lifting system with automated mechanical locking

- 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
- Lloyds witness tested to 125% of maximum working load.

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 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.

◀ *Completed in just over one hour, the 160 ton 50 x 7 meters steel racking system was lifted synchronously to a height of 2,2 meters 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 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

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.

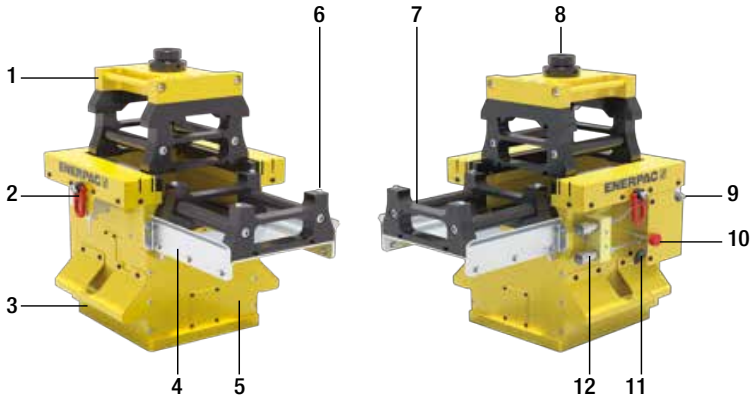
If synchronous lifting & lowering is required, the SFP-Series Pumps can be configured to accommodate stroke sensors and provide accurate computer controlled lifting function.

SCJ Series

Capacity Per Cube Jack:
500 - 1000 kN

Maximum Lifting Height:
2067 - 3006 mm

Maximum Operating Pressure:
700 bar



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-Series, Self-Locking Cube Jack

ENERPAC

▼ SCJ100, Enerpac Self-Locking Cube Jack

Incremental lifting system with automated mechanical locking

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.**

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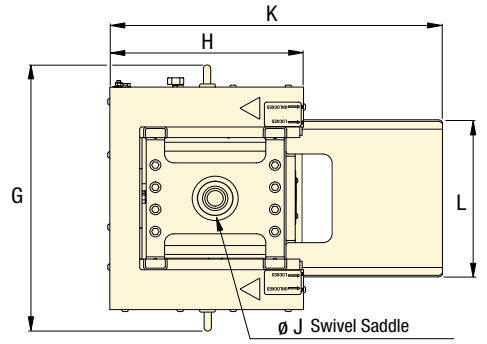
◀ *Heat exchanger maintenance job on the piping and condensers at a refinery using a combination of Enerpac Heavy Lifting Technology: SCJ-Series Cube Jacks, the ETT-Series Hydraulic Turntable and LH-Series Low-Height Skidding Systems.*

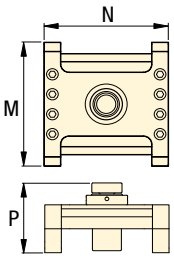
Self-Locking Cube Jacks

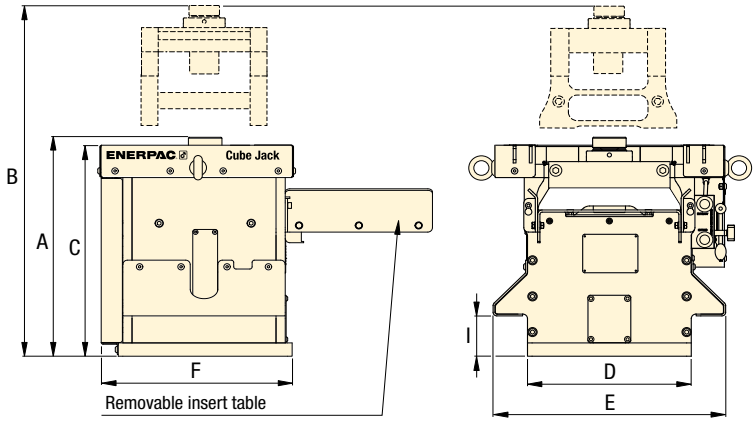
Lifting Capacity per Base Unit ton (kN)	Lifting Stroke (mm)	Model Number	Maximum Sideload at full extension	Maximum Pump Oil Flow Rate (l/min)	Oil Capacity per Base Unit (cm^3) Advance	Retract
50 (500)	156	**SCJ50**	1,5%	0,9	1229	623
100 (1000)	156	**SCJ100**	1,5%	1,8	2500	1400

Self-Locking Cube Jack and Accessories

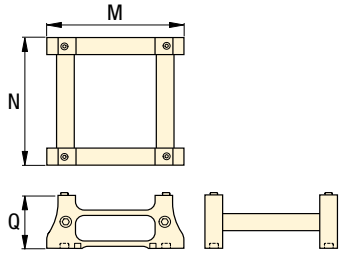


End Block with Swivel Saddle





Basic Unit



Cribbing Block

SCJ Series

Capacity Per Cube Jack:
500 - 1000 kN

Maximum Lifting Height:
2067 - 3006 mm

Maximum Operating Pressure:
700 bar

▼ *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	(kg)	Model Number	(kg)	Model Number	(kg)	Model Number	(kg)
SCJ50	360	SCJ5EB	40	SCJ5B	16	SCJ5F	110
SCJ100	820	SCJ10EB	100	SCJ10B	23,5	SCJ10F	250

Dimensions (mm)																Model Number
A	B	C	D	E	F	G	H	I	J	K	L	M	N	P Min.	P Max.	Q	
494	2067	476	356	505	443	556	428	91	125	726	351	300	310	175	225	125	SCJ50
558	3006	526	506	655	636	772	598	101	170	1046	504	450	460	189	239	125	SCJ100

* Dimensions Transport Frame L x W x H: **SCF5F**: 920 x 850 x 860 mm
SCF10F: 1600 x 1200 x 1500 mm