

VALUE THAT WORKS

GROUP PRODUCTS



SHANTUI

SP25Y/45Y/70Y/90Y

Pipelayer



ENGINE

Engine Model	Cummins NTA855-C360S10
Emission Standard	EU Stage I
SP70Y	
Net Power-ISO9249	235kW
Net Power-ISO9249(DIN)	320hp
SP90Y	
Net Power-ISO9249	235kW
Net Power-ISO9249(DIN)	320hp

WEIGHTS

Operating Weight	
SP70Y	50000 kg
SP90Y	59500 kg

LIFT CAPACITY

Lift Capacity at Tipping Point	
SP70Y	70000 kg
SP90Y	90000 kg



Shantui Social

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SHANTUI

Features

Performance

- Cummins NTA855-C360 engine
- (SP70/SP90), Cummins NT855-C280 (SP45) Weichai WD10G (SP25) providing power and improved machine maneuverability for any pipelayer application. With compact structure, reliable performance and convenient maintenance. With high power but low fuel consumption, can be adapted to bad environment and diesel condition.

Undercarriage system

- Improved machine center of gravity, rigidly connected frame, and lengthened track-roller frame with widened track shoes places more track on the ground, (lengthened semi-axis and gear hub), flexible counterweight to ensure good stability of undercarriage.

Operator Interface

- Advanced Mechatronic Systems equipped with electronic monitors, centralized monitoring, and automatic alarm.
- Torque limiter is installed to accurately indicate the angle and amplitude of the boom, lifting height and weight of the boom. It can alarm when overload and limit the movement.
- Equipped with a safety lock and quickly release button to prevent the rollover accident in the state of emergency.



Shantui Pipelayers have been the leader of the pipeline industry for decades. A worldwide network of Shantui dealers, in tune with the special high production needs of pipeliners, supports these durable and dependable machines. Shantui Pipelayers are purpose-built to meet the unique demands of pipeline customers. And like every Shantui machine, Pipelayers are designed for long life, service ability and rebuild capability to help keep owning and operating costs low. They answer customers' needs for increased lift capacity, enhanced slope capability, ease of operation, performance and transportability.

ENGINE AND UNDERCARRIAGE

Engineered for performance

ENGINE

- The engine, providing power and improved machine maneuverability for any pipelayer application. With compact structure, reliable performance and convenient maintenance. EU-I emission standard, with high power but low fuel consumption, can be adapted to bad environment and diesel condition.

UNDERCARRIAGE - EXCELLENT STABILITY:

- The undercarriage is rigidly connected with the frame with lengthened and widened tracks, flexible counterweight to ensure good stability of chassis.
- Undercarriage components are built for long life and ease of serviceability. Also lubricated tracks is available for your choice.

TRANSMISSION:

- At Shantui, we make our own transmissions for our many lines. This is a key component in our vertical integration, further contributing to our trademark value proposition.



STRUCTURE

Underlying strength

- Shantui actually makes its own structural parts, including arms, tracks, undercarriage, roller sets, buckets, and also makes its own transmissions, torque converters and much more for a wide range of construction machinery products. The Pipelayer mainframe is designed to handle the most demanding applications. It is built to absorb high impact shock loads and twisting forces. Lengthened semi-axis and gear hub, so that the overall track center distance can be widened, and more stable operation of the whole machine.

