

# HEAVY-LIFTING STRAND JACK SYSTEM

WORLD CLASS STRAND JACKS  
HIGH CAPACITY, PRECISION CONTROL,  
DURABILITY, RELIABILITY AND SAFETY.



**HSL-SERIES**

**ENERPAC** 

▼ HSL1507, HSL20006, HSL7006 Heavy-Lifting Strand Jacks



- Precision control of synchronous lifting and lowering
- Can be controlled by a single operator from a central location for increased safety
- Automated locking - unlocking operation
- Two strand sizes: 15,7 mm and 18 mm (.62 and .71 inch)
- Telescopic strand guide pipes prevent bird caging
- Internal components are coated with Lunac, an anti-corrosion coating, making it suitable for marine environments
- Lifting anchor included with all strand jacks
- Lloyd's witness tested to 125% of maximum working load.



## High Capacity Precision Control



### Strand Jacks

Enerpac strand jacks are the strand jacks of choice for customers seeking precise synchronous control with heavy-lifting capacity in an economical, compact, and reliable foot print.

Enerpac strand jacks are powered by electrical or diesel driven hydraulic power packs and controlled by Enerpac's proprietary SCC-Smart Cylinder Control System to ensure full control of lifting and lowering operations.

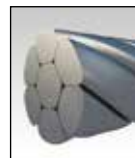
Enerpac continually improves reliability, durability, and safety of their strand jacks, making them an industry standard for heavy-lifting.



### Strand Wedges

Wedges are hardened and nickel coated to resist corrosion, resulting in an extra long life.

Page:  7



### Heavy-Lifting Strands

Enerpac offers 15,7 mm (.62 inch) and 18 mm (.71 inch) heavy-duty strands.

Page:  7

◀ HSL85007 Strand Jack System used on Enerpac custom Self Erecting Tower.

# Heavy-Lifting Strand Jacks



## Strand Jacks

A strand jack can be considered a linear winch. In a strand jack, a bundle of steel strands are guided through a main "lifting" jack.

Above and below the cylinder are anchor systems with wedges that grip the strand bundle simultaneously. Lifting and lowering a load is achieved by hydraulically controlling the main jack and both mini jacks alternately.

In the case of system pressure loss, the wedges are mechanically closed automatically, holding the suspended load in place.

Today strand jacks are widely recognized as the most sophisticated heavy lifting solution. They are used all over the world to erect bridges, load out offshore structures, and lift/lower heavy loads where the use of conventional cranes is neither economical nor practical.

## HSL Series



Capacity:

**15 - 850 ton**

Stroke:

**250 - 480 mm**

Maximum Operating Pressure:

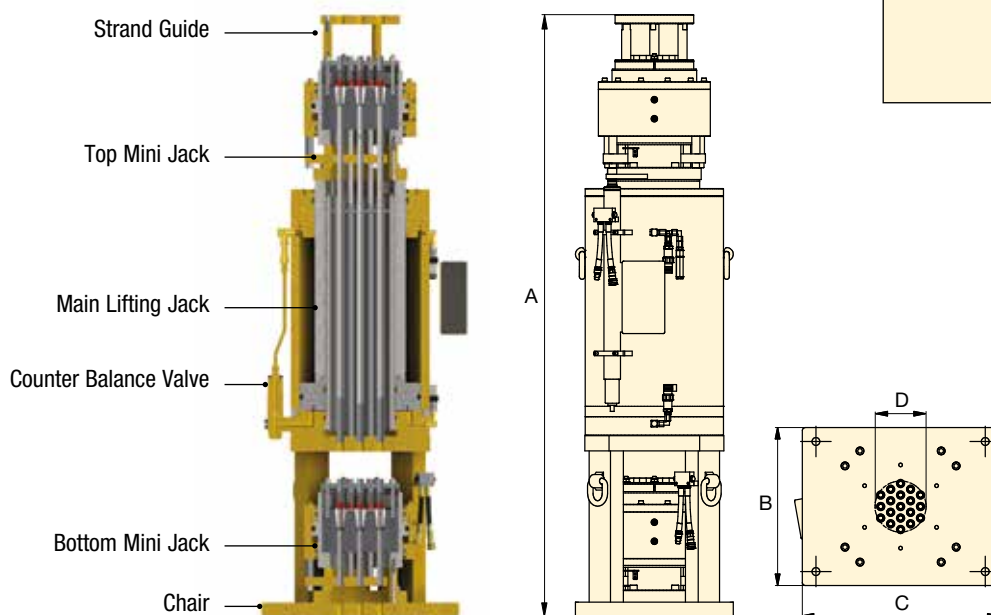
**135 - 350 bar**



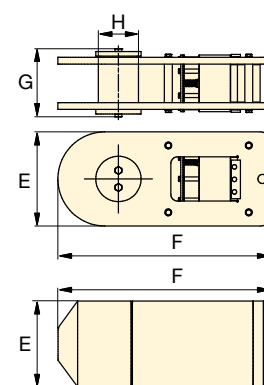
## SLPP-Series, Hydraulic Power Packs

Enerpac offers a comprehensive range of hydraulic power packs that are optimized for use with their industry leading heavy lifting strand jacks.

