

PMG20

PIPELAYER

Cummins 6BTA5.9-C170	127 kw/173hp
Max lifting capacity	20000 kg/44500lb
Operating weight	23000 kg/51600lb

SAFETY DEVICES

- **Free Fall System**

When the button is engaged, the load free-falls and then immediately stops when the button is released.

- **Automatic Boom Kick-Out**

This system will ensure you will never bend another boom.

- **Anti Two Block**

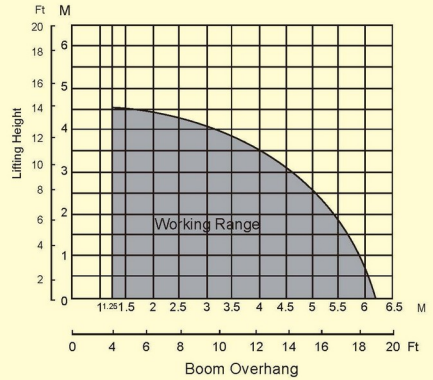
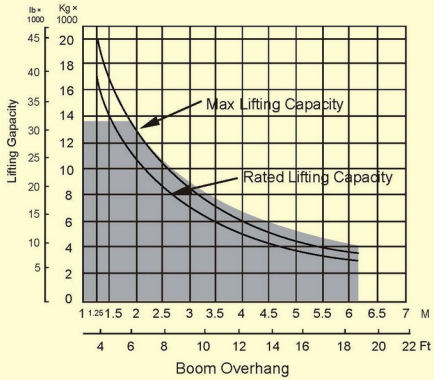
Sets a minimum distance between the top block and the hook block, preventing collisions between them.

- **Anti Tipping System**

Prevents tipping by calculating the maximum load that can be lifted.



PMG20 LOADING CHART

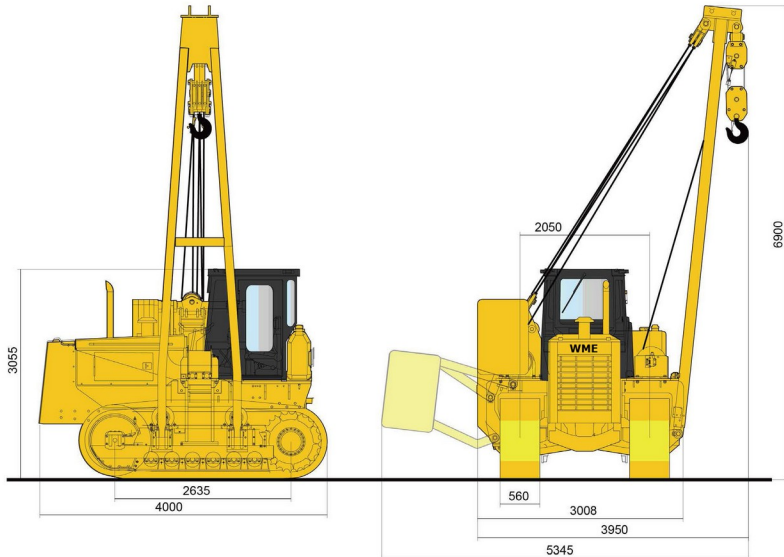


Boom overhang indicated in the table is the distance between hook center to same side track wheel outer edge.

The lifting capacity in the table includes hook weight

which is 0.8 t.

The lifting capacity of the equipment is the one when the equipment stop on the rigid level ground.



GENERAL SPECIFICATIONS

ENGINE

Type	Cummins
Model	6BTA5.9-C170
Rated power	127kW
Rated speed	2000 RPM
Bore	102mm
Stroke	120mm
Displacement	5.9 L
Design	6-cylinder in-line
Electric system	24 V
Starter	5.4kw / 13hp
Batteries	2 x 150 ah/12 V
Cooling system	water radiator

SERVICE CAPACITIES

Fuel tank	315 L
Crankcase and filter	30 L
Final drive (each side)	23 L
Cooling system	62.8 L
Hydraulic tank	148 L
Power train	70 L
Roller frames (each)	0.25 L

UNDERCARRIAGE

Structure	rigid one body welded frame
Shoe type	super extreme
Width of standard shoes	560 mm
Number of shoes (each side)	39
Grouser height	65mm
Pitch	203.2 mm
Ground clearance	400 mm
Track gauge	2050 mm
Length of track on ground	2635 mm
Ground contact area with 860 mm shoes	2.95m ²
Number of track rollers (each side)	7
Number of carrier rollers	2 per side
Ground pressure	86.4 KPA

