
MAIT



PRODUCTS RANGE



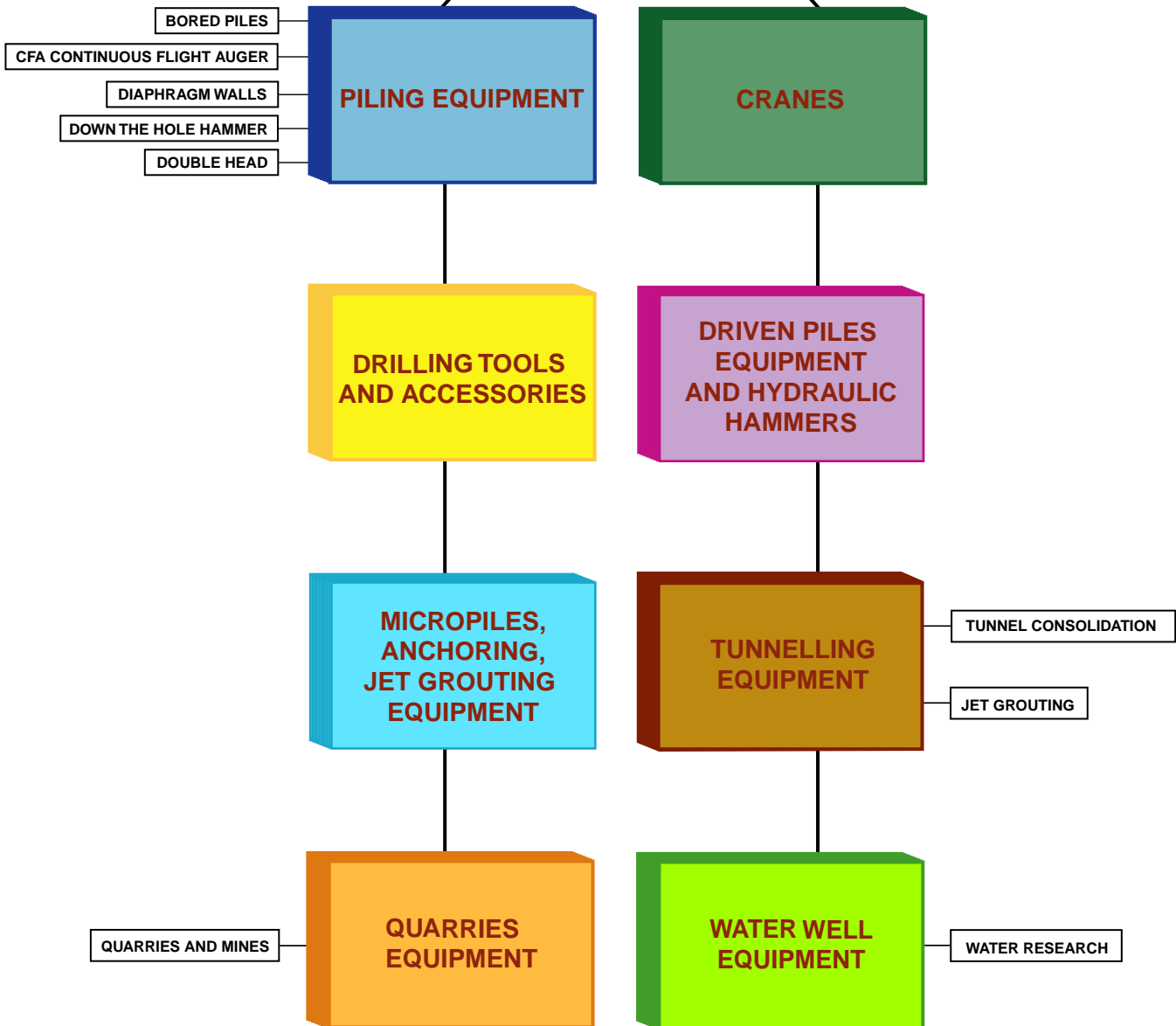


The most complete line of drilling rigs...



MAIT, a world leader with more than 50 years experience in manufacturing hydraulic drilling rigs, presents its wide range of machines able to satisfy any drilling requirement. Head office and premises are located in Osimo (AN), Italy. A qualified staff is at your disposal for technical assistance.

PRODUCTS RANGE



MAIT is all over the world, directly and indirectly, with branch offices and representative agents. Technical assistance and shipment of spare parts are guaranteed within 24 hours from request. Detailed catalogues of each drilling rig are available on request.




