

**IKIT.**  
**PRODUCT LINE**  
TECHNICAL SPECIFICATIONS



**INOT**®



# 1974

IMT is founded by Mr. Giulio Accorroni.

**1975**

The first innovative hydraulic drill rig (model 75 type G) is patented. Capable of drilling up to a depth of 30 meters (best market performance at the time)

**1978**

The Accorroni family buys 100% of IMT shares and Giulio Accorroni is appointed IMT's sole Director.

**1984**

Andrea Accorroni takes over IMT management following the death of his older brother, (Fabio Accorroni, Giulio's first son)

**1985**

The company introduces the 805 model, which soon becomes very successful and used for big construction projects, such as the Sagrada Familia in Barcelona, Spain.

**1992**

New innovative models are launched (i.e., sound-proof machine and model AF12, assembled on a crawler base completely produced by IMT).

**1993**

Beginning of co-operation with Caterpillar (CAT): IMT starts assembling drill rigs on CAT bases (IMT is the first drill rig manufacturer to do this; other manufacturers will soon follow the example); IMT starts a distribution agreement in North America and Canada for its drill rigs mounted on CAT bases through the CAT dealer in Miami, Kelly Tractor Company. In the same period, the technology for driven piles used in the U.S. until then starts moving towards the European piling system and the drilling equipment demand in the US market for all European manufacturers starts growing.

**1997**

IMT produces the AF50, the biggest drill rig in the world at the time, and sells no. 7 units to the Japanese multi-national company Sumitomo. Giulio and Andrea Accorroni are invited to Osaka for a lecture on the technical characteristics of the rig. The lecture is attended by the owners/directors of the biggest Japanese construction companies.

**2005**

IMT patents an innovative drilling system related to highly seismic grounds, the "Multi Rotary driven Soil Mixing Pile".

**2006-2008**

IMT increases its production range and doubles its sales. Andrea Accorroni, current President of IMT INTERNATIONAL S.p.A

**2009-2010**

IMT reacts to the global economic crisis by launching 2 new product lines in the market with traditional technology (the "AG" series, assembled on HITACHI base, and the "A" series, mounted on IMT base), and completes the first prototype of drill rig for seismic grounds, the AF460 model, which uses the patented "Multi Rotary driven Soil Mixing Pile" system. The prototype is presented at BAUMA 2010, the most important international exhibition for construction machinery. The complete production range is developed thereafter.

**2011**

IMT AGM appoints a new Board of Directors.

**2011/2013**

IMT develops the prototypes for the full range of the AF series drilling rigs with Tier 4 engines, as well as the newly-born A125 and A150 models, mounted on IMT base and powered by CAT.

**2014/2015**

IMT upgrades the A-series machines with new engines and design, and develops its own particular water well technology system.

**2016/2017**

The brand new range of A-series rigs with Tier 3 engines, completely designed and developed by IMT, and launched into the market, as well as the AF-series machines, mounted on CAT bases with Tier 4 Final engines

*Andrea Accorroni*



# IMT.



**IMT**, srl was founded in 1974 by Mr. Giulio Accorroni. Since then, the Company has concentrated on the acquisition of specific know-how for the planning and construction of hydraulic drill rigs, in constant search of high quality products and customer satisfaction.

IMT has always invested in technology and design. This policy has given life to a new plant that is on the cutting edge and whose objective is that of raising production quality even more.

In 1999, IMT was certified ISO 9001. This important, official recognition was given to IMT International S.p.A. following strict inspections carried out by authorised institutions. This confirms the quality level, which has already been appreciated over the years, all over the world.

IMT srl., like very few other companies in the field, has a global commercial and assistance network, present in over 30 countries in the world. From anywhere in the world, IMT customers know they can always count on fast and efficient 24-hours service, which ensures that all inquiries are taken care of immediately. Furthermore, all IMT models are mounted on the best known bases in the field, which gives our products reliability as well as the guarantee that spare parts can be easily found all over the world.

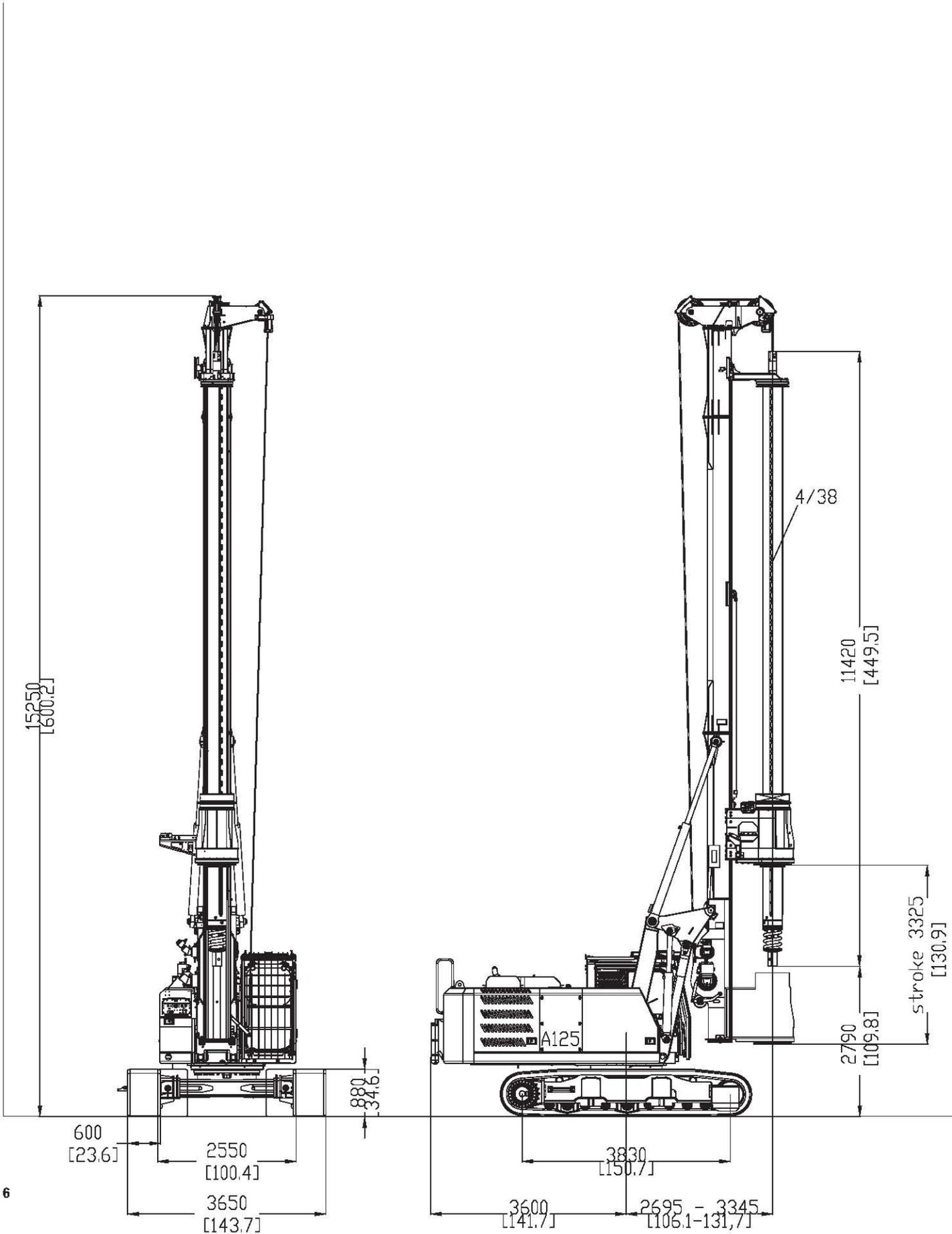
IMT's main goal, today, is not only to improve technology, but also to make our growing family of customers satisfied for have chosen IMT.



## SOLID BASIS FOR THE DIGITAL ERA

 <b>A 125</b>	6
 <b>A 140</b>	8
 <b>A 150</b>	10
 <b>A 215</b>	12
 <b>A 270</b>	14
 <b>AF 190<sub>F</sub></b>	18
 <b>AF 250<sub>F</sub></b>	20
 <b>AF 270<sub>F</sub></b>	22
 <b>AF 300<sub>F</sub></b>	24
 <b>AF 350<sub>F</sub></b>	26
 <b>AF 460</b>	28

# A 125



### Rotary

Installed torque	kNm	122
	lbf ft	90000
Working speed	rpm	7,5 - 27
Discharge speed	rpm	45 - 120

### Winches

Main winch pull force	kN	123
	lbf	27655
Main winch speed	m/min	90
	ft/min	295
Main winch Cable diameter	mm	22
	in	/
Auxiliary winch pull force	kN	60
	lbf	13490
Auxiliary winch Speed	m/min	90
	ft/min	295
Auxiliary winch Cable diameter	mm	15
	in	/

### Crowd system

Kelly crowd push	kN	100
	lbf	22485
Kelly crowd pull	kN	165
	lbf	37095
Stroke (mm)	mm	3325
	in	131

### Mast

Mast raking forward		5°
Mast side raking		±5°
Mast raking backwards		15°
Pile max. diameter	mm	1500
	in	60

### Kelly bar

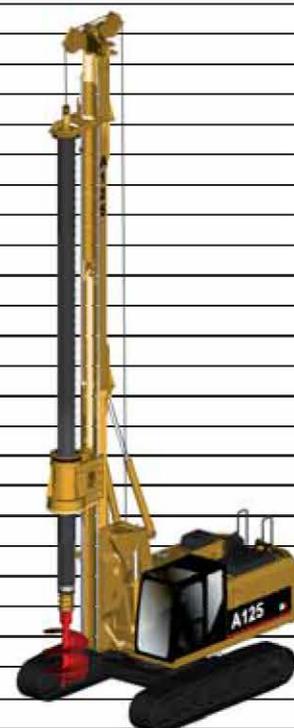
Standard		4/38
Options available		4/34 - 5/47