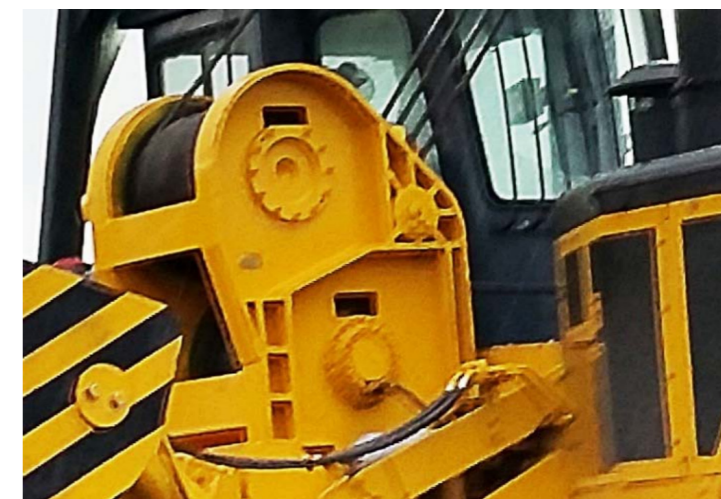


PIPELAYER

Purpose-built, robust components

WINCHES

- Proven heavy-duty winch design works with updated electro-hydraulic control for more precise implement control. Boom and hook winches are driven by independent hydraulic winches. Oil-disc brakes provide smooth operation and positive retention of boom and hook positions. A modular pin-on design allows for fast removal and easy field service. Interchangeable parts between hook and boom winch assemblies help reduce cost and downtime. The winch profile is compact and enhances visibility.



COUNTERWEIGHT

- New counterweight profile adds weight where you need it most to provide you the needed lift capacity for your application. Segments are contoured to help lower the machine center of gravity and are extended hydraulically for improved load balance and clearance. An electronic counterweight kick outs which has been added to limit the retraction of the extendable counterweight to the correct, retracted position.



BOOM

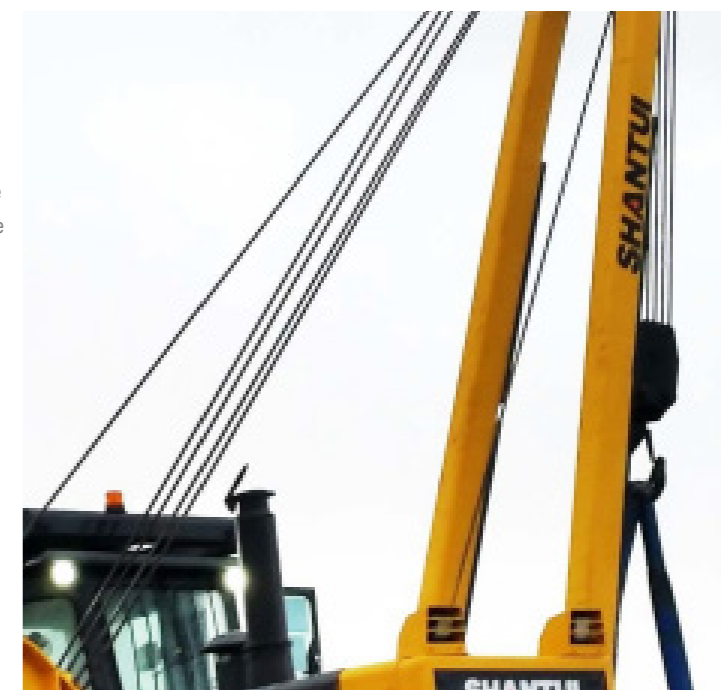
- The light weight, durable boom features high tensile strength steel construction for narrow structures and maximum visibility to the work area. Replaceable boom-mount bearing said serviceability and long life. New PL83 and PL87 now utilize common 7.31m(24 ft) and 8.53m(28 ft) booms.

BLOCKS AND HOOK

- Short profile block set enhances visibility to the work area and helps maximize the working range of the full length of the boom. The heavy-lifting components include hook and boom blocks with sleeve bearings, a forged hook with latch and serviceable handle, and ductile iron sheaves. A bolt-on block horn mounted to the front of the machine allows for convenient storage of the block set during transport.

PINNED PIPELAYER FRAME STRUCTURE

- Heavy duty pipelayer frame structures are designed to be easily pinned together to provide robust strength and durability in addition to improved service ability.



OPERATOR STATION

Designed for productive comfort

COMFORTABLE OPERATING ENVIRONMENT:

- Cabin with wide range of vision, Escape window at top which is also easy to observe hanging.
- ROPS cab and air conditioning are available for selection.
- Speed change, steering, throttle control are all placed on the left side of the driver, which is flexible and easy to operate.
- The working device is controlled by pressure relief pilot valve. The control rod is arranged reasonably, thereby effectively preventing the operator from misoperation and greatly reducing the fatigue strength of the operator.
- Equipped with a safety lock and quickly release button to prevent the rollover accident in the state of emergency.