HR 240 - 800

HR 300 - 570

HR 260

HR 180
Characteristics

Max diameter	3000 - 2500 mm 118 - 98 in	2500 - 2300 mm 98 - 90 in	2500 - 2000 mm 98 - 78 in	2000 - 1600 mm 78 - 62 in
Max depth	80 - 110 m 262 - 360 ft	80 m 262 ft	80 m 262 ft	60 m 196,80 ft
Max diameter CFA	1500 mm 59 in	1200 mm 47 in	1200 mm 47 in	1200 mm 47 in
Max depth CFA	35 m 114 ft	32 m 104 ft	28 m 91 ft	24 m 78 ft
Engine	384 KW 515 HP	384 KW 515 HP	333 KW 450 HP	240 KW 325 HP
Rotary Head torque	240 - 800 KNm 176880 - 589600 lbs.ft	300 - 570 KNm 221100 - 420090 lbs.ft	260 KNm 191620 lbs.ft	180 KNm 132660 lbs.ft
Weight	125 - 135 tons 275000 - 297540 lbs	85 tons 187340 lbs	75 tons 165300 lbs	57 - 60 tons 125628 - 132240 lbs


CFA 24

DH 24

HR 130

HR 120
Characteristics

Max diameter	1300 mm 51 in	-	1800 - 1500 mm 70 - 59 in	1500 mm 59 in
Max depth	40 m 131 ft	-	40 - 48 m 131 - 157 ft	35 - 39 m 14 - 127 ft
Max diameter CFA	900 mm 35 in	900 mm 35 in	800 mm 31 in	800 mm 31 in
Max depth CFA	24 m 78 ft	24 m 78 ft	19 m 62 ft	15 m 49 ft
Engine	170 KW 230 HP	170 KW 230 HP	170 KW 230 HP	118 KW 160 HP
Rotary Head torque	131 KNm 96547 lbs.ft	131 KNm 96547 lbs.ft	131 KNm 96547 lbs.ft	120 KNm 88440 lbs.ft
Weight	39 - 45 tons 86000 - 99180 lbs	39 - 45 tons 86000 - 99180 lbs	33 - 35 tons 72732 - 77140 lbs	30 tons 66120 lbs



MAIT hydraulic drilling rigs, built for piling works, are multi-purpose rigs able to adopt different drilling techniques for execution of piling works.

Main techniques to be used with these machines are:

- piles drilled with kelly bar, auger and bucket
- CFA (continuous flight auger) works
- Diaphragm walls
- Drilling with down-the-hole hammer
- Drilling with double rotary head



HR 100



HR 45



HR 130/60



HR 100 T

Characteristics

Max diameter	1500 - 1300 mm 59 - 51 in	1000 mm 39 in	2000 - 1500 mm 78 - 59 in	1800 - 1500 mm 70 - 59 in
Max depth	35 m 114 ft	26 - 32 m 85 - 104 ft	60 m 196 ft	35 - 39 m 114 - 128 ft
Max diameter CFA	600 mm 23 in	350 mm 14 in	-	-
Max depth CFA	12 m 39 ft	14 m 45 ft	-	-
Engine	118 KW 160 HP	62 KW 84 HP	170 KW 230 HP	118 KW 160 HP
Rotary Head torque	105 KNm 77385 lbs.ft	46 KNm 33900 lbs.ft	145 KNm 106685 lbs.ft	105 KNm 77385 lbs.ft
Weight	25 - 30 tons 55100 - 66120 lbs	16 tons 35260 lbs	35 - 38* tons 77140 - 83750 lbs	32* tons 70530 lbs

*truck included

MINI - DRILLS LINE



MIDI - DRILL



MINI - DRILL



BABY - DRILL

Characteristics

Max diameter	800 mm 31 in	600 mm 23 in	600 mm 23 in
Max depth	18 m 59 ft	15 m 49 ft	15 m 49 ft
Engine	50 KW 67 HP	24.6 KW 33 HP	28.8 KW 38 HP
Rotary Head torque	35 KNm 25795 lbs.ft	17,5 KNm 12897 lbs.ft	17,5 KNm 12897 lbs.ft
Weight	9000 kg 19836 lbs	5600 kg 12342 lbs	5400 kg 11901 lbs

The capability of any rig to adopt one or more of the above techniques depends, on the dimensions and configuration of the equipment. For easy reference, the above scheme shows only the capacities for piles installed with Kelly bar and continuous flight auger.

Other uses are shown in the catalogues of each drilling rig.