### Base

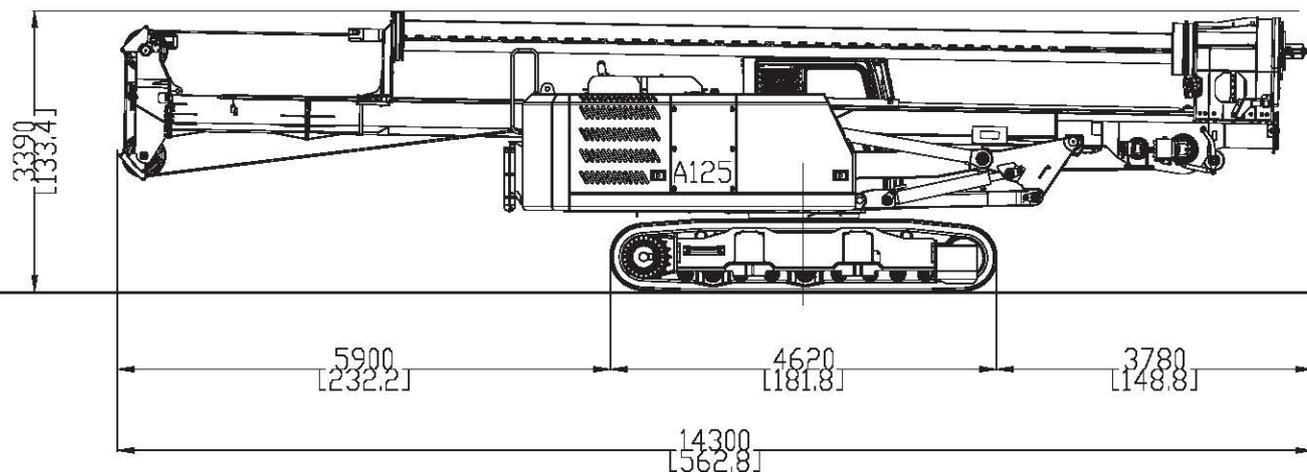
Undercarriage length / widening range / shoe	mm	IMT
	in	CAT 4620/2550 - 3650/600
Engine type		182/100 - 144/23,6
Power	KW	CAT C6.6 TIER 4I
		122KW (164HP)@1800 rpm

### Weight

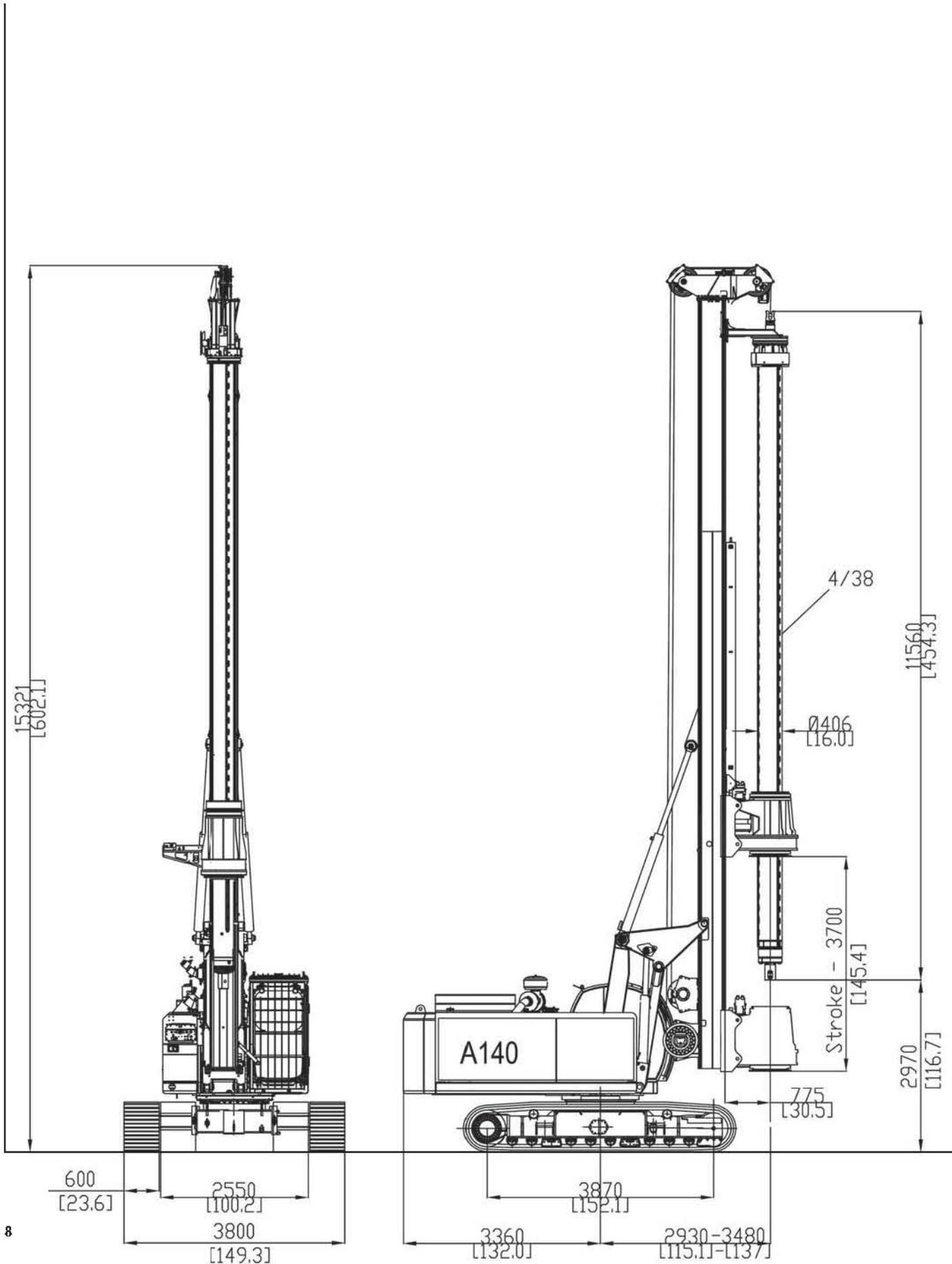
Operating Weight w/standard kelly bar	t (metric)	36,8
	lbs	81130



All technical data are indicatives and subject to change without notice.



# A 140



## Rotary

Installed torque	kNm	150
	lbf ft	110600
Working speed	rpm	7,5 - 25
Discharge speed	rpm	45 - 112

## Winches

Main winch pull force	kN	145
	lbf	32600
Main winch speed	m/min	90
	ft/min	295
Main winch Cable diameter	mm	22
	in	/
Auxiliary winch pull force	kN	60
	lbf	13490
Auxiliary winch Speed	m/min	90
	ft/min	295
Auxiliary winch Cable diameter	mm	15
	in	/

## Crowd system

Kelly crowd push	kN	110
	lbf	24730
Kelly crowd pull	kN	175
	lbf	39345
Stroke (mm)	mm	3700
	in	146

## Mast

Mast raking forward		5°
Mast side raking		± 5°
Mast raking backwards		15°
Pile max. diameter	mm	1500
	in	60

## Kelly bar

Standard		4/38
Options available		4/34 - 5/47 - 6/57

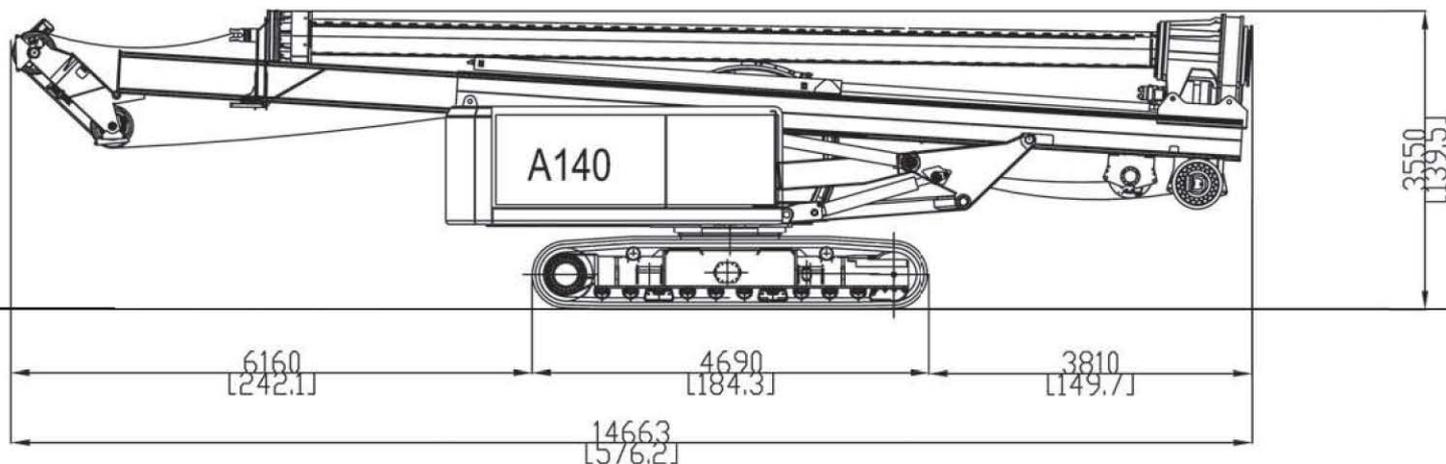
## Base

Undercarriage length / widening range / shoe	mm	4690/2550 - 3800/600
	in	185/100 - 149,3/23,6
Engine type		Cummins QSB 6,7 T3/T4
Power	KW	169KW (227 HP) @1900 rpm