ADVANCED MECHATRONIC SYSTEMS:

- The chassis is equipped with electronic monitors, centralized monitoring, and automatic alarm.
- Torque limiter is installed to accurately indicate the angle and amplitude of the boom, lifting height and weight of the boom. It can alarm when overload and limit the movement.



SERVICE ABILITY AND CUSTOMER SUPPORT

Service at your work

SERVICE SUPPORT

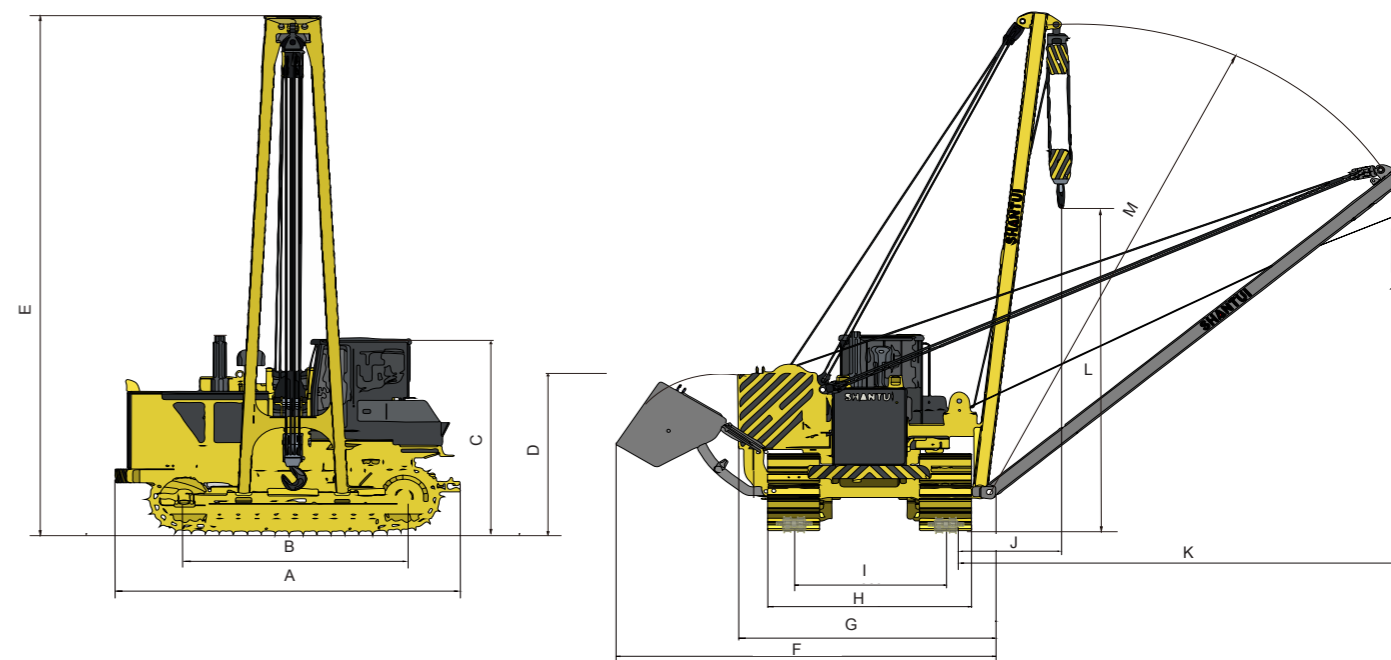
- Shantui after-sales service, parts distribution and delivery expertise are on par with global standards, further strengthening Shantui as a leading multinational brand.
- Integral to our global network is our longstanding promise to provide service ANYTIME, ANYWHERE. Shantui dealers and sales agents are well-trained, experienced and committed to delivering on this promise to our customers worldwide.