Page: **5**



## ▼ LIFTING ANCHOR

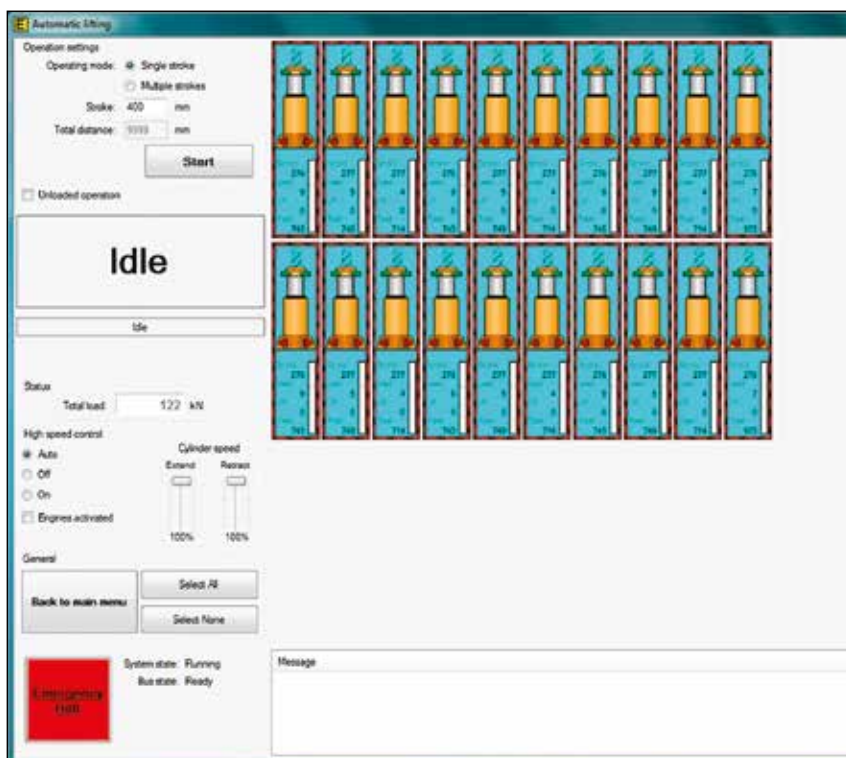


HSL1507 only

HEAVY-LIFTING STRAND JACKS											LIFTING ANCHORS (included)				
Strand Diameter	Capacity *	Model Number	Number of Strands	Stroke	Working Pressure	A	B	C	D		E	F	G	H	
mm (inch)	ton (kN)			(mm)	(bar)	(mm)	(mm)	(mm)	(mm)	(kg)	(mm)	(mm)	(mm)	(mm)	(kg)
15,7 (.62)	<b>70</b> (700)	<b>HSL7006</b>	7	480	205	1915	360	575	93	680	250	721	225	110	60
	<b>200</b> (2000)	<b>HSL20006</b>	19	480	230	1992	522	650	169	1430	415	942	362	177	260
	<b>500</b> (5000)	<b>HSL50006</b>	48	480	350	2218	733	733	282	3435	620	1385	555	260	815
18 (.71)	<b>15</b> (150)	<b>HSL1507</b>	1	250	218	1242	220	220	20	100	65	178	—	—	5
	<b>45</b> (450)	<b>HSL4507</b>	3	480	135	1915	360	575	93	680	250	721	225	110	60
	<b>100</b> (1000)	<b>HSL10007</b>	7	480	210	1926	408	625	114	950	300	855	257	120	105
	<b>850</b> (850)	<b>HSL85007</b>	55	480	350	2402	900	900	364	5200	785	1730	660	315	1560

\* Capacity is based on 2,5 minimum safety factor over strand breaking load. See page 7 for details.

▼ Shown: SCC-Smart Cylinder Control System



## Smart Box

The Smart Box is Enerpac's proprietary control platform. It allows an operator to control up to 60 strand jacks simultaneously with a standard laptop.

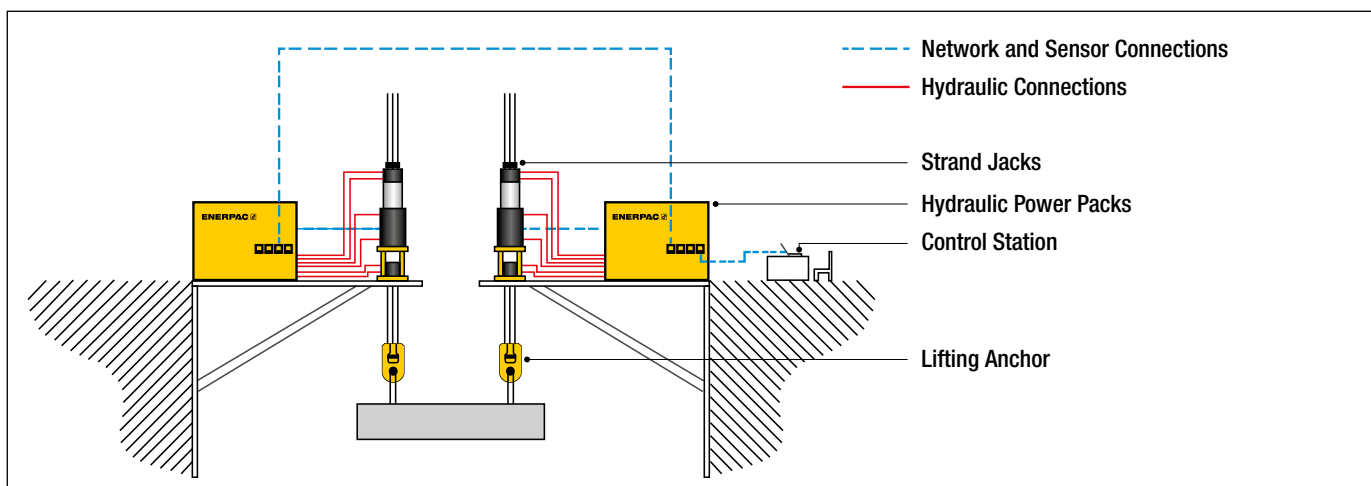
Smart Box Model number: **SBSJSCC-V4**  
Optional Laptop Model nr: **SBLT-1**

- 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
- Ability to operate up to 60 strand jacks simultaneously
- Simple graphical user interface
- Data logging and export capabilities.

▼ Enerpac's SCC-Smart Cylinder Control System simplifies synchronous operation with intuitive controls and a user-friendly graphical interface.



▼ System overview showing a 2-Point Lift with Automatic Control.





