

pipelayer P70 / P90 features

Performance

Cummins NT855-C360 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 adapt to bad environment and diesel condition.

Chassis Stability

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 chassis.

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.





Engine and Undercarriage

Engineered for performance

Engine

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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:

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

we actually makes its own structural parts, including arms, tracks, under carriages, 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 engineered to handle the most demanding applications.

The purpose-built Pipelayer mainframe is built to absorb high impact shock loads and twisting forces,

(Lengthened semi-axis and gear hub, so that the overall track center distance to be widened, and more stable operation of the whole machine.)



Pipelayer

Purpose-built, robust components

Winches

Proven heavy-duty winch design works with updated hydraulic control for more precise implement control. Boom and hook winches are driven by independent hydraulic winches. Planetary gear reduction mechanism provides smooth operation and positive retention of boom and hook positions, safe falling hook function and normally closed brake arranged at the input end of the speed reducer are provided to ensure safety and reliability. Modular design allows for fast removal and easy field service. The winch profile is compact and enhances visibility

Counterweight

The counterweight is composed of a counterweight frame, a counterweight block and cylinder. The counterweight frame is an externally swinging four connecting rod form, and the counterweight block can be adjusted according to the lifting weight at work. The expansion of the counterweight mechanism is driven by hydraulic cylinder. The whole mechanism is mature in structure and reliable in use

Boom

Short profile block set enhances visibility to the work area and helps maximize the working range of the full length of the boom. The boom is equipped with limiting mechanism, hook over protection device and free falling hook function to ensure the safety of the machine during operation. The hook over protection device prevents the hook from being pressed together with the fixed pulley to avoid the breakage of the wire rope or other parts

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 serviceability.



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:

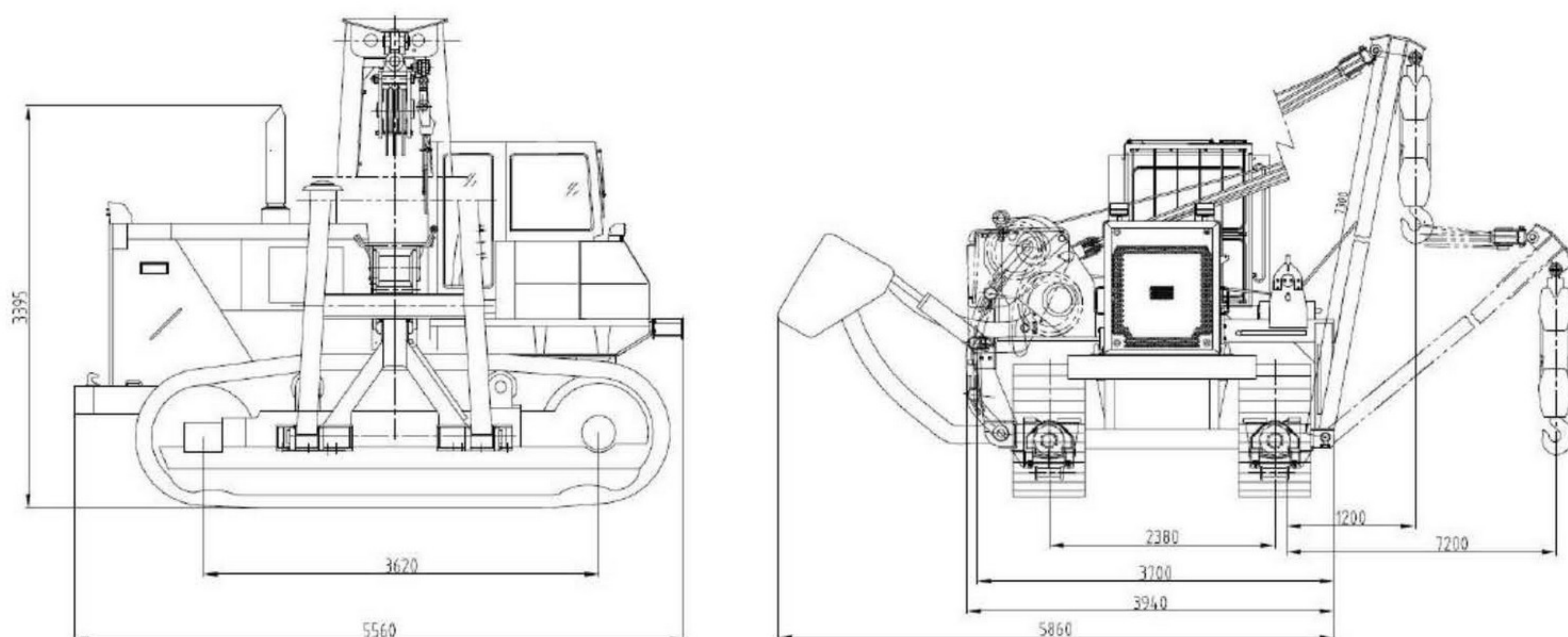
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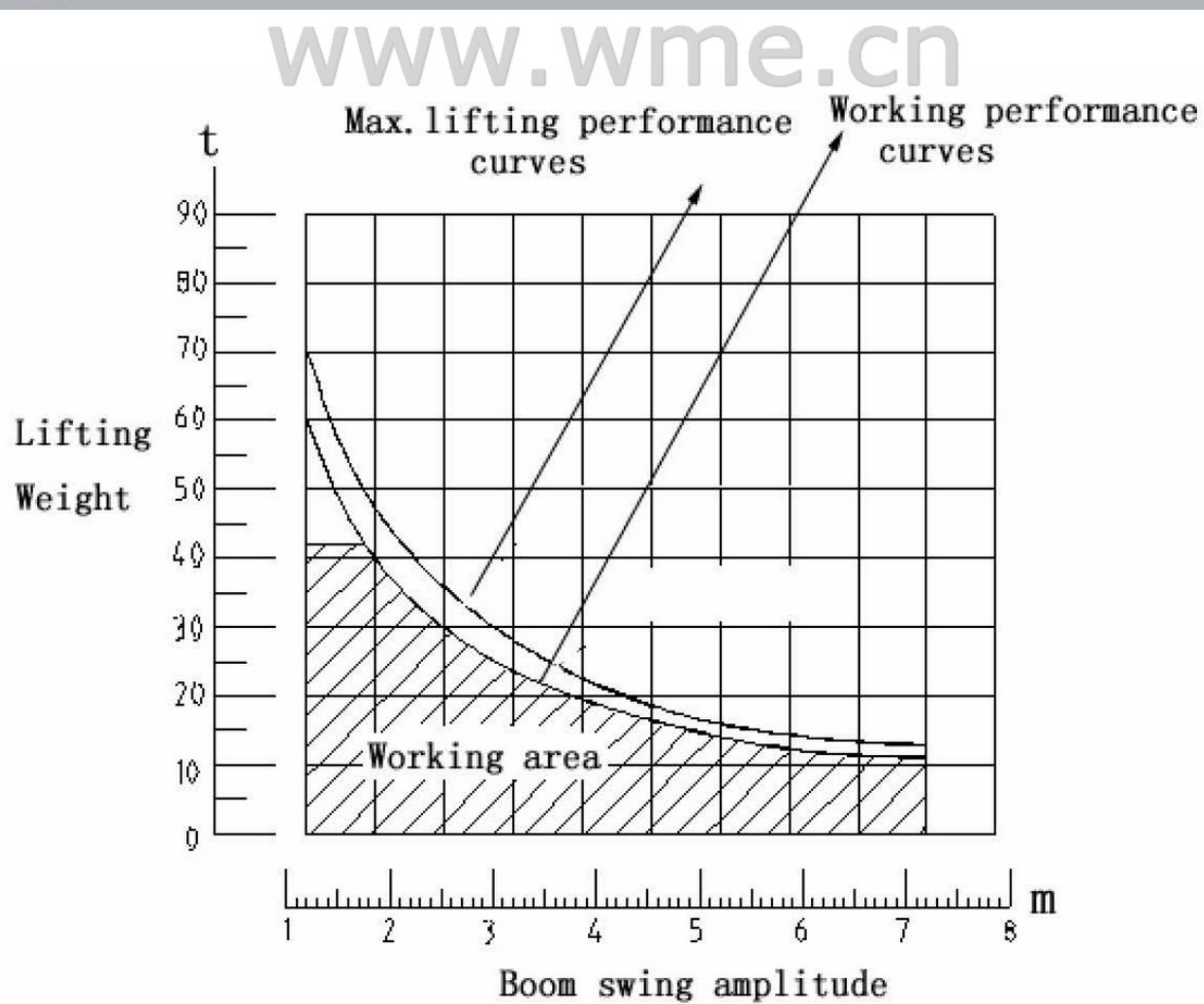