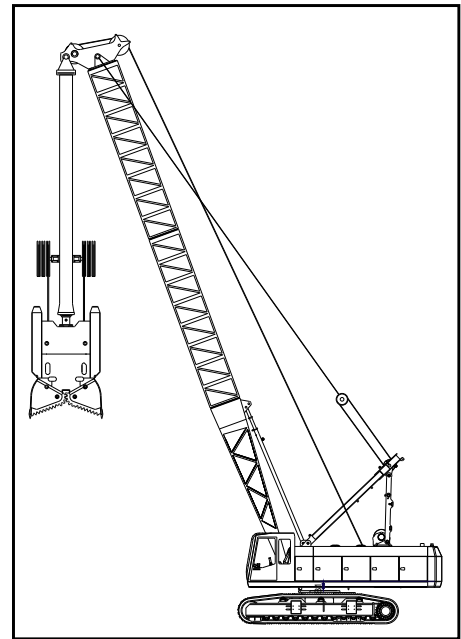
The above mentioned models are shown from the larger (HR 240 - 800) to the smaller (mini drills lines).



CRANE



HC 650



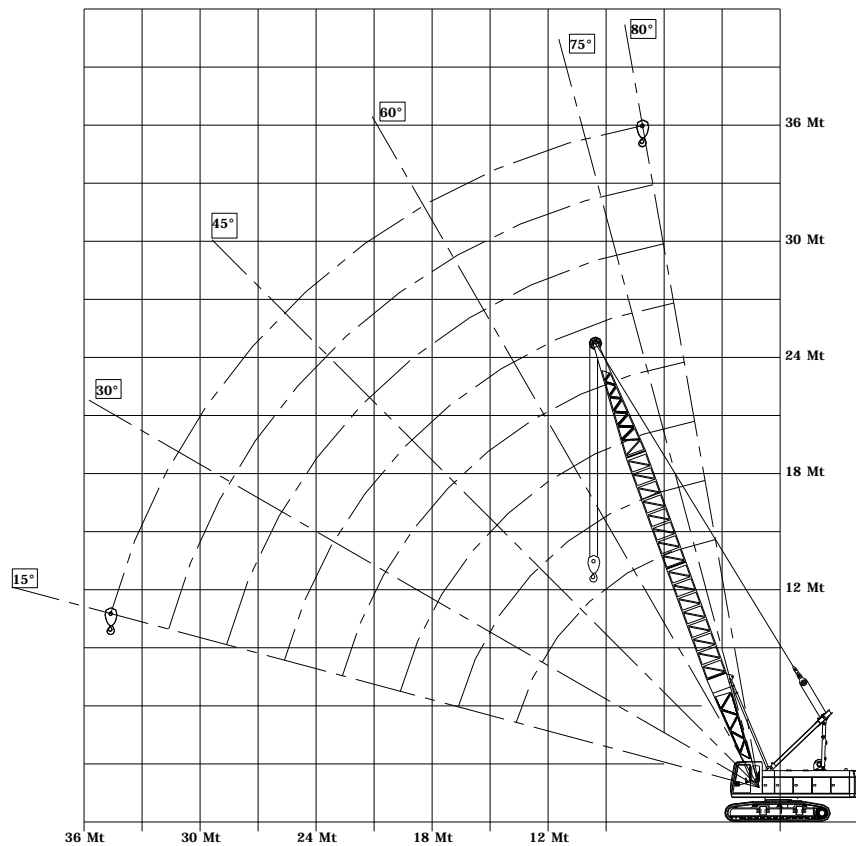
HC 650 (with grab)

Characteristics

Rated lifting capacity	500 KN	112500 lbs
Main winch	110 / 160 / 180 / 200 KN	24750 / 36000 / 40500 lbs
Auxiliary winch	160 KN	36000 lbs
Engine	240 KW - 333 KW	325 HP - 450 HP
Grabs work	1000 x 3200 mm	39 x 126 in
Depth	50 m	164 ft
Weight	65 tons	143300 lbs



MAIT cranes can be used either as simple cranes, or for application of drilling equipment for piling work. The advantage is that, you can quickly modify the crane to the most suitable configuration for the job to be done.