# Electric Hydraulic Power Packs

## ▼ SLPP30EW Hydraulic Power Pack



### SLPP Series

Flow at Rate Pressure:

**3,5 - 43,0 l/min**

Motor Size:

**2,2 - 30 kW**

Reservoir Capacity:

**20 - 350 litres**

Maximum Operating Pressure:

**230 - 350 bar**



#### Service and Maintenance Kits

Service and Maintenance Kits available for both strand jacks and power packs to minimize downtime.

Page: 7

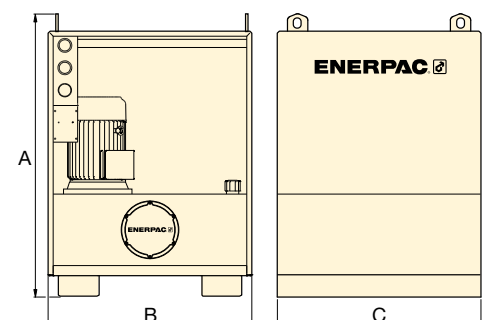
- Variable frequency drive motor (VFDM) for precision control
- Optimized for use with specific strand jack sizes
- Equipped with a hydraulic safety circuit
- Pumps are easily connected with a standard RS-485 network cable
- Integrated Emergency-stop on pump
- Connection for auxiliary hand pendant
- Pumps include:
  - reservoir sight glass
  - return tank filter
- Enclosed frame with integrated lifting lugs and fork lift pockets
- Standard voltage for electric pumps is 400 V, 3-phase, 50 Hz.

Strand Jack Capacity ton (kN)	Theoretical Lifting Speed (m/hr) *			
	Pump Motor Size (kW) *			
	2,2	7,5	15	30
15 (150)	12	–	–	–
45 (450)	–	15	–	–
70 (750)	–	15	–	–
100 (1000)	–	12	–	–
200 (2000)	–	6	–	–
500 (5000)	–	–	6	10
850 (8500)	–	–	–	6

\* Theoretical lifting speeds. Each application should be evaluated to determine the optimum lifting speed for maximum safety and control. Contact Enerpac for more information.

#### Electric Hydraulic Power Packs


Motor Size (kW)	Model Number 380-415 V, 3 ph, 50 Hz	Oil Flow at 1500 RPM (l/min)	Maximum Working Pressure (bar)	A (mm)	B (mm)	C (mm)	Weight (kg)
2,2	SLPP2EW	3,5	230	935	600	600	157
7,5	SLPP7EW	16	230	990	600	750	260
15	SLPP15EW	30	350	1300	1000	1000	680
30	SLPP30EW	43	350	1460	1920	870	1250

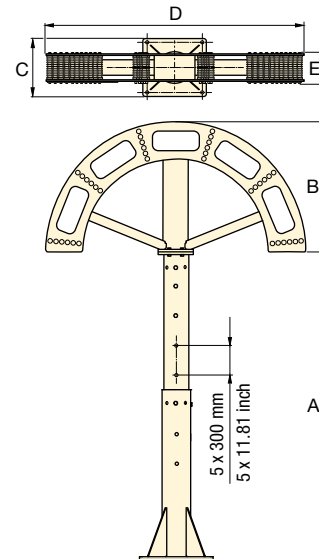




## Strand Guide


- Provides a guide for the strand as a strand jack lifts the load
- Capable of feeding the strands into a strand recoiler
- Adjustable height.