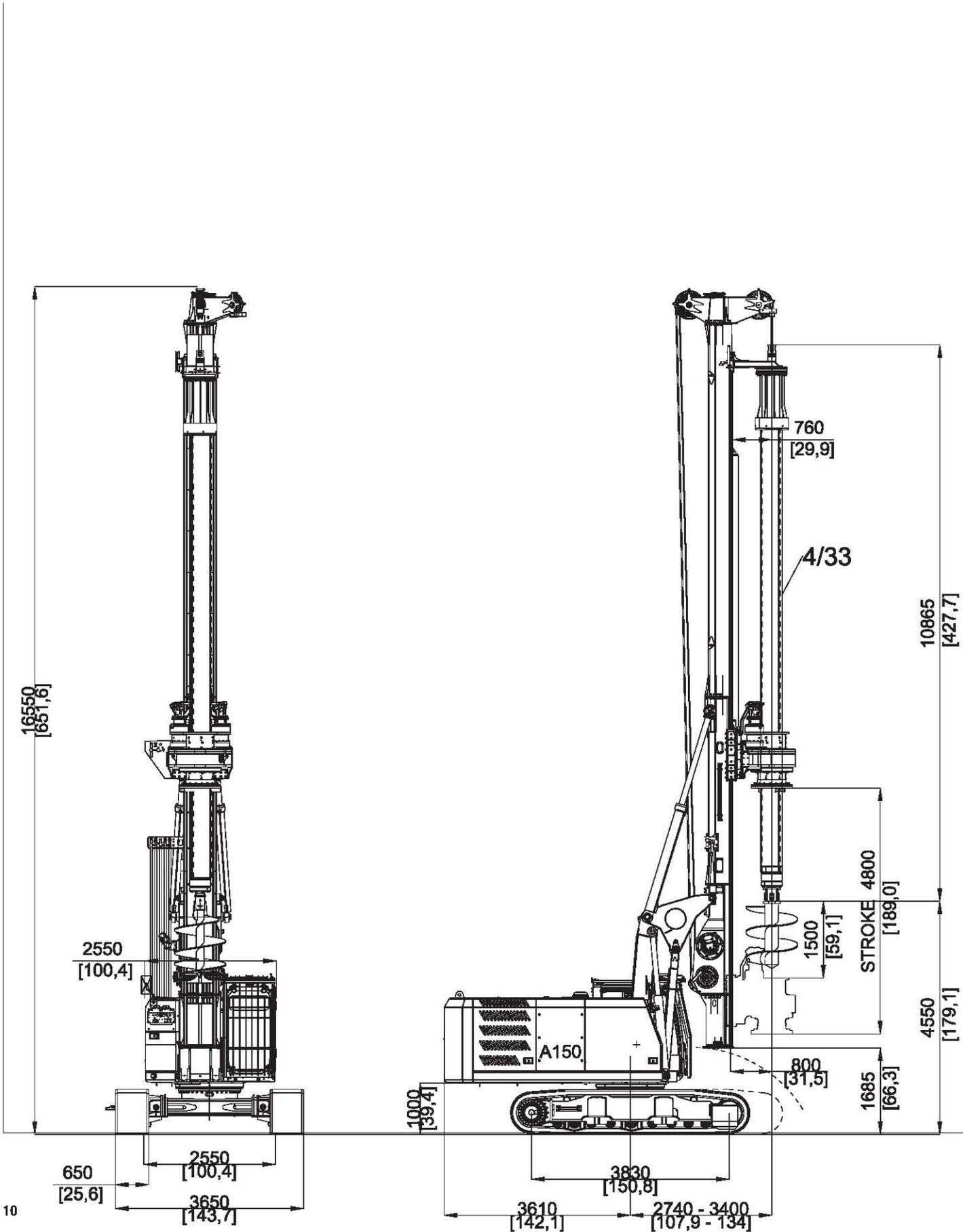
## Weight

Operating Weight w/standard kelly bar	t(metric)	37
	lbs	81580

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# A 150



## Rotary

Installed torque	<b>kNm</b>	160
	<b>lbf ft</b>	118010
Working speed	<b>rpm</b>	8 - 28
Discharge speed	<b>rpm</b>	40 - 110

## Winches

Main winch pull force	<b>kN</b>	155
	<b>lbf</b>	34850
Main winch speed	<b>m/min</b>	80
	<b>ft/min</b>	262
Main winch Cable diameter	<b>mm</b>	24
	<b>in</b>	/
Auxiliary winch pull force	<b>kN</b>	75
	<b>lbf</b>	16865
Auxiliary winch Speed	<b>m/min</b>	75
	<b>ft/min</b>	246
Auxiliary winch Cable diameter	<b>mm</b>	18
	<b>in</b>	/

## Crowd system

Kelly crowd push	<b>kN</b>	160
	<b>lbf</b>	35970
Kelly crowd pull	<b>kN</b>	200
	<b>lbf</b>	44965
Stroke (mm)	<b>mm</b>	4800
	<b>in</b>	189

## Mast

Mast raking forward		5°
Mast side raking		+5°
Mast raking backwards		15°
Pile max. diameter	<b>mm</b>	1600
	<b>in</b>	63

## Kelly bar

Standard		4/33
Options available		4/35 - 5/42 - 5/20 LCA

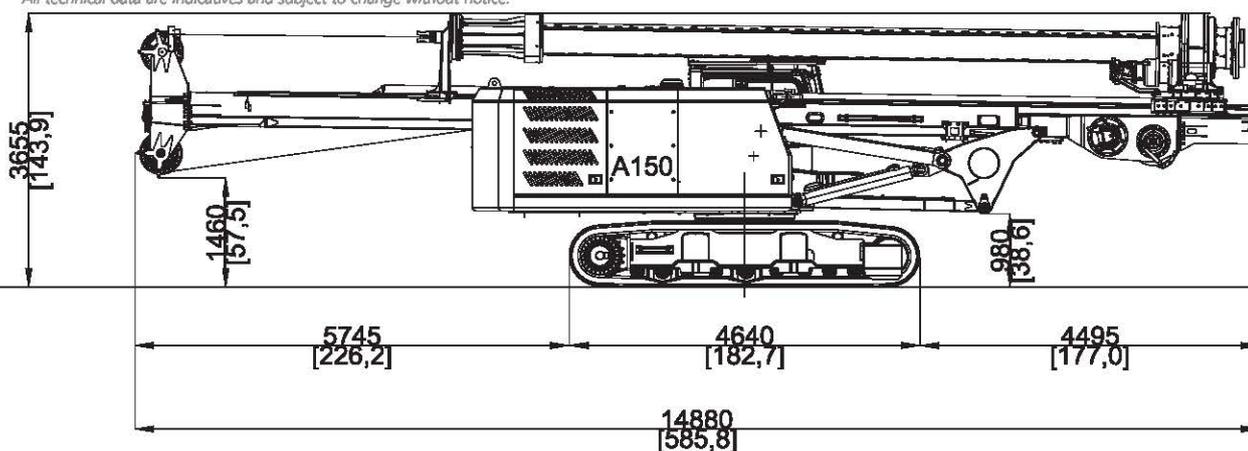
## Base

		<b>IMT</b>
Undercarriage length / widening range / shoe	<b>mm</b>	CAT 4640/2550 - 3650/650
	<b>in</b>	182,7/100 - 144/25,5
Engine type		CAT C7.1 TIER 4i
Power	<b>KW</b>	161KW (216HP)@1800 rpm

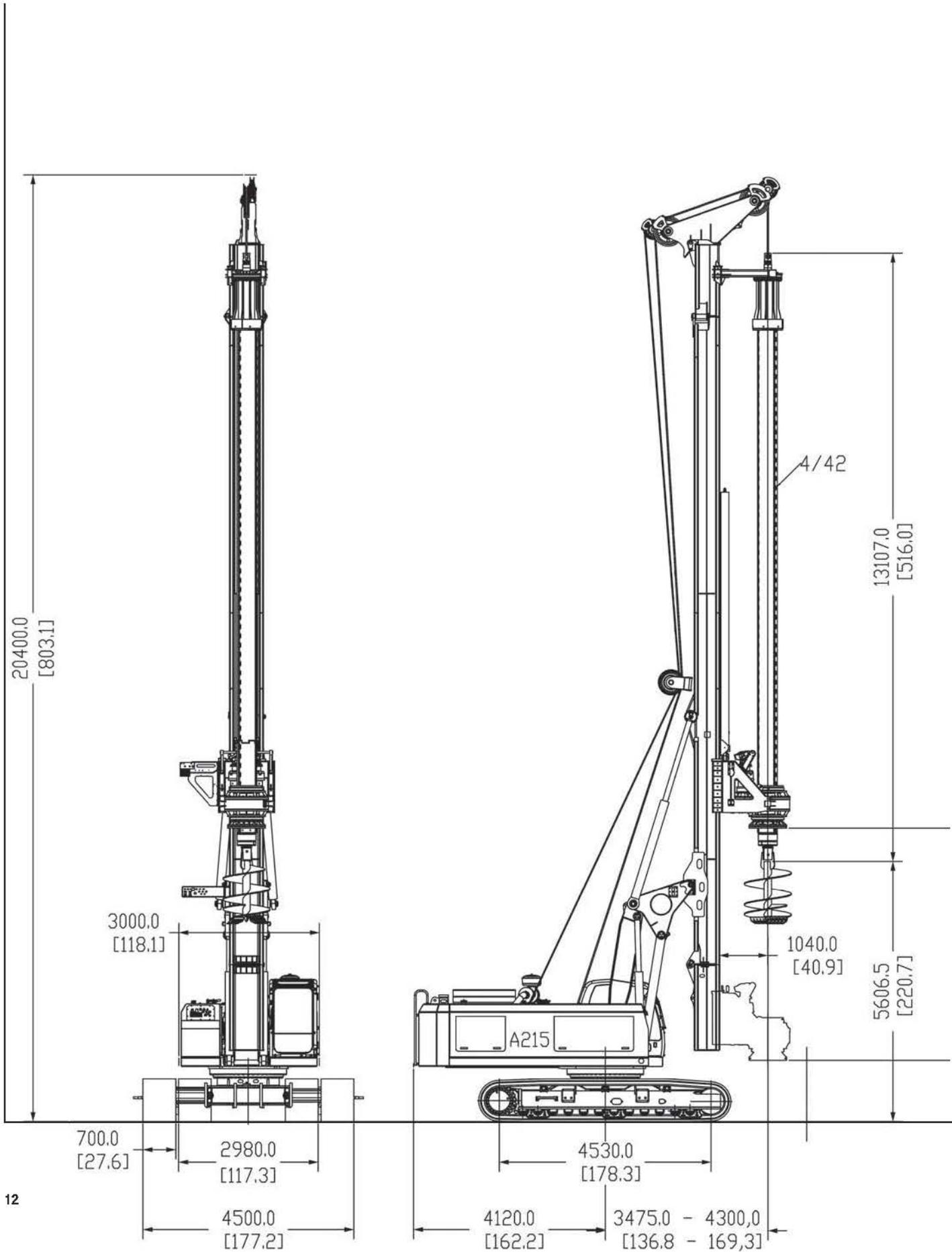
## Weight

Operating Weight w/standard kelly bar	<b>t(metric)</b>	46,7
	<b>lbs</b>	103000
Operating Weight w/o standard kelly bar	<b>t(metric)</b>	40,7
	<b>lbs</b>	89800
Operating Weight w/5/20 kelly bar in LCA configuration	<b>t(metric)</b>	43
	<b>lbs</b>	94800

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# A 215



### Rotary

Installed torque	kNm	215
	lbf ft	158580
Working speed	rpm	13 - 28
Discharge speed	rpm	64 - 104

### Winches

Main winch pull force	kN	200
	lbf	44965
Main winch speed	m/min	60
	ft/min	197
Main winch Cable diameter	mm	26
	in	/
Auxiliary winch pull force	kN	80
	lbf	17985
Auxiliary winch Speed	m/min	50
	ft/min	164
Auxiliary winch Cable diameter	mm	20
	in	/

### Crowd system

Kelly crowd push	kN	180
	lbf	40470
Kelly crowd pull	kN	200
	lbf	44965
Stroke (mm)	mm	5000
	in	197

### Mast

Mast raking forward		4°
Mast side raking		± 5°
Mast raking backwards		15°
Pile max. diameter	mm	2000
	in	79