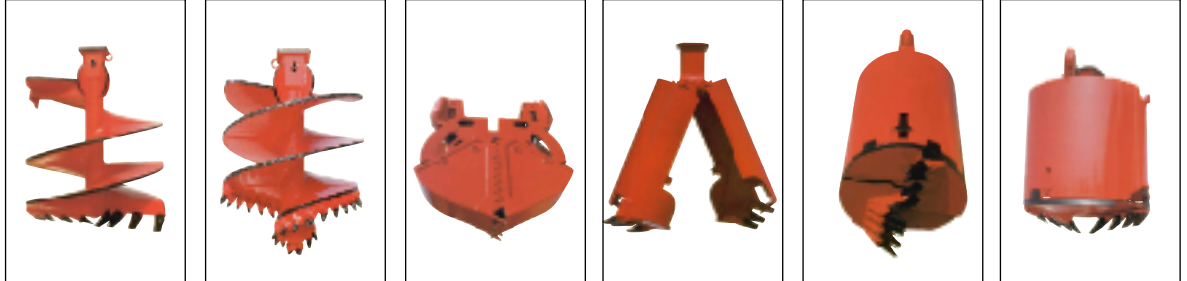
LOAD CAPACITY in KN - for 360° boom rotation

RADIUS		BOOM LENGTH									
		12,20 m 40 ft	15,25 m 50 ft	18,30 m 60 ft	21,35 m 70 ft	24,40 m 80 ft	27,45 m 90 ft	30,50 m 100 ft	33,55 m 110 ft	36,60 m 120 ft	
3,05	10	500 KN - 112.0500 lbs									
3,35	11	500 KN - 112.0500 lbs									
3,66	12	483 KN - 108.675 lbs	483 KN - 108.675 lbs								
3,96	13	460 KN - 103.500 lbs	460 KN - 103.500 lbs								
4,27	14	436 KN - 98.100 lbs	436 KN - 98.100 lbs								
4,57	15	386 KN - 86.850 lbs	386 KN - 86.850 lbs	386 KN - 86.850 lbs	386 KN - 86.850 lbs						
6,10	20	242 KN - 54.450 lbs	242 KN - 54.450 lbs	242 KN - 54.450 lbs	242 KN - 54.450 lbs	241 KN - 54.022 lbs	240 KN - 54.000 lbs	239 KN - 53.775 lbs			
7,52	25	175 KN - 39.375 lbs	175 KN - 39.375 lbs	174 KN - 39.150 lbs	174 KN - 39.375 lbs	173 KN - 38.317 lbs	172 KN - 38.700 lbs	171 KN - 38.475 lbs	170 KN - 38.250 lbs	169 KN - 38.025 lbs	
9,15	30	135 KN - 30.375 lbs	135 KN - 30.375 lbs	134 KN - 30.150 lbs	133 KN - 30.375 lbs	133 KN - 29.317 lbs	132 KN - 29.700 lbs	131 KN - 29.497 lbs	130 KN - 29.250 lbs	129 KN - 29.025 lbs	
10,70	35	109 KN - 24.525 lbs	109 KN - 24.525 lbs	108 KN - 24.300 lbs	108 KN - 24.300 lbs	107 KN - 24.075 lbs	106 KN - 23.850 lbs	105 KN - 23.625 lbs	104 KN - 23.400 lbs	103 KN - 23.175 lbs	
12,20	40	90 KN - 20.250 lbs	90 KN - 20.250 lbs	90 KN - 20.250 lbs	89 KN - 20.025 lbs	88 KN - 19.800 lbs	87 KN - 19.575 lbs	86 KN - 19.350 lbs	85 KN - 19.125 lbs	84 KN - 18.900 lbs	
15,25	50		66 KN - 14.850 lbs	66 KN - 14.850 lbs	65 KN - 14.625 lbs	64 KN - 14.400 lbs	63 KN - 14.175 lbs	62 KN - 13.950 lbs	61 KN - 13.725 lbs	60 KN - 13.500 lbs	
18,30	60			51 KN - 11.475 lbs	50 KN - 11.250 lbs	49 KN - 11.025 lbs	48 KN - 10.800 lbs	47 KN - 10.575 lbs	46 KN - 10.350 lbs	45 KN - 10.125 lbs	
21,35	70				39 KN - 8.775 lbs	39 KN - 8.775 lbs	38 KN - 8.500 lbs	37 KN - 8.325 lbs	36 KN - 8.100 lbs	34 KN - 7.650 lbs	
24,40	80					29 KN - 6.525 lbs	29 KN - 6.525 lbs	28 KN - 6.300 lbs	27 KN - 6.075 lbs	26 KN - 5.850 lbs	
27,45	90						20 KN - 4.500 lbs	23 KN - 5.175 lbs	22 KN - 4.950 lbs	21 KN - 4.725 lbs	
30,50	100							14 KN - 3.150 lbs	17 KN - 3.825 lbs	16 KN - 3.600 lbs	
33,50	110								7 KN - 1.575 lbs	12 KN - 2.700 lbs	

Considerable care and sturdiness have been designed into the most important components: crawlers, winches, boom, etc.

