

▼ JS250 and JS500 Enerpac Jack-Up System (one lifting tower shown)



- Self-contained hydraulics in each jack-up unit for uncluttered work area
- Synchronously lift loads with multiple jack-up units. The most common system set-up includes 4 jack-up units
- Adjustable top barrel is standard on all models
- Lifting barrels are stacked together to mechanically hold the load
- Up to 4% side load capacity depending on lifting height
- Computer controls for operating the jack-up system with automatic and manual lifting settings.

Incremental Lifting System – Synchronously Lift and Mechanically Hold



Typical Applications

- Bridge maintenance
- Lifting and lowering of heavy equipment
- Lifting, lowering and levelling of heavy structures and buildings
- De-propping/load transfer from temporary steel work.



Computer Controls

- Enerpac Jack-up Systems provide precision control suitable for many demanding lifting/lowering applications. The comprehensive self-contained design features simple to use software.
- Automatic synchronization of multiple networked lift points.
 - Overload and stroke alarms
 - Emergency stop switch at jack-up units and controls.

▼ Enerpac has been awarded a contract by Burkhalter to extend the height of Enerpac's 2000 ton (500 ton per tower) jack-up system from 20m to 36m for future projects.



▼ Enerpac Jack-Up System lifts 1500 ton span on Fore River Bridge.



▼ Undocking an 1500 ton Electric Rope Shovel in a Copper Mine with a JS500 Jack-Up System for bearing inspection and maintenance.



Enerpac Jack-Up Systems



Enerpac Jack-Up Systems

The jack up-system is a custom developed multi-point lifting system. A typical system setup includes four jack-up units positioned under each corner of a load.

Example: A four unit setup with JS250 has a lifting capacity of 1000 ton (250 ton per unit). The lifting frame of a jack-up unit contains four hydraulic lifting cylinders, one in each corner, which lift the load using the stacked steel barrels.

A load is lifted in increments as barrels are slid into the system, lifted, and stacked; forming 'lifting towers'. A jack-up system is operated and controlled by a computer control unit.

Each unit's lifting and lowering operations occur simultaneously; the computer control unit's synchronous technology maintains the balance of the load.

JS Series

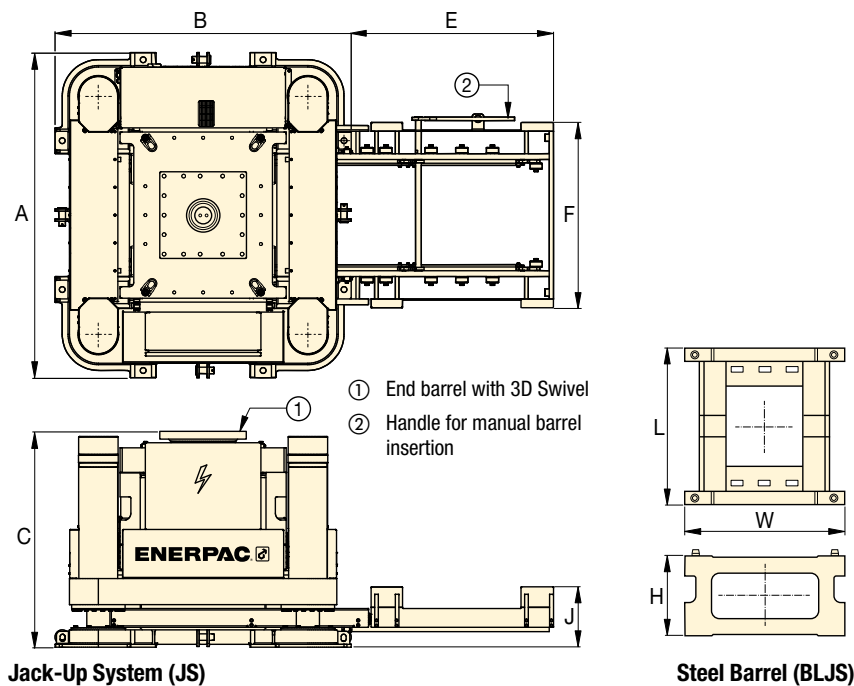


Capacity Per Lifting Tower:

250 - 500 ton

Lifting Height:

10 - 15 metres



Jack-up System Smart Box

The **Smart Box SBSJ-SCCV4** is Enerpac's proprietary control platform. It allows an operator to control up to 8 jack-up towers simultaneously with one **SBLT1** standard laptop.

- Single operator control from a central location provides safe and reliable operation
- Synchronous lift /lower and load control between the lifting positions
- Automatic lifting and lowering cycles
- Displays individual and accumulative stroke/load
- Simple graphical user interface.



Adjustable Top Barrel

Adjustable top barrel is standard on all models.

Includes double-acting lock nut cylinder with swivel saddle.

Cylinder can be extended to contact the load. Provides ability to adjust starting height of each leg, ensuring safe and stable lifting. Must be operated with separate 700 bar pump with 4/3 directional valve.

Steel Barrels

For use with Jack-Up System	Barrel Set Model Number	Number of Barrels per Set	Barrel Dimensions (mm)			Weight per Barrel (kg)
			L	W	H	
JS250	BLJS250	4	1150	1150	500	360
JS500	BLJS500	4	1700	1700	700	950

Jack-Up Systems

Capacity per Tower ton (kN)	Model Number	Maximum Sideload	Maximum Lifting Speed (m/hr)	Base Frame Dimensions (mm)			Barrel Loading System (mm)			Electric Power Pack (kW)	Weight per Jack-Up Unit * (kg)	Weight Adjustable Top Barrel (3D Swivel) (kg)
				A	B	C	E	F	J			
250 (2500)	JS250	3% @ 10m	4	2250	2050	1475	1400	1341	418	15	7500	2880
500 (5000)	JS500	4% @ 15m	4	2800	2300	1700	1980	1771	458	30	13.750	3850

* Weight per jack-up tower, excluding adjustable top barrel.