TANK JACKING SYSTEM TECHNICAL SPECIFICATIONS

PRODUCT OVERVIEW & MODEL RANGE

01 PRODUCT OVERVIEW & MODEL RANGE

Tank Jacking System uses hydraulic lifting units to raise assembled tank roof and shell sections during inverted erection. The equipment range includes two mechanical configurations: the LYT chain-type system, which transfers lifting force through a movable pulley and load-bearing chain, and the SQD chuck-type system, which uses alternating chucks and steel lifting rods.

LYT CHAIN-TYPE HYDRAULIC TANK JACKING SYSTEM



Technical Item	Specification
Model Range	LYT-120-2700 to LYT-300-2700
Rated Capacity	120 / 200 / 300 kN
Piston Stroke	1,500 mm
Chain Stroke	2,700 mm
Lifting Member	Load-bearing chain

SQD CHUCK-TYPE HYDRAULIC TANK JACKING SYSTEM



Technical Item	Specification
Model Range	120–1,000 kN
Rated Capacity	Six model capacities
Hydraulic Stroke	100 / 200 mm
Published Lifting Height	2.6 m
Lifting Member	Steel lifting rod

HYDRAULIC POWER PACK RANGE

Lifting System	Power Pack Models
LYT	YB-7.2 / YB-14.5
SQD	YH-40 / YH-60 / YH-90

LYT chain assemblies and SQD lifting rods and chucks are system-specific components and are not interchangeable.

TANK JACKING SYSTEM TECHNICAL SPECIFICATIONS

LYT CHAIN-TYPE HYDRAULIC TANK JACKING SYSTEM

02 LYT CHAIN-TYPE HYDRAULIC TANK JACKING SPECIFICATIONS

The LYT chain-type hydraulic tank jacking system uses a double-acting hydraulic cylinder and movable pulley assembly to transfer lifting force through a load-bearing chain. The three reference models share the same piston stroke and chain stroke, with different rated lifting capacities.

LYT HYDRAULIC TANK JACKING UNIT SPECIFICATIONS



Technical Parameter	LYT-120-2700	LYT-200-2700	LYT-300-2700
Rated Lifting Capacity	120 kN	200 kN	300 kN
Rated Oil Pressure	25 MPa	25 MPa	25 MPa
Piston Stroke	1,500 mm	1,500 mm	1,500 mm
Chain Stroke	2,700 mm	2,700 mm	2,700 mm
Hydraulic Safety Device	Double-direction hydraulic lock	Double-direction hydraulic lock	Double-direction hydraulic lock
Reinforcement	2 adjustable pull rods	2 adjustable pull rods	2 adjustable pull rods

KEY MECHANICAL PARAMETERS

120–300 kN
Rated Lifting Capacity

1,500 mm
Piston Stroke

2,700 mm
Chain Stroke

LYT STRUCTURE SCHEMATIC



Piston stroke and chain stroke represent different movements and shall not be treated as the same travel distance.