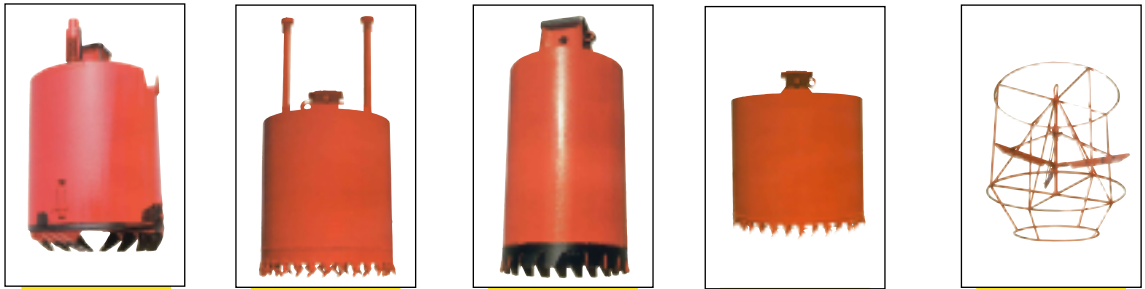


DRILLING TOOLS



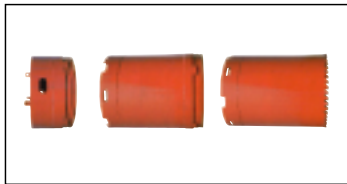
Characteristics

	Auger		Auger		Grab	Bucket		Bucket		Bucket		
Minimum diameter	400 mm	15 in	400 mm	15 in	500 x 2600 mm 19 x 98 in	400 mm	15 in	500 mm	19 in	500 mm	19 in	
Maximum diameter	2500 mm	98 in	2500 mm	47 in	1200 mm	47 in	800 mm	31 in	2500 mm	98 in	2500 mm	98 in
Torque range	up to 1200-3500 KNm 88440 - 257950 lbs.ft		up to 1200-3500 KNm 88440 - 257950 lbs.ft		-	up to 1200-1600 KNm 88440 - 117920 lbs.ft		up to 1200-3500 KNm 88440 - 257950 lbs.ft		up to 1200-3500 KNm 88440 - 257950 lbs.ft		



Characteristics

	Bucket		Core barrel		Core barrel		Core barrel		Pipe - lower	
Minimum diameter	500 mm	19 in	600 mm	23 in	600 mm	23 in	500 mm	19 in	400 mm	15 in
Maximum diameter	2500 mm	98 in	2500 mm	98 in	2500 mm	98 in	2500 mm	98 in	1000 mm	39 in
Torque range	up to 1200-3500 KNm 88440 - 257950 lbs.ft		up to 1200-3500 KNm 88440 - 257950 lbs.ft		up to 1200-3500 KNm 88440 - 257950 lbs.ft		up to 1200-3500 KNm 88440 - 257950 lbs.ft		-	



Casing tubes



Casing tubes

Characteristics

Minimum diameter	660 mm	25 in	660 mm	25 in
Maximum diameter	1560 mm	61 in	2500 mm	98 in

Available single or double wall screw type or fast coupling



For maximum production, a complete line of drilling tools is necessary to face different work conditions. MAIT presents a complete line of drilling tools, available in three different series, each one suitable to increasing drilling torque.

- A - torque up to 130 KNm
- B - torque from 130 KNm to 210 KNm
- C - torque from 210 KNm to 350 KNm
- D - very small torque or tools for mini drills

DRILLING ACCESSORIES



Power pack

Models	HPS 240	HPS 325
Average working range	800 - 1600 mm 31 - 62 in	1500 - 2700 mm 59 - 106 in
Diesel engine	177 KW 240 HP	240 KW 325 HP
Total weight	3,5 tons 7714 lbs	4,5 tons 9918 lbs