### Kelly bar

Standard		4/42
Options available		4/46 - 4/48 - 5/60

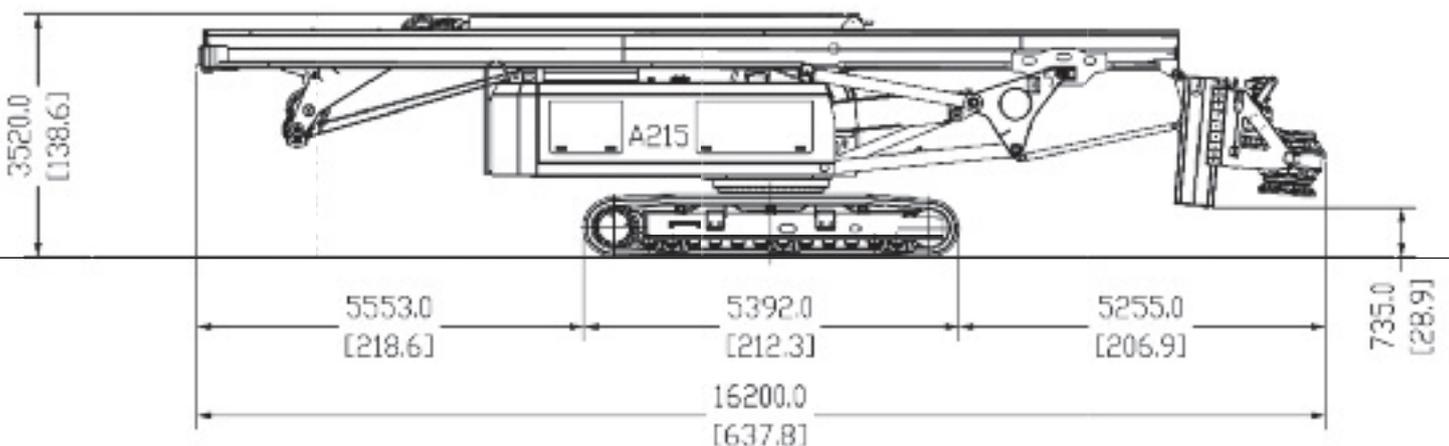
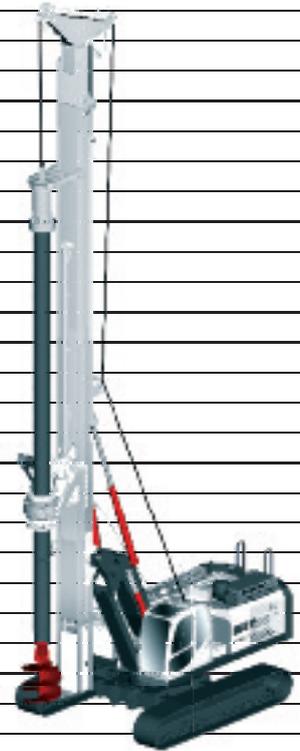
### Base

Undercarriage length / widening range / shoe	mm	IMT 5392/2980 - 4500/700
	in	212/117 - 177/27,5
Engine type		Cummins QSL 9 T3/T4
Power	KW	254 KW (340 HP) @1800 rpm

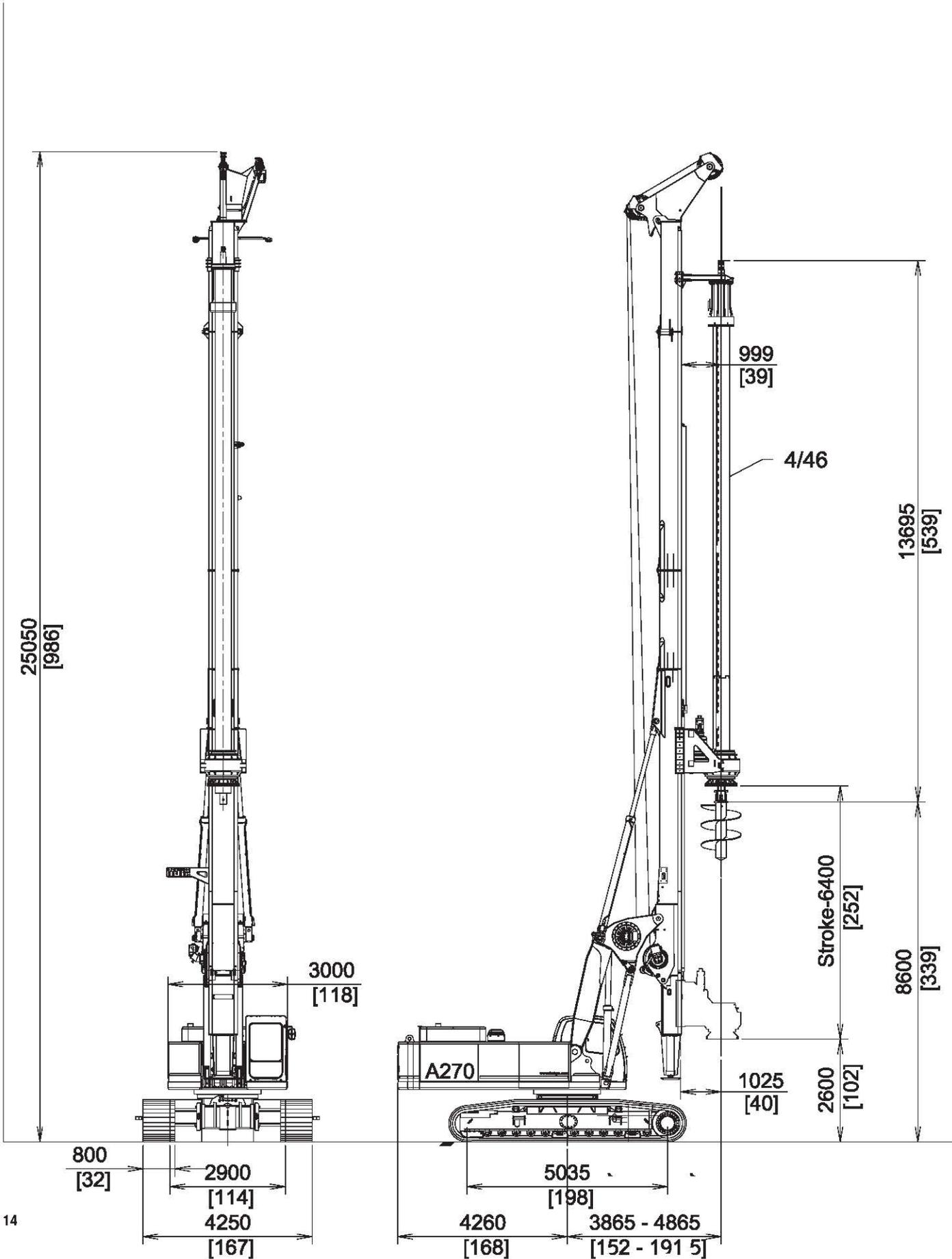
### Weight

Operating Weight w/standard kelly bar	t (metric)	60
	lbs	132280

All technical data are indicatives and subject to change without notice.



# A 270



## Rotary

Installed torque	kNm	275
	lbf ft	202830
Working speed	rpm	8 - 30
Discharge speed	rpm	48 - 115

## Winches

Main winch pull force	kN	250
	lbf	56200
Main winch speed	m/min	73
	ft/min	240
Main winch Cable diameter	mm	28
	in	/
Auxiliary winch pull force	kN	120
	lbf	26980
Auxiliary winch Speed	m/min	80
	ft/min	262
Auxiliary winch Cable diameter	mm	22
	in	/

## Crowd system

Kelly crowd push	kN	300
	lbf	67445
Kelly crowd pull	kN	390
	lbf	87680
Stroke (mm)	mm	6400
	in	252

## Mast

Mast raking forward		5°
Mast side raking		-8°
Mast raking backwards		15°
Pile max. diameter	mm	2000
	in	79

## Kelly bar

Standard		4/46
Options available		4/35 - 4/52 - 5/50 - 5/66 - 5/70

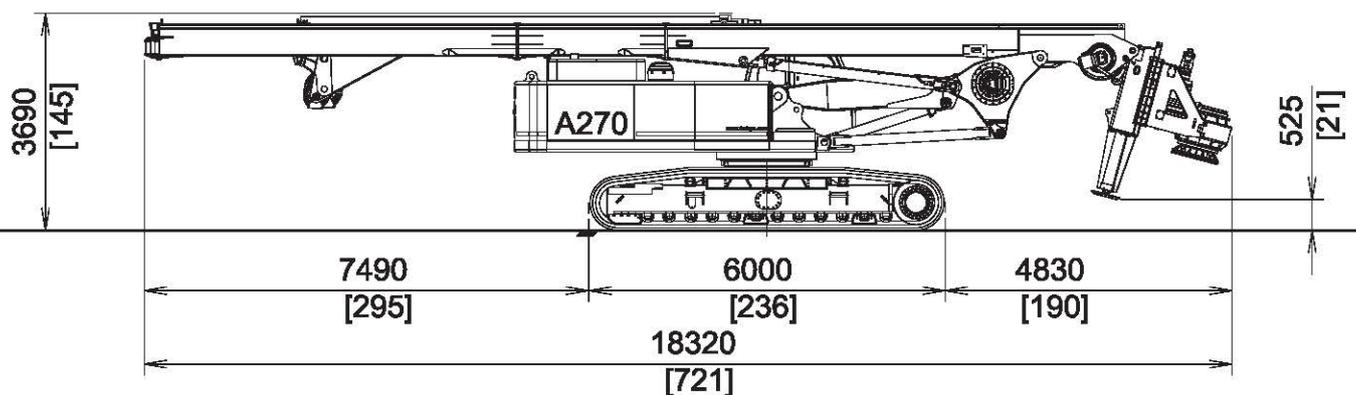
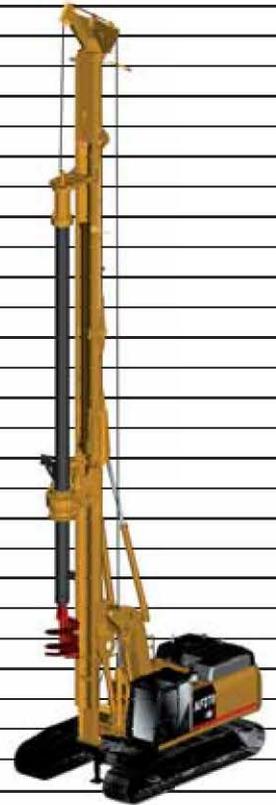
## Base

Undercarriage length / widening range / shoe	mm	6000/2900 - 4250/800
	in	236/114 - 167/31,5
Engine type		CAT C13 T3/T4
Power	KW	328KW (440HP)@1800 rpm