WEIGHTS(APPROXIMATE)

Shipping weight (tractor)	16t
Boom	1.2t
Pipelayer attachment	38t
Cwt leaves	3.6t
Cwt frame & rack	1.4t
Total weight	26t

TRACTION FORCE

1f – drawbar pull	105 kN
2f – drawbar pull	58 kN

HYDRAULIC SYSTEM

Pump type	gear-type, high pressure fixed displacement
Temperature	-40—+60
Pump output – max	226 L/min
Relief valve setting –counterweight	14000 KPA
Relief valve setting –winches	20000 KPA
Pump output –counterweight	74 L/min

PIPELAYING EQUIPMENT

Planetary hydraulic winches		
Winch brakes.....multiple-disk, hydraulic released.		
	HOOK	BOOM
Drum diameter	380 mm	360 mm
Flange diameter	540 mm	520 mm
Drum length	346 mm	267 mm
Capacity	70 m(18 mm)	50 m(18mm)
Wire rope installed	70 m	50 m
Rope min breaking strength	189 kN(18mm)	
Hook speed with 8 part line	13 m/min	
Luffing time	24 s (0-85)	
Boom – square section standard	7.5m	
	bigger length boom available	
Removable counterweight	6 segments	



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STANDARD EQUIPMENT

Undercarriage

Suspended track frame, closed, non-oscillating type •
Track chain, sealed with split master link, 41 links •
Track frame, rigid •
Pivot shaft, separate •
Sprocket segments, bolted •
Track roller 9, each side •
Carrier roller 2, each side •
Idler 01, each side •
Hydraulic track adjuster •
Track and rollers lifespan lubricated •
860 mm serviceable plate •
Track guide centre part •
Track guiding guard, front •

Power train

Cummins 6BTA5.9-C170 engine •
Antifreeze, -37 OC (-34 F) •
Fan, suction •
Water separator fuel system •
Air cleaner, dry type w/exhaust •
Aspirated primary and safety elements and service indicator •
Fuel priming pump •
Fuel tank and filter •
Torque converter, single stage •
Final drives, planetary type •
Muffler •
Radiator •
Transmission, power shift •
3 speed forward, 3 reverse •
Parking brake, automatic •

Hydraulic system

Variable flow pump, load sensing •
Pipe and valves •
Hydraulic control counterweight •
Hydraulic control winch and boom •

Free fall device •
Control valve for 1 circuit •
Hydraulic servo control •
Hydraulic tank and oil level control •
Oil filter with strainer in hydraulic tank •

Operator's cab

Cabin, isolation mounted, full vision
With lockable door •
Operator's seat, adjustable •
Seat belt •
Foot operator, inching break paddle •
Dual steering control •
Monitoring system/service indicator •
Key, start •
Fire extinguisher in cabin •
Coat hook •
Rear mirror, inside •
Safety glass, tinted •
Windshield wipers front, rear •
Dome window •
Control, single joystick •
Safety lever •
Emergency stop •

Electrical

Starter motor •
Batteries, 2 units maintenance free •
On-board system 24 V •
Alternator 50 A •
Back-up alarm, horn •
Beacon •
Working lights, front 2, rear 2, side 2, boom 1, winch, 1 •
Dome light •
Instrument warning lights •
Battery charging •
Hourmeter •
Speed range •

Engine oil pressure •
Water temperature •
Fuel level •
Parking brake •
Hydraulic oil temperature •
Pump replenishing pressure •
Oil return filter •
Air filter •
Main warning light •

Pipe laying equipment

Boom welded type box-section structure •
Boom kickout, uppermost position •
Boom load limit sensor •
Counterweight, adjustable, hydraulically controlled, 4-block and 2-counterweight frames •
Hydraulic draw works with independent driver motors for boom and hook winches •
Brakes, wet multiple disc, closed type, spring applied and hydraulically released •
Blocks and hook with latch •
Ropes •

Basic machine

Bumper front •
Towing lug front •
Towing hitch rear •
Battery compartment, lockable •
Refuelling pump, electric •
Belly pans, heavy-duty, hinged •
Radiator, wide-meshed •
Engine cover, perforated •
Engine doors, perforated •
Engine doors, hinged, lockable •
Lugs for crane lifting •
Toolkit •
Exhaust pipe, insulated •

OPTIONAL EQUIPMENT

Air conditioner
Arctic package

Rear winch for pulling
ROPS or FOPS

Lengthened boom.
Enlarged radiator