SPECIFICATIONS

MODEL	SP25Y	SP45Y	SP70Y	SP90Y	
Engine	WD10G178E25	NT855-C280S10	NTA855-C360S10	NTA855-C360S10	
Emission	Tier 2	Tier 1	Tier 1	Tier 1	
Rated rotation	1850 rpm	2000 rpm	2000 rpm	2000 rpm	
Gross power	131kw	179kw	257kw	257kw	
Net power	120kw	169kw	235kw	235kw	
Number of cylinder-bore × stroke	6-126mm*130mm	6-139.7mm*152.4mm	6-139.7mm*152.4mm	6-139.7mm*152.4mm	
Displacement	9.726L	14L	14L	14L	
Max. torque	765N.m@1100-1200 rpm	1036N.m@1400 rpm	1440N.m@1400 rpm	1440N.m@1400 rpm	
Cooling system	Mechanic fan				
DRIVE SYSTEM					
Drive system	Manufactured by SHANTUI, with high working efficiency, low breakdown rate; torqflow transmission, 3 gears forward and 3 gears backward.				
Forward,km/h	1	0 - 3,29	0 - 3,8	0 - 3,6	0 - 3,6
	2	0 - 5,82	0 - 6,8	0 - 6,6	0 - 6,6
	3	0 - 9,63	0 - 11,8	0 - 11,5	0 - 11,5
Backward,km/h	1	0 - 4,28	0 - 4,9	0 - 4,4	0 - 4,4
	2	0 - 7,59	0 - 8,5	0 - 7,8	0 - 7,8
	3	0 - 12,53	0 - 14,3	0 - 13,53	0 - 13,53
Torque converter	3-element, single stage, 1-phase				
Transmission	Planetary gear and torqflow transmission hydraulically actuated, forced lubrication				
Bevel gear shaft	Spiral bevel gear, single-stage speed reduction, splash lubrication				
Steering clutch	Wet multiple disc, disc spring loaded, hydraulically actuated, hand operated, interconnected with steering brake.				
Brake	Wet, contracting band, foot operated with hydraulic booster				
Final drive	Spur gear, double reduction ,splash lubrication				
CHASSIS SYSTEM					
Track shoe type	Single grouser	Single grouser	Single grouser	Single grouser	
Track gauge	2050mm	2250mm	2380mm	2490mm	
Width of track shoe	560/610 mm	610/660 mm	760 mm	860 mm	
gradeability	20°	20°	20°	20°	
Ground clearance	400mm	405mm	500mm	500mm	
Number of track shoes	39pcs/single side	40pcs/single side	45pcs/single side	45pcs/single side	
Ground pressure (standard configuration)	70kpa	86kpa	89kpa	91kpa	
Number of carrier rollers	2 pcs/single side	2 pcs/single side	2 pcs/single side	2 pcs/single side	
Number of track rollers	7 pcs/single side	7 pcs/single side	9 pcs/single side	9 pcs/single side	
Pitch	203mm	216mm	228mm	228mm	
VOLUME					
Fuel capacity	300L	440L	600L	640L	
Coolant liquid capacity	62.8L	79L	121L	121L	
Engine oil capacity	45L	-	47L	47L	
Hydraulic oil tank	148L	180L	400L	400L	
Transmission	122L	122L	185L	185L	
Final drive	23L/single side	51L/single side	55L/single side	55L/single side	
OPERATING WEIGHT					
Operating weight (standard)	23800kg	34000kg	50000kg	59500kg	