## Weight

Operating Weight w/standard kelly bar	t (metric)	74
	lbs	164640

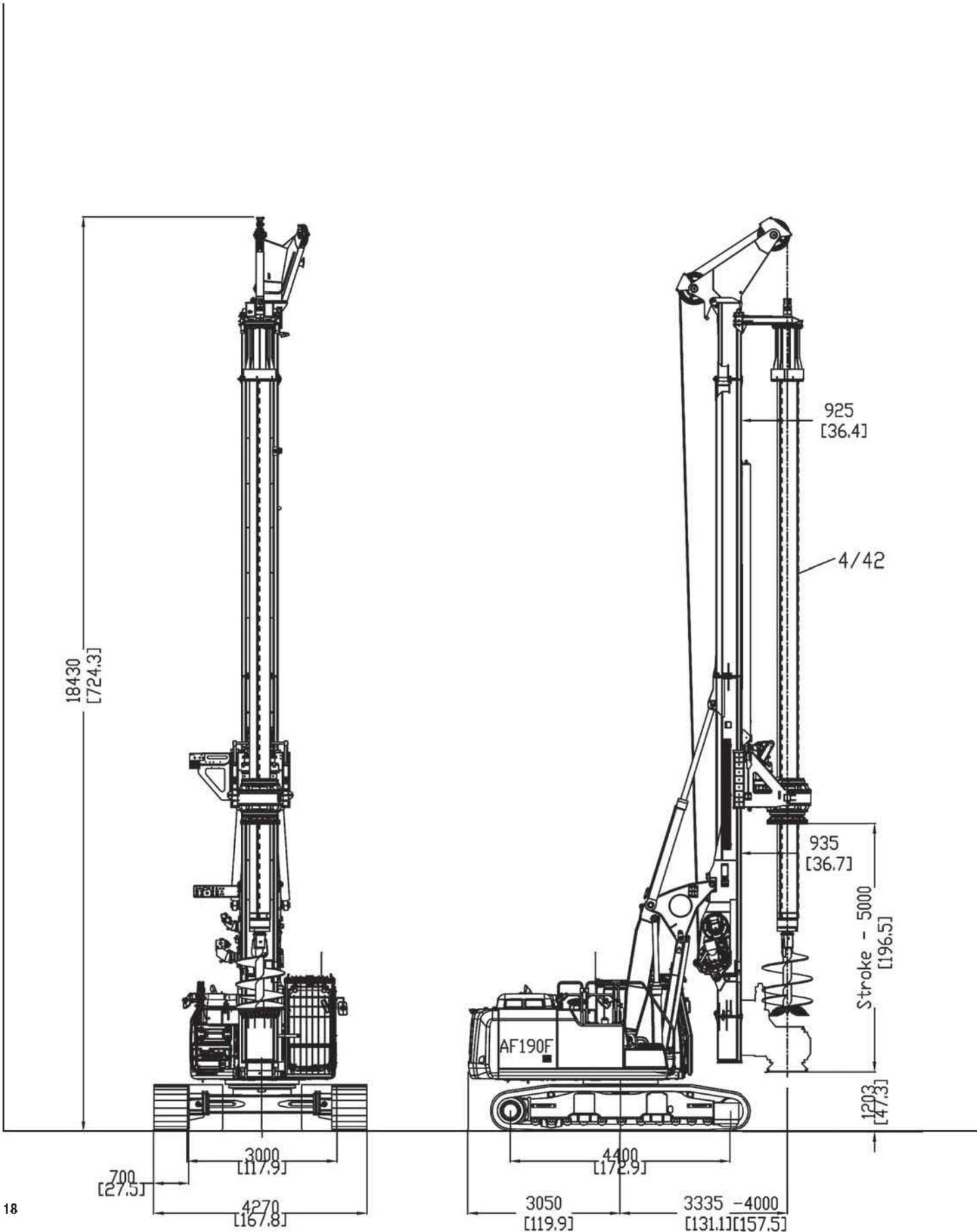
All technical data are Indicatives and subject to change without notice.







# AF 190F



### Rotary

Installed torque	kNm	205
	lbf ft	151205
Working speed	rpm	7 - 27
Discharge speed	rpm	40 - 110

### Winches

Main winch pull force	kN	200
	lbf	44965
Main winch speed	m/min	85
	ft/min	279
Main winch Cable diameter	mm	26
	in	/
Auxiliary winch pull force	kN	80
	lbf	17985
Auxiliary winch Speed	m/min	85
	ft/min	279
Auxiliary winch Cable diameter	mm	18
	in	/

### Crowd system

Kelly crowd push	kN	180
	lbf	40470
Kelly crowd pull	kN	200
	lbf	44965
Stroke (mm)	mm	5000
	in	197

### Mast

Mast raking forward		5°
Mast side raking		±5°
Mast raking backwards		15°
Pile max. diameter	mm	1800
	in	71

### Kelly bar

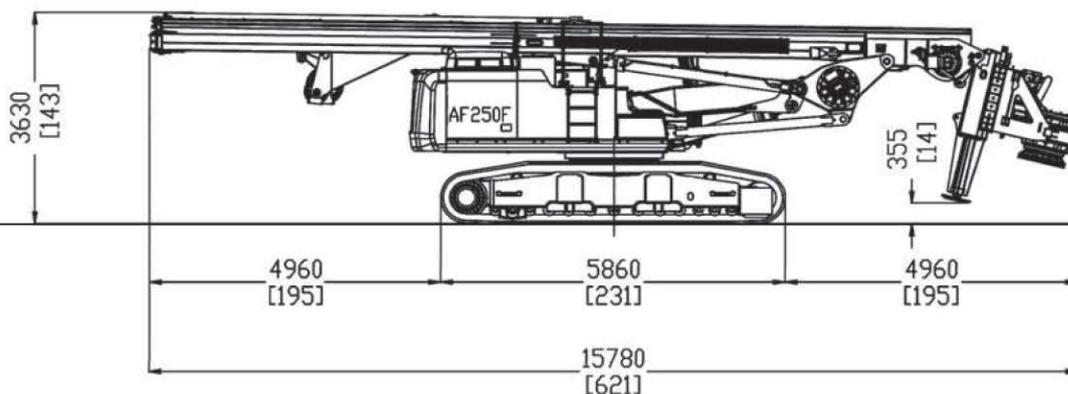
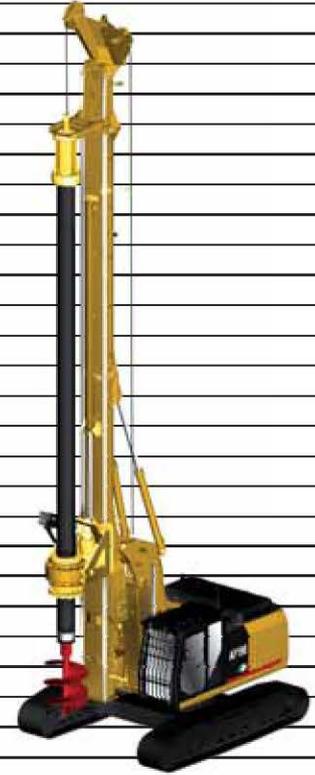
Standard		4/42
Options available		4/46 - 4/48 - 5/60

### Base

Undercarriage length / widening range / shoe	mm	Caterpillar 330F
	in	CAT 5210/3000 - 4270/700
Engine type		CAT C7.1 TIER 4F
Power	KW	178KW (239HP)@1750 rpm

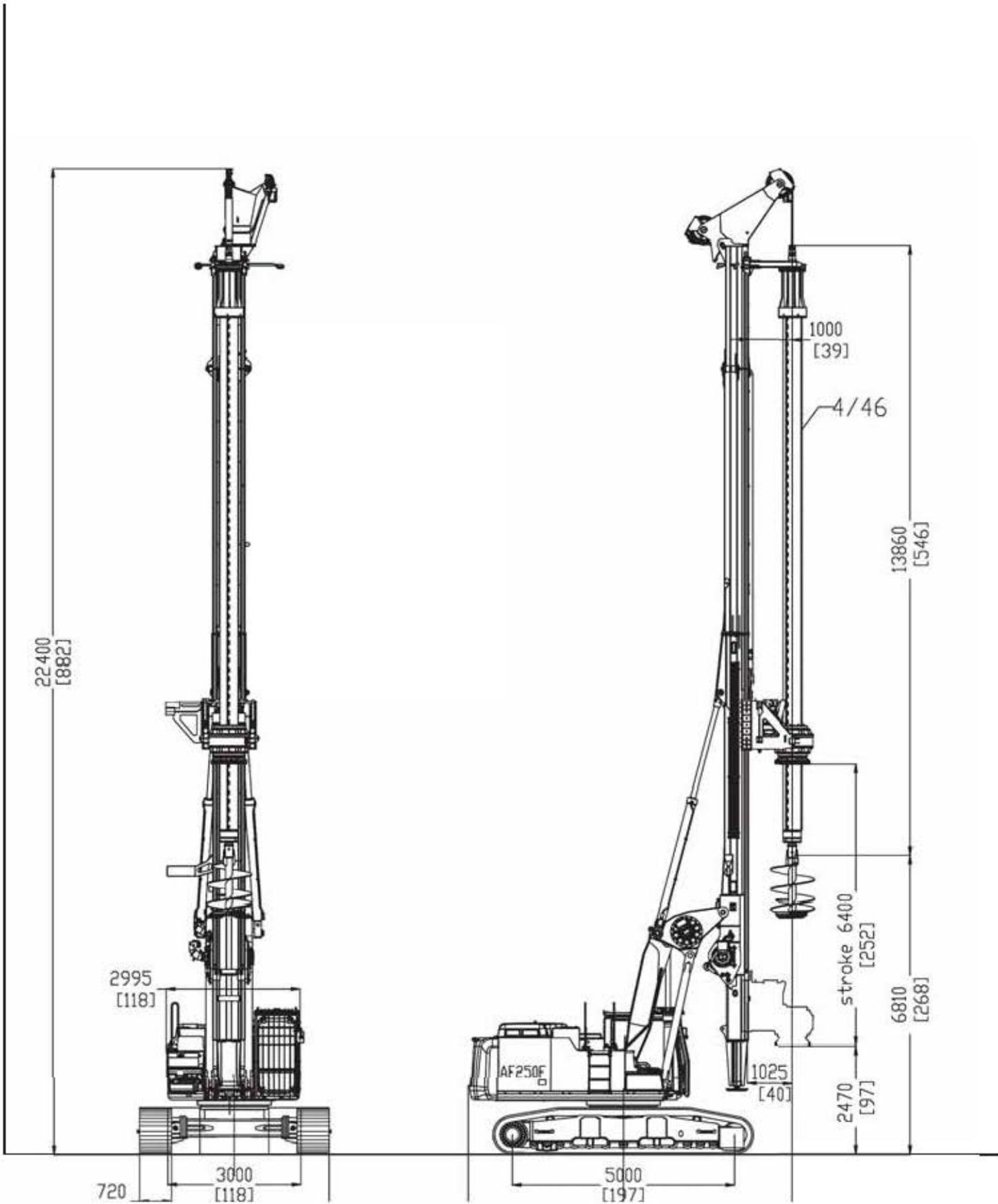
### Weight

Operating Weight w/standard kelly bar	t(metric)	55
	lbs	121255



All technical data are indicatives and subject to change without notice.