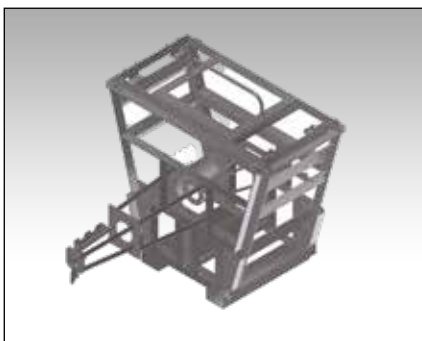
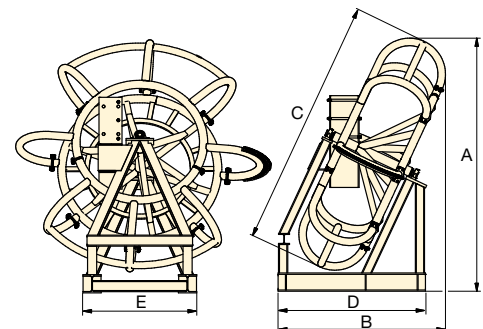
Model Number	Maximum Number of Strands		A (mm)		B	C	D	E	 (kg)
	15,7 mm (.62 inch)	18 mm (.71 inch)	min.	max.	(mm)	(mm)	(mm)	(mm)	
<b>SGS1</b>	19	13	2760	4260	950	600	1900	250	450
<b>SGM1</b>	48	48	2080	3580	1175	600	2350	376	700
<b>SGL1</b>	55	55	2490	3990	1530	750	3060	375	1300



## Strand Recoiler


- Passively pays in or pays out strands while jacking and lowering
- Must be used in combination with an Enerpac strand guide.

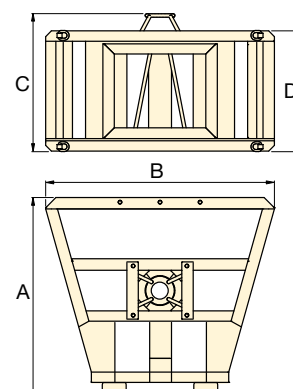
Model Number	Maximum Number of Strands	Strand Capacity (length in meters)		A	B	C	D	E	 (kg)
		15,7 mm (.62 inch)	18 mm (.71 inch)	(mm)	(mm)	(mm)	(mm)	(mm)	
<b>SRCS1</b>	20	750	500	1930	1000	1762	1000	1800	445
<b>SRCL1</b>	48	6000	4000	2756	1831	2706	1605	1240	1000



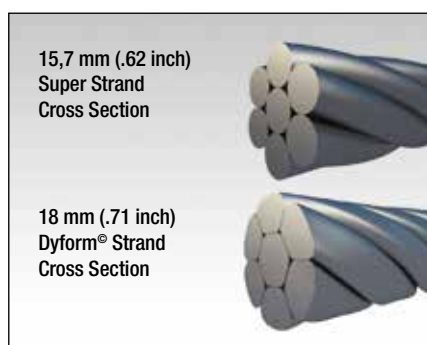
## Strand Dispenser

- Essential to safely unbundle a new strand coil
- Provides method for dispensing strand for set-up.

Model Number	A	B	C min. - max.	D	 (kg)
	(mm)	(mm)	(mm)	(mm)	
<b>SD1</b>	1755	2000	1050 - 2445	1050	650



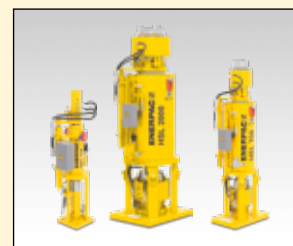
# Strand Service and Maintenance Items



## Heavy-Lifting Strands

- Strands available in 15,7 mm Super or 18 mm Dyform
- When used as directed with Enerpac HSL-Series Strand Jacks, strand meets 2.5:1 design factor prescribed by ASME B30.1.2020.

## HSL Series



Capacity:

**15 - 850 ton**

Stroke:

**250 - 480 mm**

Maximum Operating Pressure:

**135 - 350 bar**

Strand Diameter	Strand Type	Model Number *	Tensile Strength	Steel Area	Breaking Load	Length per Coil	Mass	
mm (inch)			(N/mm <sup>2</sup> )	(mm <sup>2</sup> )	(kN)	(m)	(kg/m)	(kg)
15,7 (.62)	Super	SC06	1860	150	279	2560	1,17	3000
18 (.71)	Dyform®	SC07	1700	223	380	1720	1,74	3000

\* Sold by the coil. Coil weight and lengths are approximate and typically within 3% of nominal values.