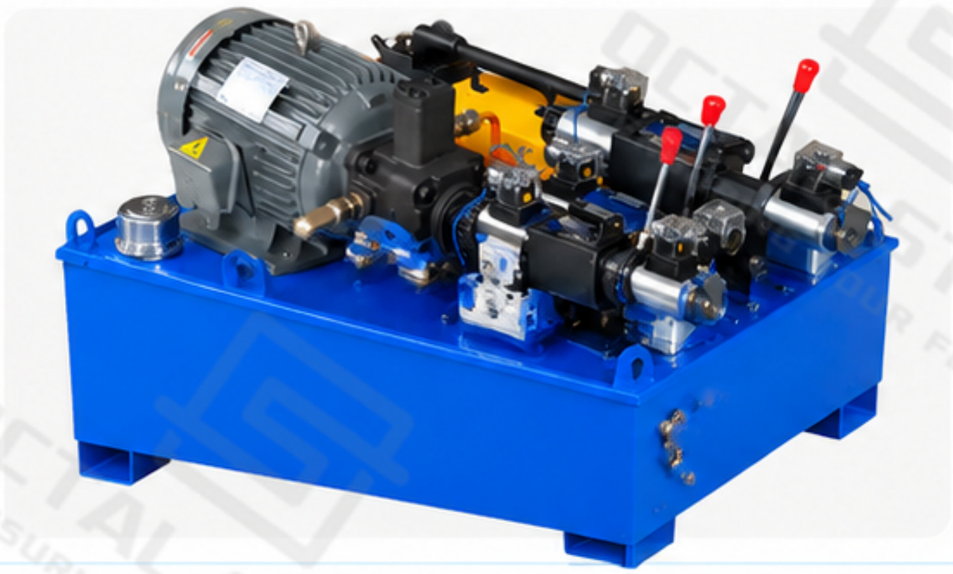
TANK JACKING SYSTEM TECHNICAL SPECIFICATIONS

LYT HYDRAULIC POWER PACK SPECIFICATIONS

03 LYT HYDRAULIC POWER PACK SPECIFICATIONS

The hydraulic power pack supplies pressurized oil to the LYT lifting units and controls the extension and return movements of the hydraulic cylinders.
Two reference configurations, YB-7.2 and YB-14.5, are available with different oil flow rates, tank capacities and motor power ratings.

LYT HYDRAULIC POWER PACK



LYT HYDRAULIC POWER PACK TECHNICAL DATA

Technical Parameter	YB-7.2	YB-14.5
Hydraulic Oil Tank Capacity	220 L	340 L
Rated Pressure	25 MPa	25 MPa
Rated Oil Flow	7.2 L/min	14.5 L/min
Motor Power	5.5 kW	7.5 kW
Main Power Supply	380 V, 3-phase, 4-wire	380 V, 3-phase, 4-wire
Solenoid Valve Control Voltage	220 V	220 V

CONFIGURATION COMPARISON

YB-7.2

7.2 L/min
Rated Oil Flow

Motor Power	5.5 kW
Oil Tank	220 L
Pressure	25 MPa

YB-14.5

14.5 L/min
Rated Oil Flow

Motor Power	7.5 kW
Oil Tank	340 L
Pressure	25 MPa

TECHNICAL NOTES

- Both configurations share a rated pressure of 25 MPa.
- Their main differences are rated oil flow, hydraulic oil tank capacity and motor power.

TANK JACKING SYSTEM TECHNICAL SPECIFICATIONS

SQD CHUCK-TYPE HYDRAULIC TANK JACKING SYSTEM

04 SQD CHUCK-TYPE HYDRAULIC TANK JACKING SPECIFICATIONS

The SQD chuck-type hydraulic tank jacking system uses alternating upper and lower chucks to grip a steel lifting rod during incremental lifting. Six model configurations cover rated lifting capacities from 120 kN to 1,000 kN, with different hydraulic pressure and stroke specifications.

SQD HYDRAULIC TANK JACK TECHNICAL PARAMETERS

Model	Rated Lifting Capacity	Rated Oil Pressure	Single Hydraulic Stroke	Published Lifting Height	Repeated Slip Value
SQD-120-100S.F	120 kN	18 MPa	100 ± 0.5 mm	2.6 m	≤5 mm
SQD-160-100S.F	160 kN	20 MPa	100 mm	2.6 m	≤3 mm
SQD-250-100S.F	250 kN	25 MPa	100 ± 1 mm	2.6 m	≤3 mm
SQD-350-100S.F	350 kN	20 MPa	100 mm	2.6 m	≤3 mm
SQD-500-100S.F	500 kN	25 MPa	100 ± 0.5 mm	2.6 m	≤5 mm
SQD-1000-200S.F	1,000 kN	20 MPa	200 mm*	2.6 m	≤3 mm

* SQD-1000-200S.F is listed with a nominal 200 mm hydraulic stroke. Its stroke tolerance is not specified in the available confirmed data.