# AF 270F



## Rotary

Installed torque	kNm	260
	lbf ft	191770
Working speed	rpm	7 - 27
Discharge speed	rpm	45 - 110

## Winches

Main winch pull force	kN	240
	lbf	53955
Main winch speed	m/min	73
	ft/min	240
Main winch Cable diameter	mm	28
	in	/
Auxiliary winch pull force	kN	120
	lbf	26980
Auxiliary winch Speed	m/min	80
	ft/min	262
Auxiliary winch Cable diameter	mm	22
	in	/

## Crowd system

Kelly crowd push	kN	250
	lbf	56205
Kelly crowd pull	kN	390
	lbf	87680
Stroke (mm)	mm	6400
	in	252

## Mast

Mast raking forward		5°
Mast side raking		+8°
Mast raking backwards		15°
Pile max. diameter	mm	2000
	in	79

## Kelly bar

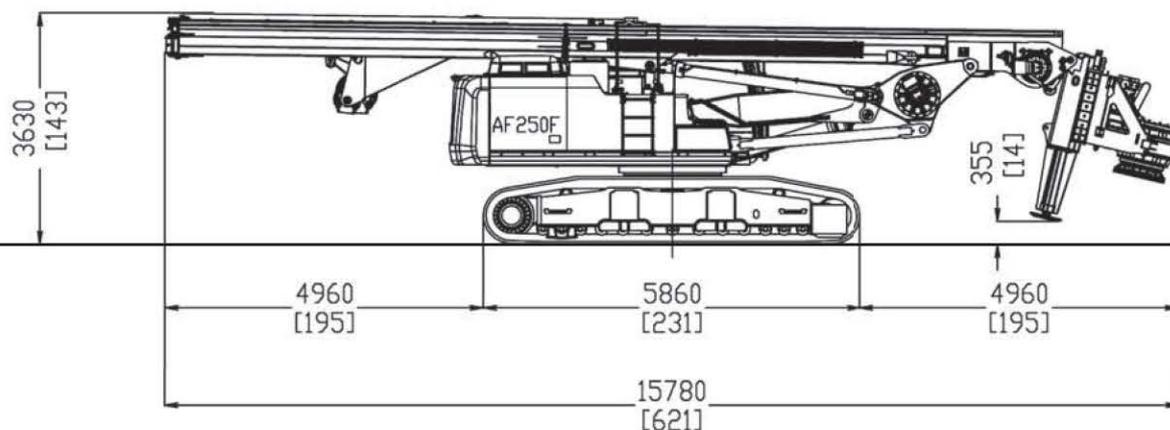
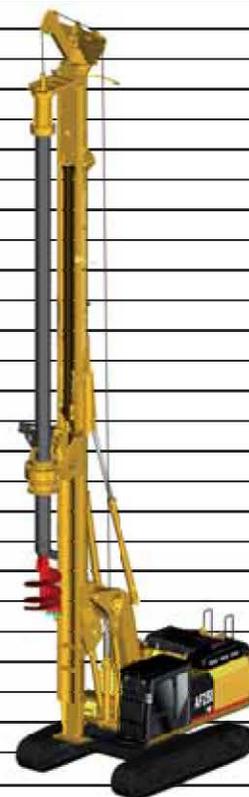
Standard		4/46
Options available		4/48 - 5/66

## Base

Undercarriage length / widening range / shoe	mm	Caterpillar 336F
	in	CAT 5860/3000 - 4270/720
Engine type		231/118 - 169/28,5
Power	KW	CAT C9.3 TIER 4F
		241KW (323HP)@1500 rpm

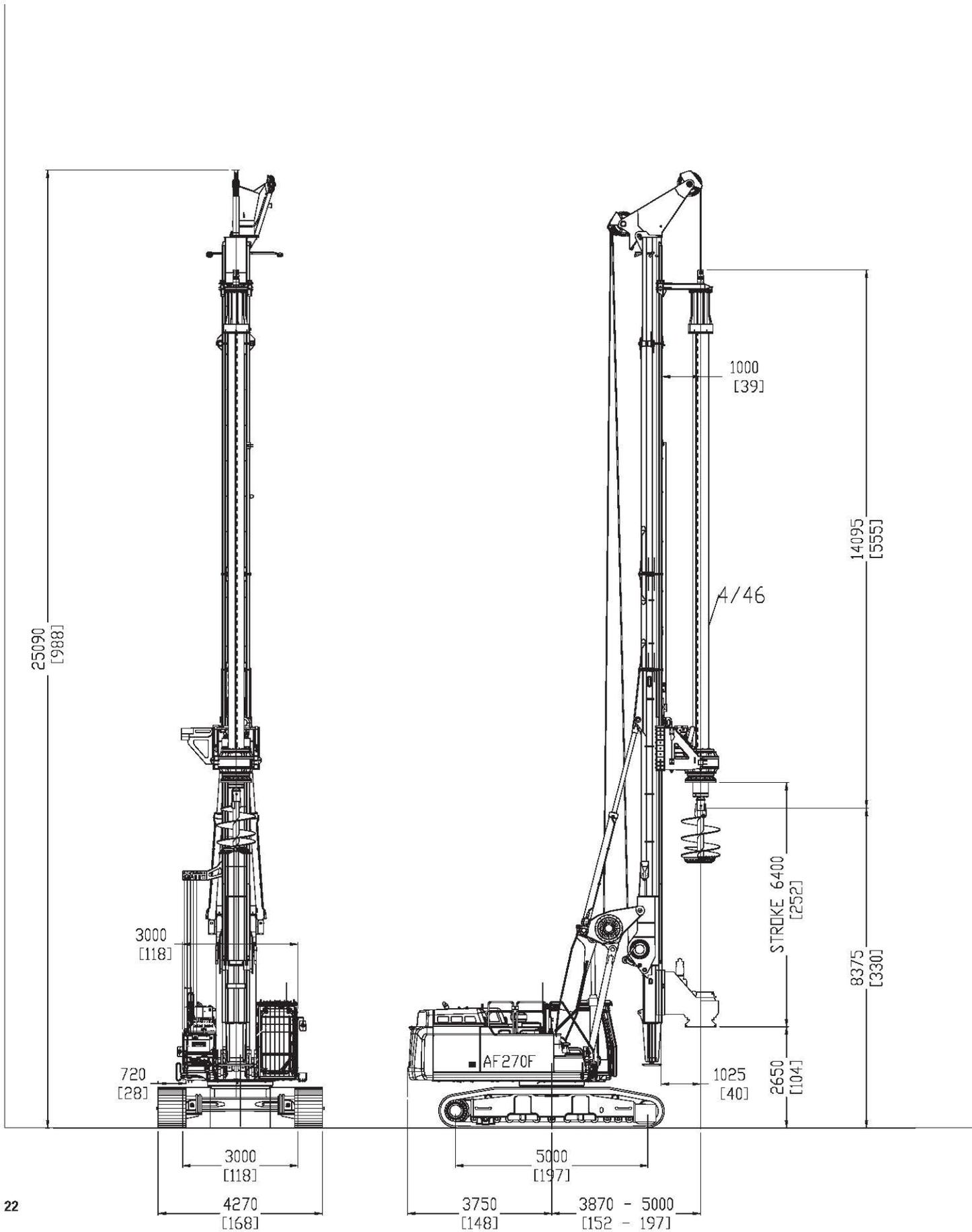
## Weight

Operating Weight w/standard kelly bar	t(metric)	70
	lbs	152120



All technical data are indicative and subject to change without notice.

# AF 270F



## Rotary

Installed torque	kNm	275
	lbf ft	202830
Working speed	rpm	8 - 30
Discharge speed	rpm	48 - 115

## Winches

Main winch pull force	kN	250
	lbf	56205
Main winch speed	m/min	73
	ft/min	240
Main winch Cable diameter	mm	28
	in	/
Auxiliary winch pull force	kN	120
	lbf	26980
Auxiliary winch Speed	m/min	80
	ft/min	262
Auxiliary winch Cable diameter	mm	22
	in	/

## Crowd system

Kelly crowd push	kN	300
	lbf	67445
Kelly crowd pull	kN	390
	lbf	87680
Stroke (mm)	mm	6400
	in	252

## Mast

Mast raking forward		5°
Mast side raking		±8°
Mast raking backwards		15°
Pile max. diameter	mm	2000
	in	79

## Kelly bar

Standard		4/46
Options available		4/35 - 4/52 - 5/50 - 5/66 - 5/70

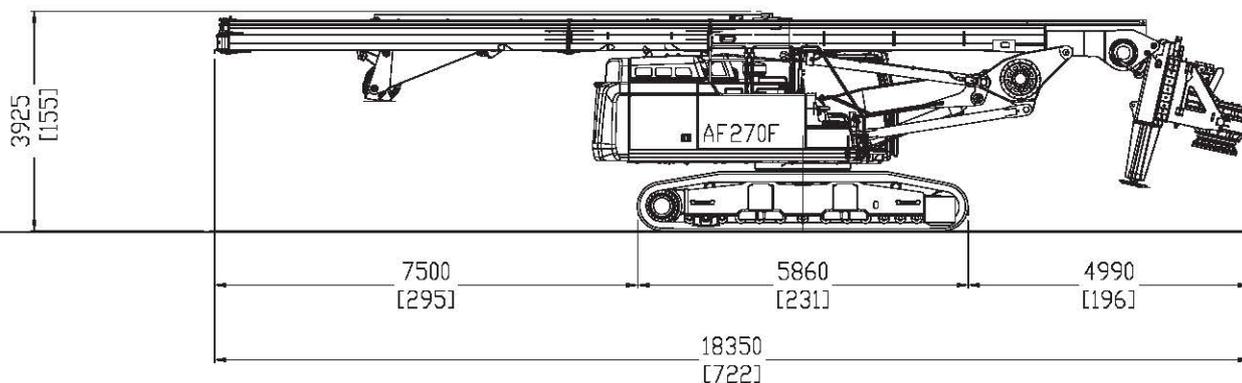
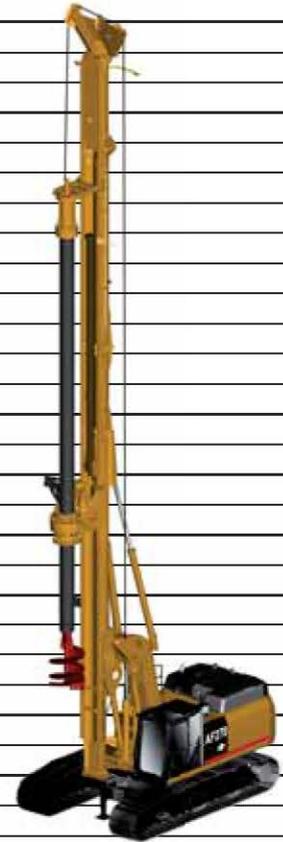
## Base

Undercarriage length / widening range / shoe	mm	Caterpillar 352F 5860/3000 - 4270/720
	in	231/118 - 168/28,3
Engine type		CAT C13 TIER 4F
Power	KW	322KW (432HP)@1800 rpm