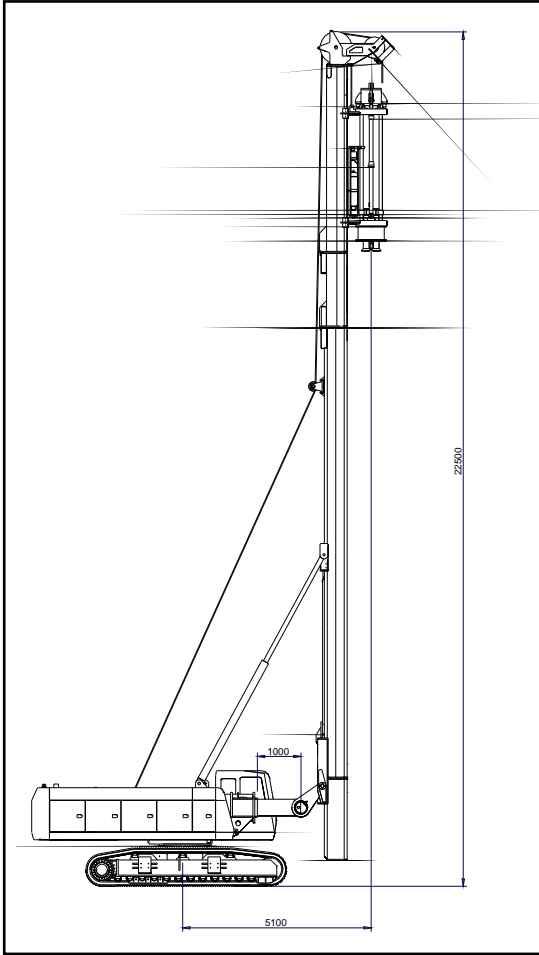
Casing oscillator

Models	1200	1600	1800	2000	2500	3000
	600	880	1200	1500	1800	2000
Max nominal diameter	1200 mm 47 in	1600 mm 63 in	1800 mm 70 in	2000 mm 78 in	2500 mm 98 in	3000 mm 118 in
Min nominal diameter	600 mm 23 in	880 mm 34 in	1200 mm 47 in	1500 mm 59 in	1800 mm 70 in	2000 mm 78 in
Max oscillating torque	1620 KNm 1193940 lbs.ft	2250 KNm 1658250 lbs.ft	3000 KNm 2211000 lbs.ft	3300 KNm 2432100 lbs.ft	3630 KNm 2675310 lbs.ft	9300 KNm 6854100 lbs.ft
Weight	10 -11 tons 22040 lbs 24240 lbs	13 -15 tons 28650 lbs 33060 lbs	17 - 18 tons 37468 lbs 39670 lbs	20 - 22 tons 44080 lbs 48488 lbs	27 - 30 tons 59508 lbs 66120 lbs	47 tons 103588 lbs

Tools of class A are available with square joints 100 mm (3,94 in) and 130 mm (5,12 in). Tools of class B with square joint of 130 mm (5,12 in) and 200 mm (7,87 in). Tools of class C are available with square joints 200 mm (7,87 in) and tools of class D with joint 100 mm (3,94 in). Hydraulic power packs and casing oscillators are also available for driving and extracting casing tubes. Also casing tubes, single or double wall, screw or fast coupling type, can be supplied shortly.



DRIVEN PILES EQUIPMENT



THH6

THH8

Characteristics

Engine	170 KW	230 HP	333 KW	450 HP
Type of hammers	8,2 tons	18072 lbs	10,5 tons	23142 lbs
Max pile length	16 m	52 ft	19 m	62 ft
Max weight of the pile	4 tons	8816 lbs	6 tons	13224 lbs
Weight	39 - 49 tons	85956 - 107996 lbs	65 - 75 tons	143260 - 165300 lbs



The THH line has been designed and built for driving piles with hydraulic impact hammers. Optimizing weight, dimensions and transmitted energy, the THH line offers the most compact and efficient equipment available on the market. MAIT also supplies its complete line of hydraulic hammers.

The THH equipment can be equipped with the following kits.

- kit for piling works with kelly bar, augers or buckets
- kit for work with continuous flight auger
- kit for piling work with double head
- kit for jet grouting drilling works
- works with hydraulic vibrators

HYDRAULIC HAMMERS



HH series

Models	<i>HH 5000</i>	<i>HH 7000</i>	<i>HH 9000</i>	<i>HH 12000</i>	<i>HH 14000</i>	<i>HH 18000</i>
RAM weight	5 tons <i>11020 lbs</i>	7 tons <i>15428 lbs</i>	9 tons <i>19836 lbs</i>	12 tons <i>26448 lbs</i>	14 tons <i>30856 lbs</i>	18 tons <i>39672 lbs</i>
Total weight	7,7 tons <i>16971 lbs</i>	10 tons <i>22040 lbs</i>	12 tons <i>26889 lbs</i>	21 tons <i>46284 lbs</i>	23,5 tons <i>51794 lbs</i>	28 tons <i>61712 lbs</i>
Max fall height	1200 mm <i>47,24 in</i>	1200 mm <i>47,24 in</i>	1200 mm <i>47,24 in</i>	1200 mm <i>47,24 in</i>	1200 mm <i>47,24 in</i>	1200 mm <i>47,24 in</i>

MAIT has developed a line of hydraulic hammers to be mounted on the THH base equipment for driving concrete piles.