		P70	P90
	WEIGHT AND DIMENSIONS	Operating weight	50000 kg
		Maximum lifting weight	70000 kg
		Track shoe width	760 mm
		Minimum turning radius	3950 mm
		Ground length	3620 mm
		Ground clearance	485 mm
	ENGINE	Rated power	235 kW
		Model	Cummins NT855-C360
		Cylinder	6 cylinder in line
		Bore × Stroke	139.7 × 152.4 mm
		Model Type	Water cooled 4-cycle, turbo-
		Emission Standard	EU-Stage I
		Max. torque	1411 Nm (144 kg.M)
		Piston displacement	14 L
		Rated revolution	2000 rpm
			257 kW
	TRANSMISSION SYSTEM	Type	Hydraulic transmission
		Hydraulic torque converter	3-element, 1 stage, 1 phase
		Transmission	Planetary gear, forced lubrication
		Travel speed 1st (forward/reverse)	3.7/4.5 km/h
		Travel speed 2nd (forward/reverse)	6.8/8.2 km/h
		Travel speed 3rd (forward/reverse)	11.8/13.7 km/h
	UNDERCARRIAGE	Minimum turning radius	3950 mm
		Track gauge	2380 mm
		Length of track on ground	3620 mm
		Width of track plate	760 mm
		Ground Specific Pressure	0.089 MPa
		Number of Rollers (each side)	9
		No. of Carrier Rollers (each side)	2
		Track Type and NO.	Single Tooth (45/each side)
	WORKING PUMP	Type	Duplex pump
		Displacement of large pump	201.49 ml/r
		Rated pressure of large pump	21 MPa
		Displacement of small pump	10.16 ml/r
		Rated pressure of small pump	5 MPa
	SERVICE REFILL CAPACITIES	Fuel tank capacity	600 L
		Hydraulic tank capacity	103 L
		Engine Oil Pan	27 L
		Torque converter and transmission	136 L
		Final drive Case (each)	55 L
	PIPELAYING EQUIPMENT	Boom Length	7300 mm
		Max.lifting height	6550 mm
		Max. lift capacity	70T ±3%
		Boom Line speed	0~6 m/min
		Boom swing amplitude	1220~7200 mm
		Grade-ability	20°

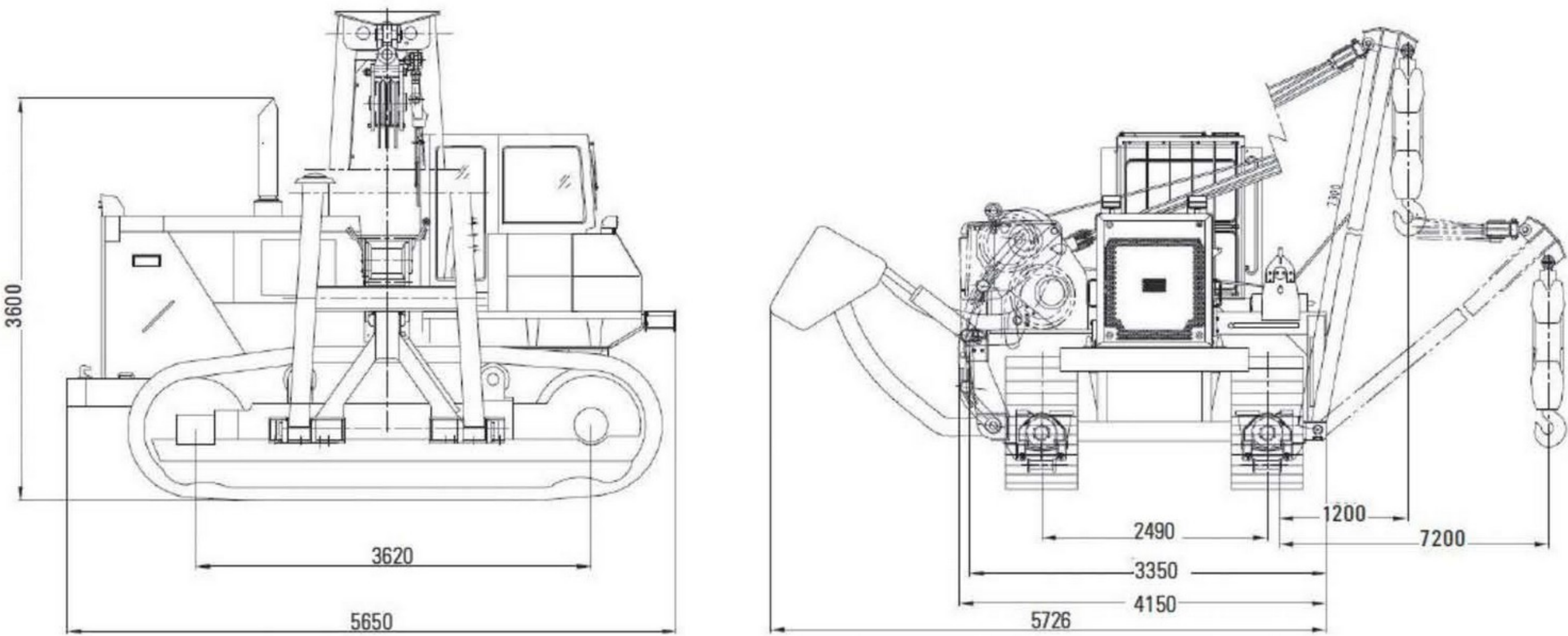
Dimensions



Lift Curve



Dimensions



Lift Curve