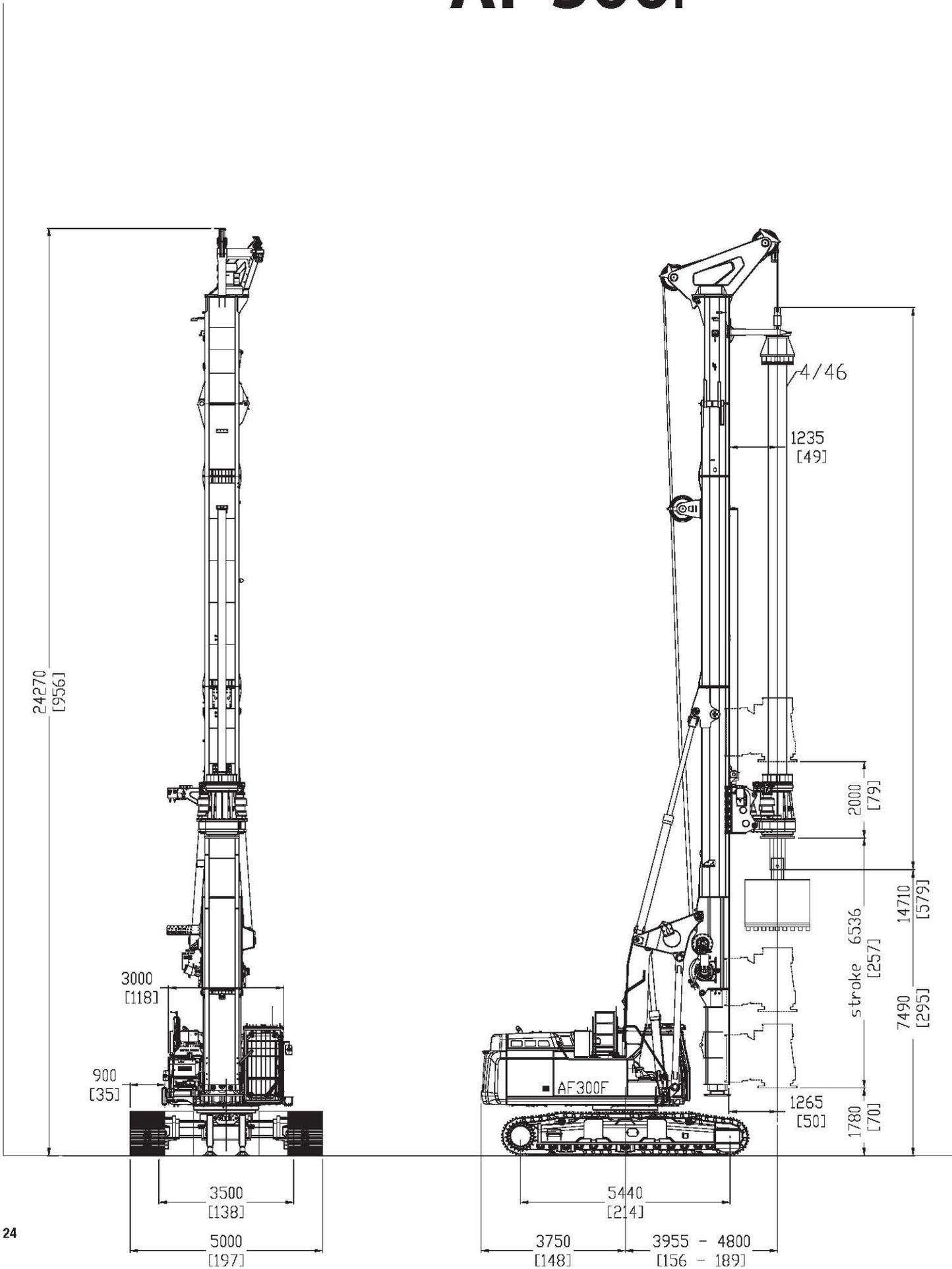
## Weight

Operating Weight w/standard kelly bar	t(metric)	76
	lbs	165350

All technical data are indicatives and subject to change without notice.



# AF 300F



### Rotary

Installed torque	<b>kNm</b>	310
	<b>lbf ft</b>	228645
Working speed	<b>rpm</b>	6,5 - 28
Discharge speed	<b>rpm</b>	45 - 110

### Winches

Main winch pull force	<b>kN</b>	300
	<b>lbf</b>	67445
Main winch speed	<b>m/min</b>	70
	<b>ft/min</b>	230
Main winch Cable diameter	<b>mm</b>	32
	<b>in</b>	/
Auxiliary winch pull force	<b>kN</b>	150
	<b>lbf</b>	33725
Auxiliary winch Speed	<b>m/min</b>	80
	<b>ft/min</b>	262
Auxiliary winch Cable diameter	<b>mm</b>	20
	<b>in</b>	/

### Crowd system

Kelly crowd push	<b>kN</b>	350
	<b>lbf</b>	78685
Kelly crowd pull	<b>kN</b>	390
	<b>lbf</b>	87680
Stroke (mm)	<b>mm</b>	6536
	<b>in</b>	257

### Mast

Mast raking forward		5°
Mast side raking		±5°
Mast raking backwards		15°
Pile max. diameter	<b>mm</b>	2500
	<b>in</b>	99

### Kelly bar

Standard		4/46
Options available		3/35 - 4/50 - 5/50 - 5/64 - 6/75

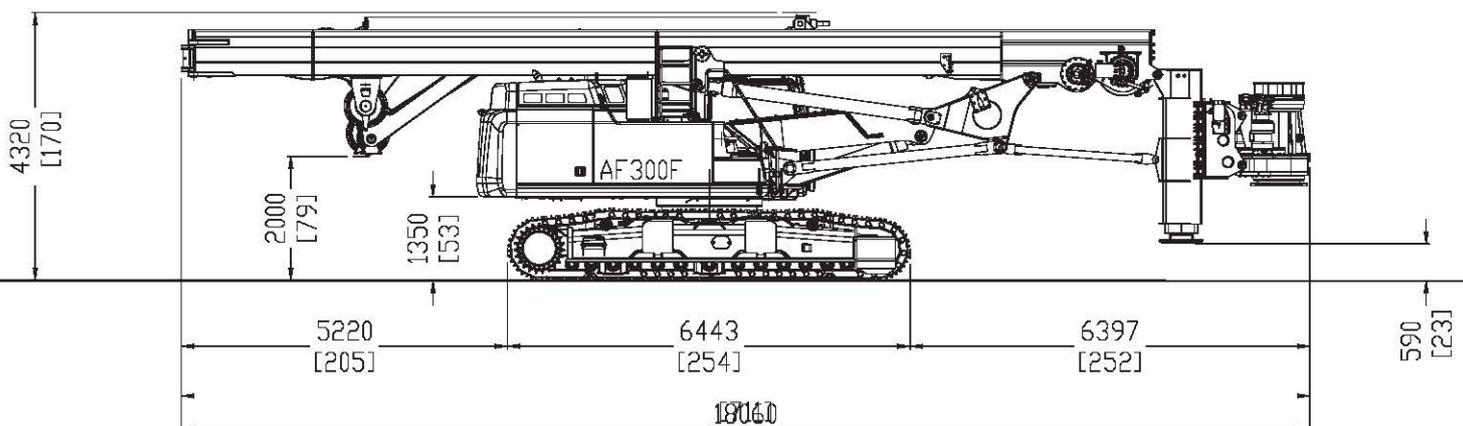
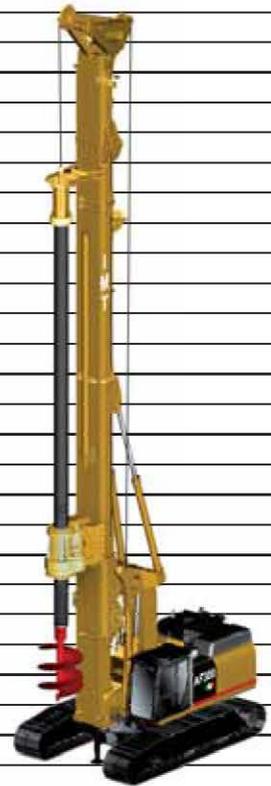
### Base

Undercarriage length / widening range / shoe	<b>mm</b>	<b>Caterpillar 352F</b> CAT 6440/3500 - 5000/900
	<b>in</b>	253/137 - 193/35,4
Engine type		CAT C13 TIER 4 F
Power	<b>KW</b>	322KW (432HP)@1800 rpm

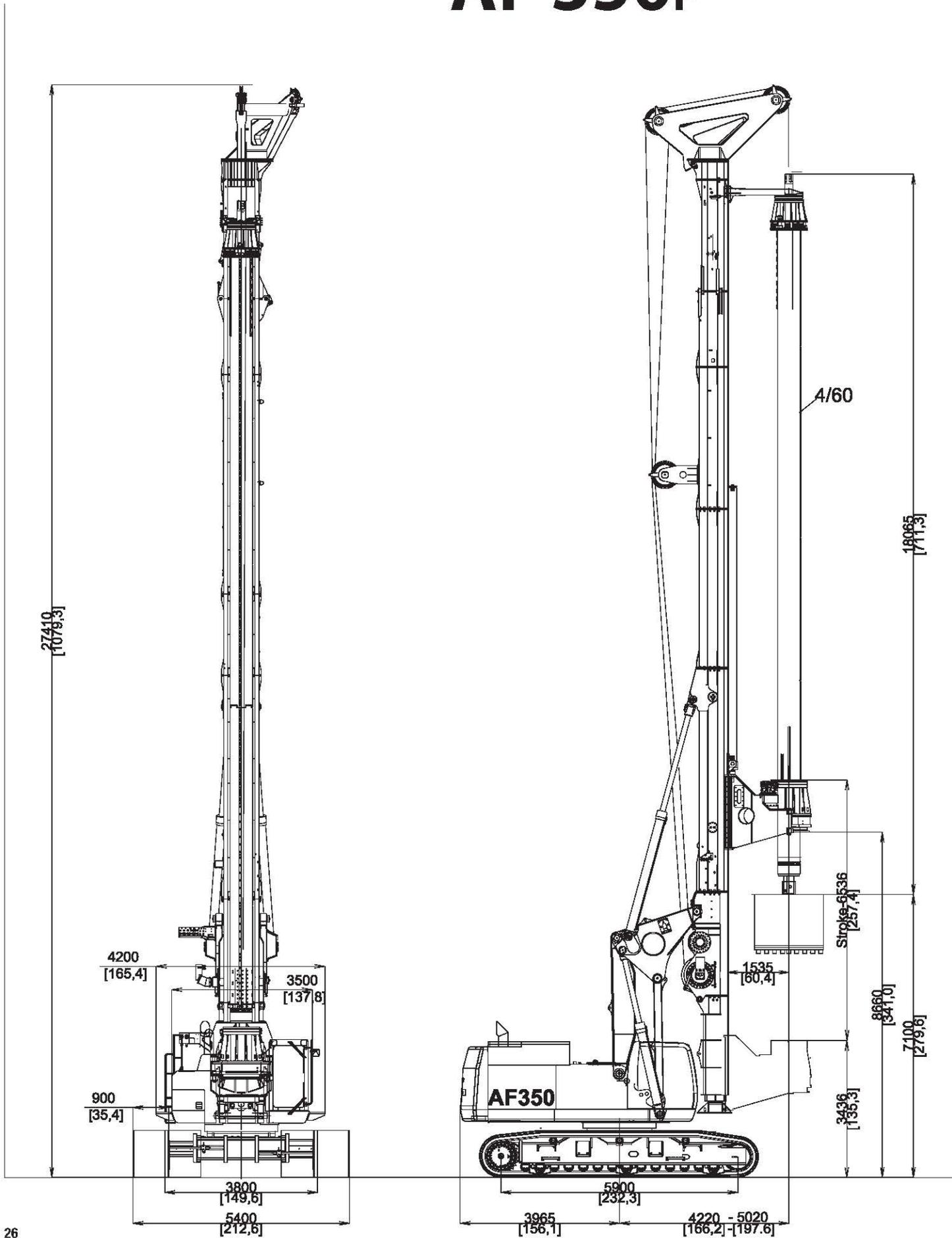
### Weight

Operating Weight w/standard kelly bar	<b>t(metric)</b>	100
	<b>lbs</b>	220462

All technical data are indicatives and subject to change without notice.