DIMENSION	SP25Y	SP45Y	SP70Y	SP90Y
A Machine length	4130mm	4760mm	5650mm	5650mm
B Length of Track on Ground	2635mm	3050mm	3620mm	3620mm
C Machine height	3050mm	3300mm	3600mm	3600mm
D Height of counterweight	2680mm	2750mm	2900mm	2900mm
E Max machine height(with boom)	6040mm	7100mm	8200mm	9500mm
F Max width (counterweight unfold)	5010mm	5330mm	5900mm	6150mm
G Min width (counterweight fold)	3360mm	3690mm	3800mm	4125mm
H Track width	2610mm	2860mm	3140mm	3350mm
I Track gauge	2050mm	2250mm	2380mm	2490mm
J Min boom swing amplitude	1220mm	1220mm	1220mm	1220mm
K Max boom swing amplitude	5830mm	6650mm	7600mm	8900mm
L Max lifting height	4150mm	5250mm	6000mm	7000mm
M Boom Length	5500mm	6500mm	7300mm	8600mm

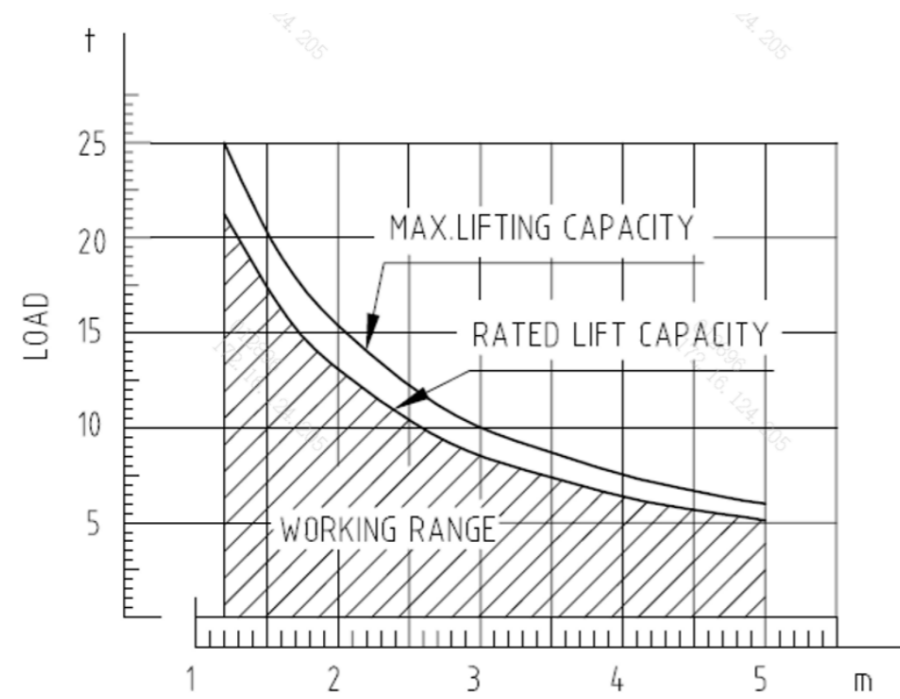


HOISTING EQUIPMENT

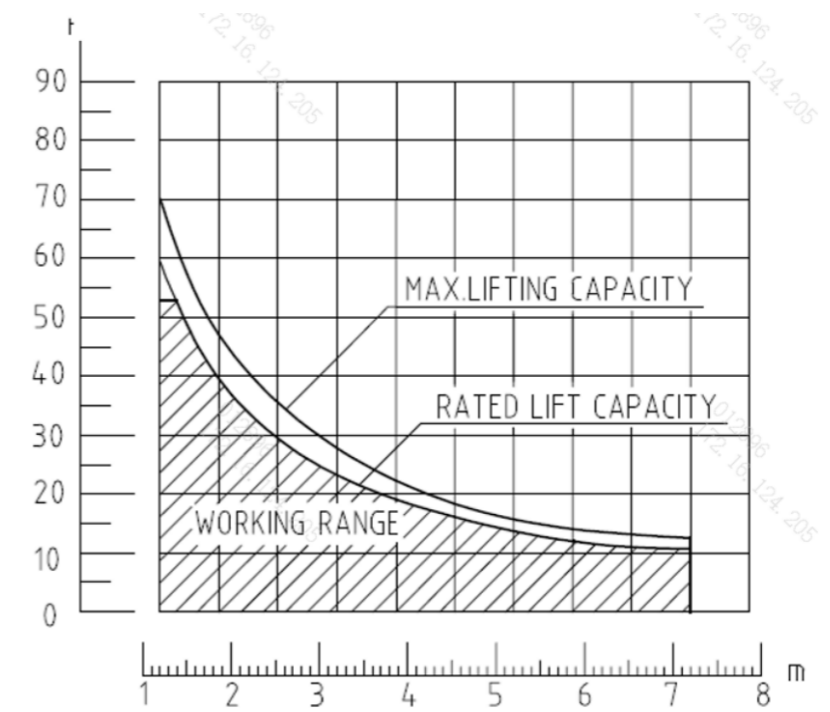
	25T	45T	70T	90T
Max. lift capacity	25T	45T	70T	90T
Radius of outreach	1.22m-5.5m	1.22m-6.5m	1.22m-7.3m	1.22m-8.6m
The speed of hook	0-12 m/min	0-6 m/min	0-6 m/min	0-6.8 m/min
Counterweight	4*830kg	2*1900kg	4*2000kg	12*910kg
Hydraulic pressure	18MPa	18MPa	20MPa	21MPa
Diameter of wire rope	18mm	20mm	20mm	22mm
Length of wire rope	60m	90m	95m	95m