## Strand Wedges

- Hardened nickel coated wedges for long life and trouble-free wedge release
- Wedges are included with every strand jack and available as spare parts
- Wedge Lubricant (Part # HLWLS) ensures that the outside of the wedges are thoroughly lubricated to prevent unwanted binding and potential bird-caging of the strand.



### Wedge Lubricant

During wedge maintenance or wedge replacement, it is critical that the outside of the wedges are thoroughly lubricated before placing them back into the anchor block. A stick lubricant or another type of pressure resistance grease should be used.

Model number: **HLWLS**

Model Number	For Strand Diameter		Package Quantity
	(mm)	(inch)	
HLW06	15,7	0.62	50
HLW07	18	0.71	50



### Service and Maintenance Kits

Service and Maintenance Kits available for both strand jacks and power packs to minimize downtime.

- **Spare Part Kit A** contains basic service items for regular scheduled maintenance.
- **Spare Part Kit B** contains service and spare parts items to address easily damaged or worn items that require attention during important lifting applications.
- **Spare Part Kit C** (power packs only) contains service and spare parts items to ensure maximum up time for critical lifting jobs that cannot afford any delays.

Power Pack Model Nr. 380-415 V	Power Pack Service Kit A	Power Pack Service Kit B	Power Pack Service Kit C
SLPP2EW	03415410000	03415420001	03415430000
SLPP7EW	02787410000	02787420001	02787430000
SLPP15EW	01797410000	01797420001	01797430000
SLPP30EW	03637410000	03637420001	03637430000

Strand Jack Model Nr.	Strand Diameter mm (inch)	Heavy-Lifting Strand (full coil)	Total Wedges per Jack	Set of Strand Wedges (pack of 50)	Strand Jack Service Kit A	Strand Jack Service Kit B
HSL1507	18 (.71)	SC07	3	HLW07	02607410000	02607420000
HSL4507	18 (.71)	SC07	9	HLW07	04033410000	04033420000
HSL7006	15,7 (.62)	SC06	21	HLW06	02603410000	02603420000
HSL10007	18 (.71)	SC07	21	HLW07	03828410000	03828420000
HSL20006	15,7 (.62)	SC06	57	HLW06	02604410000	02604420000
HSL50006	15,7 (.62)	SC06	144	HLW06	03937410000	03937420000
HSL85007	18 (.71)	SC07	165	HLW07	04010410000	04010420000



# THE RIGHT TOOL MAKES ALL THE DIFFERENCE

Enerpac heavy lifting technology products are put to work under the most intense and demanding conditions. That's why we never compromise. So you can rely on quality and precision every time, giving you the safest and most efficient path to a successful lift.

Enerpac heavy lifting technology combines technical excellence with proven performance – every day, every year, year after year. We believe that customers shouldn't have to compromise – they can rest easy knowing that even in the most complex situations, their reputations and safety are protected by the most trusted products available.

**ELITE TOOLS. FOR ELITE PROFESSIONALS.**

## Heavy Lifting Technology



**SFP-Series,**  
Split-Flow Pumps



**EVO, EVOP-Series,**  
Synchronous Lifting Systems



**SCJ-Series,**  
Self-Locking Cube Jacks



**JS-Series,**  
Jack-Up Systems



**ML-Series, Mini-Lift**  
Telescopic Hydraulic Gantry



**SL, SBL-Series,**  
Telescopic Hydraulic Gantries



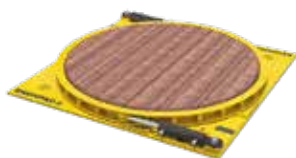
**HSL-Series,**  
Strand Jack Systems



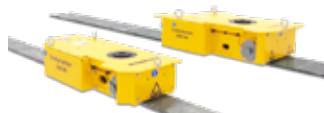
**SHS-Series,**  
Synchronous Hoisting Systems



**LH-Series,**  
Low-Height Skidding Systems



**ETT-Series,**  
Hydraulic Turntables



**ETR-Series,**  
Electric Trolley Systems



**EMLS, EMV-Series,**  
Battery-Powered Machine Skates