

JUNTTAN PM 20 AND PM 25 HYDRAULIC PILING RIGS

The JUNTTAN PM 20 and PM 25 hydraulic piling rigs are both designed for low cost, high efficiency operation. They are of similar design and configuration but they differ in capacity

and power characteristics. Both machines have engine, hydraulic system, cylinder sizes, winches and drive block specifically designed to provide optimum efficiency.

The PM 20 can be used with 3 to 6 tonnes drive blocks and the PM 25 with 3 to 10 tonnes drive blocks.

JUNTTAN PM 20 AND PM 25 HYDRAULIC PILING RIGS TECHNICAL DATA

Base machine

Weights

	Specification		
Description	PM 20	PM 25	
Base machine	26.0 t	28.5 t	
Leader and support structure	7.5 t	8.2 t	
Total transport weight	33.5 t	36.7 t	
Extendable counterweight Operational weight	6.0 t	6.2 t	
(without pile and hammer)* Hydraulic hammer	39.5 t	42.9 t	
(without drive cap)	5.5 t	10.1 1	

^{*}Operational weight is base machine, leader and support structure.

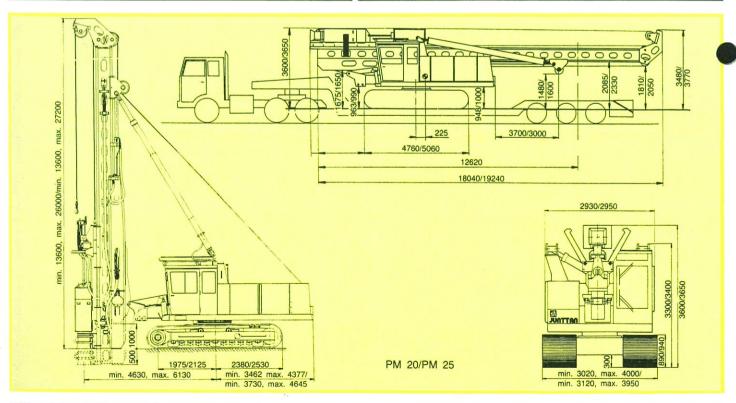
Crawler data

		Specification	on
Description	PM :	20	PM 25
Width of track pads	800 mm	900 mm*	850 mm
Overall width at crawlers			
during transport	3020 mm	3220 mm	3120 mm
during operation	3900 mm	4000 mm	3950 mm
Adjustment max.	880 mm	780 mm	830 mm
Area of ground contact	76160 cm ²	85680 cm ²	86020 cm ²
Ground pressure	0.52 kg/cm^2	0.46 kg/cm ²	0.50 kg/cm ²
No. of pads per crawler	58	58	52
Length of tracks	4760 mm	4760 mm	5060 mm
No. of rollers	2 upper	2 upper	2 upper
	11 lower	11 lower	12 lower

^{*700} mm track pads are optional.

Velocity

	Specification		
Description	PM 20	PM 25	
Travel speed	1.5 km/h	1.5 km/h	
Machinery deck slewing speed	2.5 rpm.	2.5 rpm.	





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Power plant

	Sp	Specification		
Description	PM 20	PM 25		
Diesel engine model*	DEUTZ BF6L 913/C	1. DEUTZ BF6L 513R 2. DEUTZ BF6L 513RC		
Output on ISO Std.	118 kW at 2300 rpm.	1. 150 kW at 2300 rpm.		
DIN 6271		2. 190 kW at 2300 rpm.		
Normal operating rpm.	2150 rpm.	2150 rpm.		
Hydraulic pumps	HYDROMATIK A8VO80SR +A2F45	HYDROMATIK A8VO107SR +A2F063		
Hydraulic system				
output	2 x 179 l/min + 1 x 96 l/min	2 x 192 l/min + 1 x 127 l/min		
Hydraulic system				
pressure	max. 300 bar	max. 300 bar		
Electric system	24 VDC	24 VDC		
Battery	2 x 12 V 155 Ah	2 x 12 V 155 Ah		

^{*}Other engine options can be offered.

Piling gear

Leader

			Specif	ication				
Description	2	PM 20			PM 25			
Heights*	Std.	Min.	Max.	Std.	Min.	Max.		
Avalaible height of slide section	4 m	4 m	4 m	4 m	4 m	4 m		
Leader	17 m	12.6 m	21 m	18.2 m	12.6 m	22.2 m		
	(12.6 + 4.4)		(17 + 4)	(12.6 + 5.6)		(18.2 + 4)		
Total height of leader	21 m	16.6 m	25 m	22.2 m	16.6 m	26.2 m		
Cat head		1 m			1 m			
Lift force of the leader telescope cylinder		300 kN			400 kN			

^{*}Heights do not include cat head.

Leader operation

	transcription of the second	Specification		
Description	PM 20	PM 25		
Vertical motion up	+ 1000 mm	+ 1000 mm		
Vertical motion down	- 500 mm	- 500 mm		
Horizontal motion	max. 1500 mm	max. 1500 mm		
Leader rakes*		forwards max. 18° (3:1)		
		backwards max. 40° (1.2:1)		
		laterally max. 12° (5:1)		

^{*}In every case leader rake values for pile and hammer should be checked by referring to the stability charts supplied with the rig.

Winches

Description		Specification		
	PM 20	PM 25		
Quantity	2	2		
Winding speed	max. 50 m/min	max. 50 m/min		
Line pull*	73 kN	110 kN		
Line required				
at hammer	Ø 24 mm x 40 m	Ø 28 mm x 40 m		
at pile	Ø 20 mm x 70 m	Ø 22 mm x 70 m		

^{*}Other winch options can be offered.

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Crawler spread and counterweight width provide an extremely stable undercarriage permitting pile driving over the widest possible range of inclined angles.



By siting controls alongside the operators seat excellent forward visibility of the work area is achieved. Inclinometers indicate the rake of the leader in two planes. The FOPS standard cab is acoustically isolated and vibration damped to the highest specification and is fully enclosed in a steel safety cage.



The counterweight disposition may be adjusted by up to 1 metre directly from the operators cab and the amount of counterweight be changed by adding or removing modular sections.

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- 1. Hydraulically operated pile arms permit precise positioning of piles and the leader can be adjusted to changes in pile position during driving without interruption of operations. Using a pile twister the piles can be turned through bayonet pile joints when an extension is required.
- 2. The crawler spread is adjustable by approx. 1 metre beyond the transport width, giving even more stability.
- 3. Both the JUNTTAN PM 20 and PM 25 are suitable for normal road and rail transport.







The name JUNTTAN is already a hallmark in the field of soil mechanics. Throughout the world the number of satisfied users of JUNTTAN Products increases year on year.

year.
Operations started in 1976 under the name of Savonvarvi Oy. As the product line became better known it was felt appropriate to change the name to that now used and trusted — Juntan.

JUNTTAN OY

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