SQD STRUCTURE SCHEMATIC



SQD MODEL RANGE OVERVIEW

SQD Rated Lifting Capacity

120 kN → **1,000 kN**

120 | 160 | 250 | 350 | 500 | 1,000

Six rated lifting capacity configurations

TECHNICAL NOTES

- The upper and lower chucks must match the lifting rod specifications. Rod diameter, straightness and alignment should be checked against the selected SQD model and supporting frame arrangement.

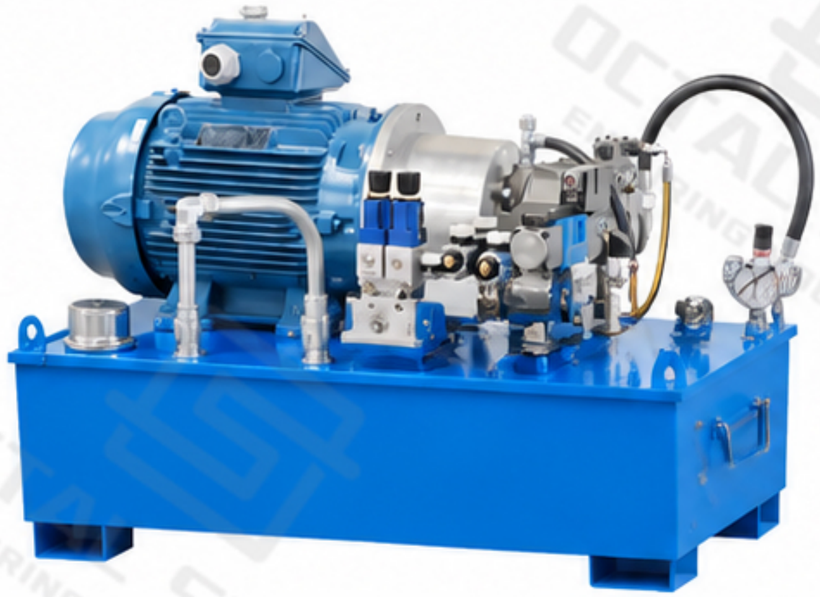
TANK JACKING SYSTEM TECHNICAL SPECIFICATIONS

SQD HYDRAULIC POWER PACK SPECIFICATIONS

05 SQD HYDRAULIC POWER PACK SPECIFICATIONS

The SQD hydraulic power pack supplies pressurized oil to operate the chuck-type lifting units. Three reference configurations, YH-40, YH-60 and YH-90, are listed with different rated oil flow rates, motor power ratings and oil tank capacities.

SQD HYDRAULIC POWER PACK



SQD HYDRAULIC POWER PACK TECHNICAL DATA

Technical Parameter	YH-40	YH-60	YH-90
Maximum Pressure	25 MPa	25 MPa	25 MPa
Motor Power	11 kW	18.5 kW	30 kW
Rated Oil Flow	40 L/min	60 L/min	90 L/min
Motor Speed	1,470 r/min	1,470 r/min	1,470 r/min
Oil Tank Capacity	240 L	400 L	400 L
Reference Hydraulic Oil	L-HM46 Anti-Wear Hydraulic Oil	L-HM46 Anti-Wear Hydraulic Oil	L-HM46 Anti-Wear Hydraulic Oil

POWER PACK CONFIGURATION COMPARISON

YH-40

40 L/min
Rated Oil Flow

- Motor Power: **11 kW**
- Oil Tank: **240 L**
- Pressure: **25 MPa**

YH-60

60 L/min
Rated Oil Flow

- Motor Power: **18.5 kW**
- Oil Tank: **400 L**
- Pressure: **25 MPa**

YH-90

90 L/min
Rated Oil Flow

- Motor Power: **30 kW**
- Oil Tank: **400 L**
- Pressure: **25 MPa**

TECHNICAL NOTES

- All three power pack configurations have a maximum pressure of 25 MPa.
- The rated oil flow increases from 40 L/min to 90 L/min across the three configurations.
- The reference hydraulic oil is L-HM46 anti-wear hydraulic oil.