The efficiency of MAIT hydraulic hammers, along with the simplicity of the design, are important factors. Thanks to their compactness, MAIT hydraulic hammers energy to weight ratios are industry leaders.

The efficiency of MAIT hydraulic hammers can be measured by an optional special device to be supplied on request.



MICROPILES, ANCHORING, JET GROUTING EQUIPMENT



GEA 400



GEA 500

Characteristics

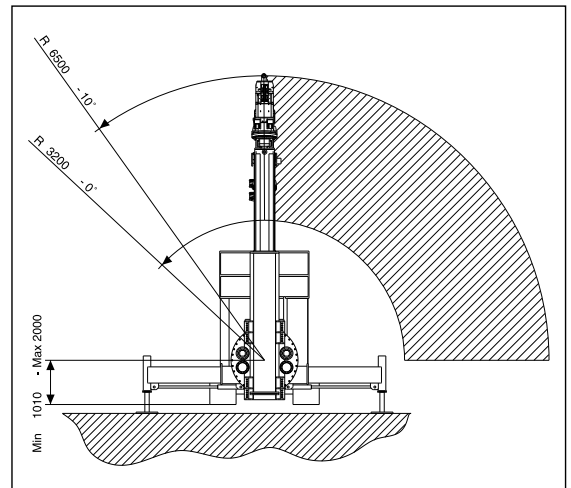
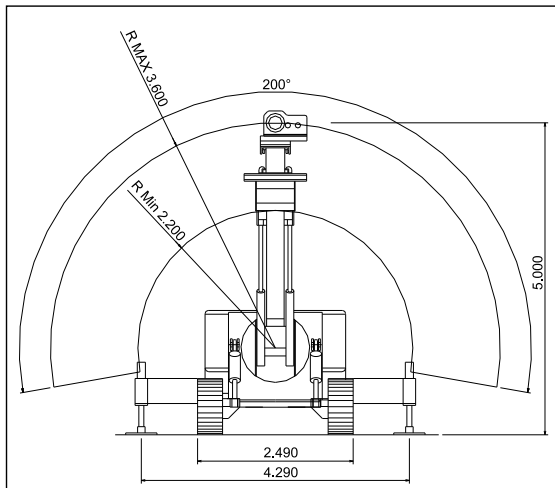
Engine	118 KW	160 HP	118 / 170 KW	160 / 230 HP
Max torque	1300 daNm	9581 lbs.ft	1.300 daNm	9581 lbs.ft
RPM	0-600 rpm		0-600 rpm	
Pull down - back	40 - 60 KN	9000 - 13500 lbs	60 - 80 KN	13500 - 18000 lbs
Rotary stroke	3400 mm	133 in	4200 mm	165 in
Hydraulic vice	320 mm	12,6 in	320 mm	12,6 in
Weight	12,5 tons	27550 lbs	15 - 16 tons	33060 - 35264 lbs



The GEA hydraulic drilling rigs have been designed for micro piles, anchoring and jet grouting work. These are particularly versatile drilling rigs with high mast articulation, whose drilling apparatus, according to the model, is mounted either on the thrust bearing or on oscillator crawler. On request, it is also possible to supply a double head or a drifter for simultaneous percussion and rotation. Different options are available among:

- triple effect oleodynamic vice
- winch
- foam pump
- bentonite pump
- mast extensions, etc.