DIMENSIONS

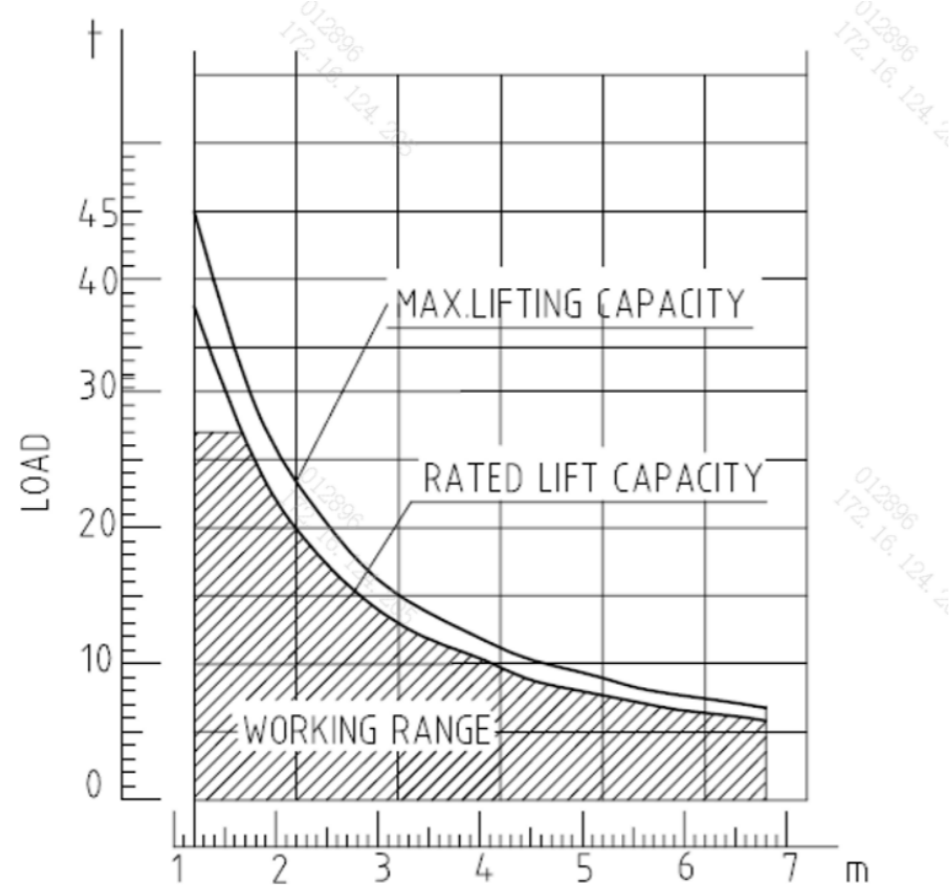
SP25Y



SP70Y



SP45Y



SP90Y