# AF 350F



**Rotary**

Installed torque	kNm	350
	lbf ft	
Working speed	rpm	7 - 24
Discharge speed	rpm	60 - 90

**Winches**

Main winch pull force	kN	330
	lbf	74187
Main winch speed	m/min	50
	ft/min	164
Main winch Cable diameter	mm	34
	in	/
Auxiliary winch pull force	kN	140
	lbf	31473
Auxiliary winch Speed	m/min	80
	ft/min	262
Auxiliary winch Cable diameter	mm	22
	in	/

**Crowd system**

Kelly crowd push	kN	350
	lbf	78683
Kelly crowd pull	kN	390
	lbf	87675
Stroke (mm)	mm	6536
	in	257

**Mast**

Mast raking forward		5°
Mast side raking		±5°
Mast raking backwards		15°
Pile max. diameter	mm	3000
	in	118

**Kelly bar**

Standard		4/60
Options available		3/35 - 4/50 - 4/76 - 5/64 - 5/90

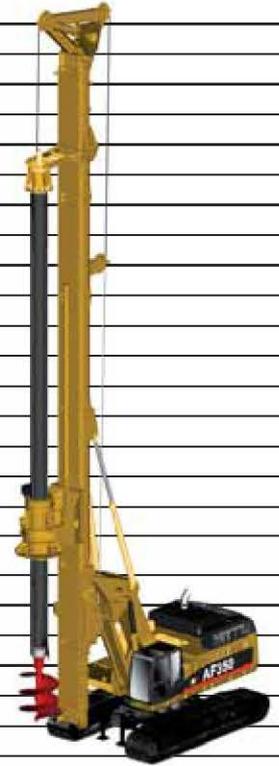
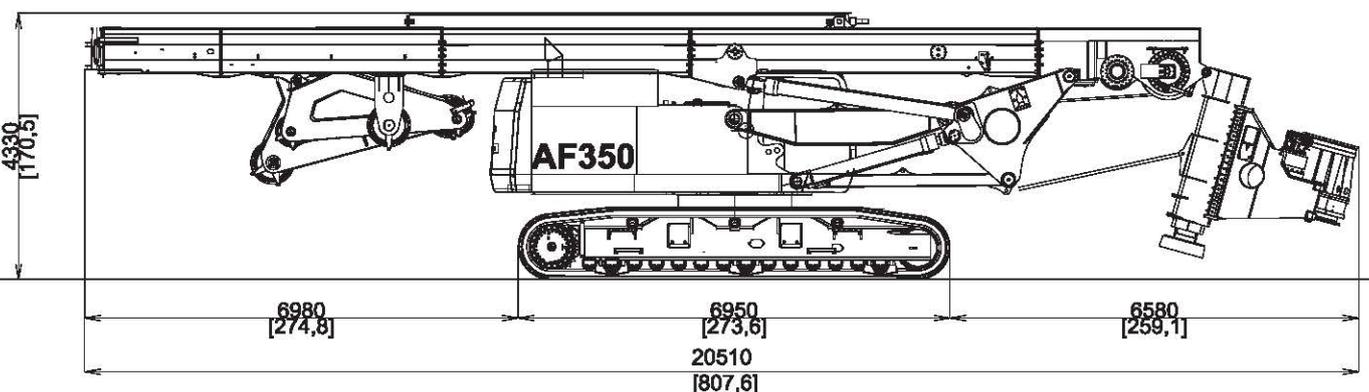
**Base**

		<b>Caterpillar 374F</b>
Undercarriage length / widening range / shoe	mm	CAT 6950/3800 - 5400/900
	in	273,6/149,6 - 212,6/35,4
Engine type		CAT C15 TIER 4 F
Power	KW	352KW (472HP)@1800 rpm

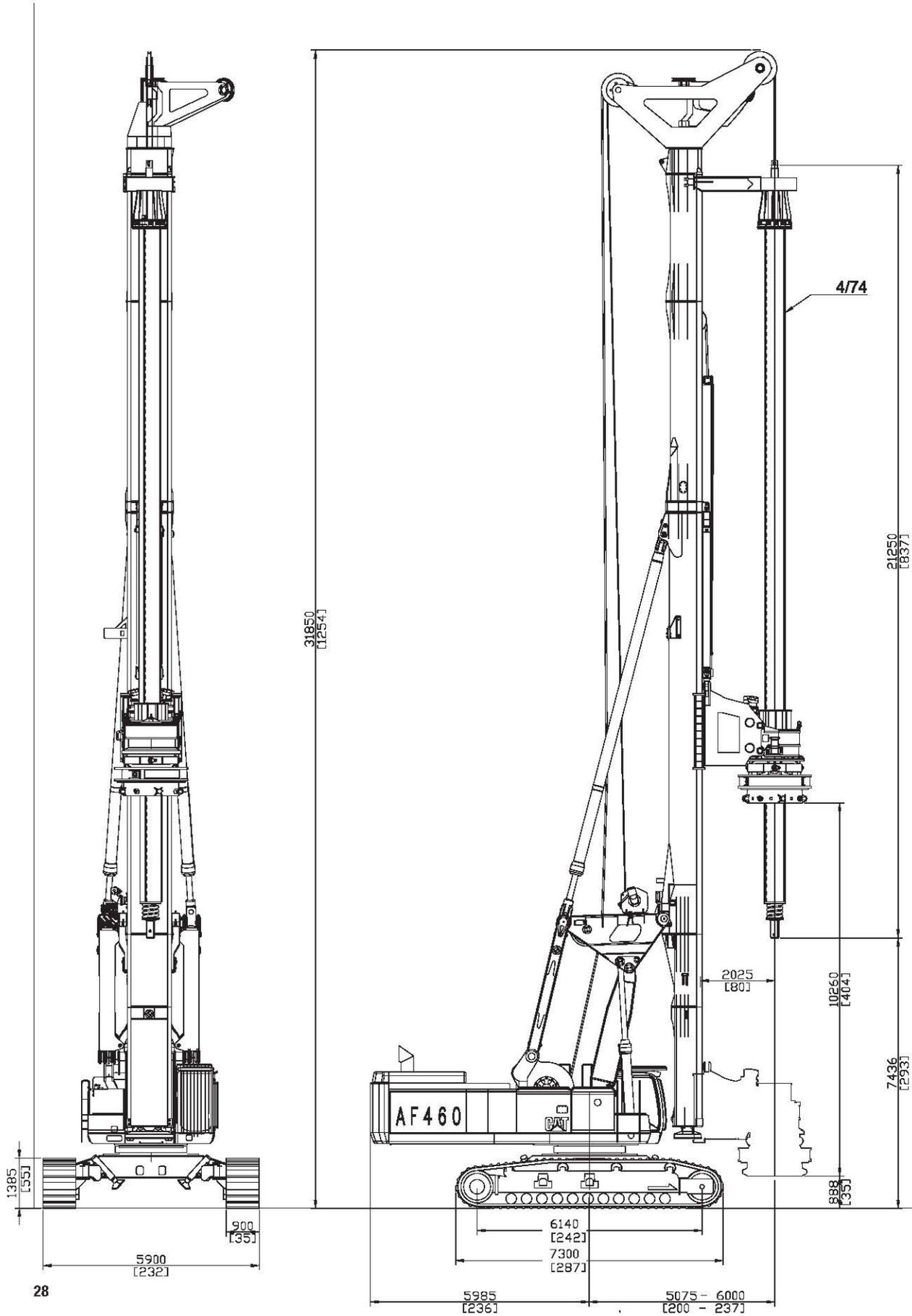
**Weight**

Operating Weight w/standard kelly bar	t (metric)	119
	lbs	/

All technical data are indicatives and subject to change without notice.



# AF 460



**Rotary**

Installed torque	<b>kNm</b>	460
	<b>lbf ft</b>	340000
Working speed	<b>rpm</b>	7 - 16
Discharge speed	<b>rpm</b>	32 - 75

**Winches**

Main winch pull force	<b>kN</b>	450
	<b>lbf</b>	101000
Main winch speed	<b>m/min</b>	54
	<b>ft/min</b>	177
Main winch Cable diameter	<b>mm</b>	40
	<b>in</b>	1,6
Auxiliary winch pull force	<b>kN</b>	180
	<b>lbf</b>	40500
Auxiliary winch Speed	<b>m/min</b>	80
	<b>ft/min</b>	262
Auxiliary winch Cable diameter	<b>mm</b>	26
	<b>in</b>	1

**Crowd system**

Kelly crowd push	<b>kN</b>	620
	<b>lbf</b>	140000
Kelly crowd pull	<b>kN</b>	710
	<b>lbf</b>	160000
Stroke (mm)	<b>mm</b>	10260
	<b>in</b>	404

**Mast**

Mast raking forward		15°
Mast side raking		5°
Mast raking backwards		15°
Pile max. diameter	<b>mm</b>	4000
	<b>in</b>	157

**Kelly bar**

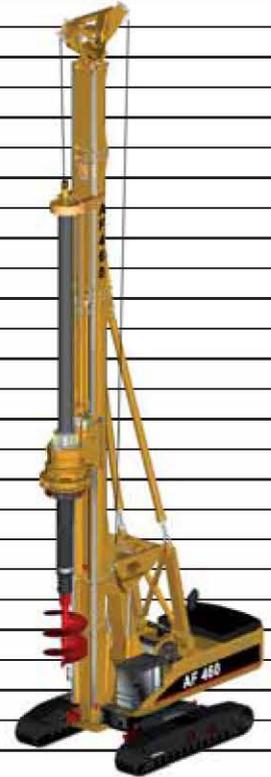
Standard		4/74
Options available		4/60 - 4/90 - 5/110

**Base**

Undercarriage length / widening range / shoe	<b>mm</b>	<b>Caterpillar 385C</b> 7300/5900/900
	<b>in</b>	287/232/35
Engine type		CAT C18 TIER 3
Power	<b>KW</b>	390KW (530HP)@1800 rpm

**Weight**

Operating Weight w/standard kelly bar	<b>1(metric)</b>	165
	<b>ibs</b>	363762



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**Industria Meccanica Trivelle**  
Via D'Ancona, 39 - 60027 Osimo (AN) Italy  
Tel. + 39 071 723341 - Fax +39 071 7133352  
[imt@imtspa.com](mailto:imt@imtspa.com)  
[www.imtspa.com](http://www.imtspa.com)