TUNNELLING EQUIPMENT



Characteristics

GEA 500J

GEA 550J

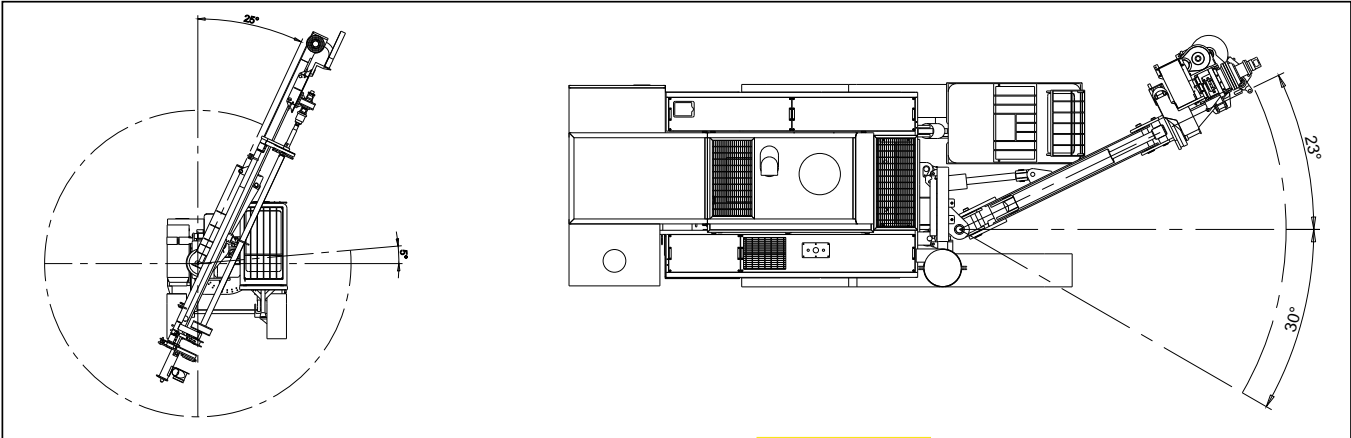
Engine	170 KW	230 HP	170 KW (diesel) 110 KW (electric)	230 HP 148 HP
Max torque	1300 daNm	9581 lbs.ft	750 / * 1300 daNm	5527,5 / *9581 lbs.ft
Rotation range	0 - 600 rpm		0 - 100 / *0 - 550 rpm	
Weight	19,5 tons	42978 lbs	35 tons	77140 lbs

* on request

The GEA J is a line of equipment for sub-horizontal drilling for micro piles (fore-poling) and jet grouting for pre-consolidation, support and drilling of large diameter tunnels.
The equipment can be supplied with single or double engine (diesel and electric).



QUARRIES EQUIPMENT



Characteristics

Q 2525

Engine	317 KW	425 HP
Rotary head	0 - 570 daNm	0 - 4200 lbs.ft
Compressor:		
Delivery	22000 - 25000 l/min	776 - 882 cu ft /min
Max pressure	25 bar	362 psi
Weight	20 tons	44080 lbs
Max depth	36 m	118 ft
Drilling diameter	105 - 180 mm	4,13 - 7,09 in
Standard kelly diameter	90 - 114 mm	3,5 - 4,5 in
Standard down the hole hammer	4" - 5" - 6"	



The Q line is specific for work in quarries and mines. Particularly powerful and compact, this line combines a powerful engine (425 HP - 317 KW) and a compressor that make this line one of the most productive on the market. The great mast articulation enables drilling in any position and an easy system of mounting and changing of the kelly bar considerably reduce idle times. In order to make spare parts easily located, internationally known high quality components are used.

WATER WELL EQUIPMENT



T 14



HIDRA 250

Characteristics

Diesel engine	49 KW	67 HP	177 KW	240 HP
Max Rotary torque	600 daNm	4422 lbs.ft	1295 daNm	9544 lbs.ft
Max speed	15 - 1100 rpm		0 - 130 rpm	
Max pullback	50 KN	11250 lbs	130 KN	29250 lbs
Max pulldown	30 KN	6750 lbs	73,5 KN	16537 lbs
Weight	4500 Kg	9918 lbs	18 tons	39672 lbs



HIDRA 500



TC 10

Characteristics

Diesel engine	207 KW	280 HP	370 / 488 KW	500 / 660 HP
Max Rotary torque	2870 daNm	21151 lbs.ft	1410 - 2000 daNm	10390 - 14740 lbs.ft
Max speed	0 - 105 rpm		0 - 110 rpm	
Max pullback	295 KN	66375 lbs	35000 - 45800 daN	78750 - 103050 lbs.ft
Max pulldown	147 KN	33075 lbs	19000 - 21000 daN	42750 - 47250 lbs.ft
Weight	24 tons	52896 lbs	30 tons	66120 lbs

The water drilling rigs are able to drill with air-foam and air-mud systems. The equipment, available in 4 models, are built according to the customer's needs, reaching depths of 100 meters and up to 700 meters maximum. These rigs are normally mounted on 2, 3 or 4 axles trucks according to the equipment size.



Mait also manufactures:

- ◆ Hydraulic drilling rigs of every size:
 - ◆ for piling, diaphragm walls, continuous flight augers
 - ◆ for water wells
 - ◆ for soil investigation, consolidation, civil engineering
 - ◆ jet grouting
- ◆ Casing oscillator
- ◆ Power packs
- ◆ Casing tubes
- ◆ Augers and buckets
- ◆ Hydraulic grabs for diaphragm walls
- ◆ Continuous flight auger
- ◆ Tremie pipes
- ◆ Teeth and bits for drilling tools

