



**IMT**®

**A 140**

hydraulic drill rig

**IMT**



# 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.

**2016/2019**

The brand new range of A-series rigs with Tier 3 and Tier 4 engines, completely designed and developed by IMT, and launched into the market

*Andrea Accorroni*



# A 140

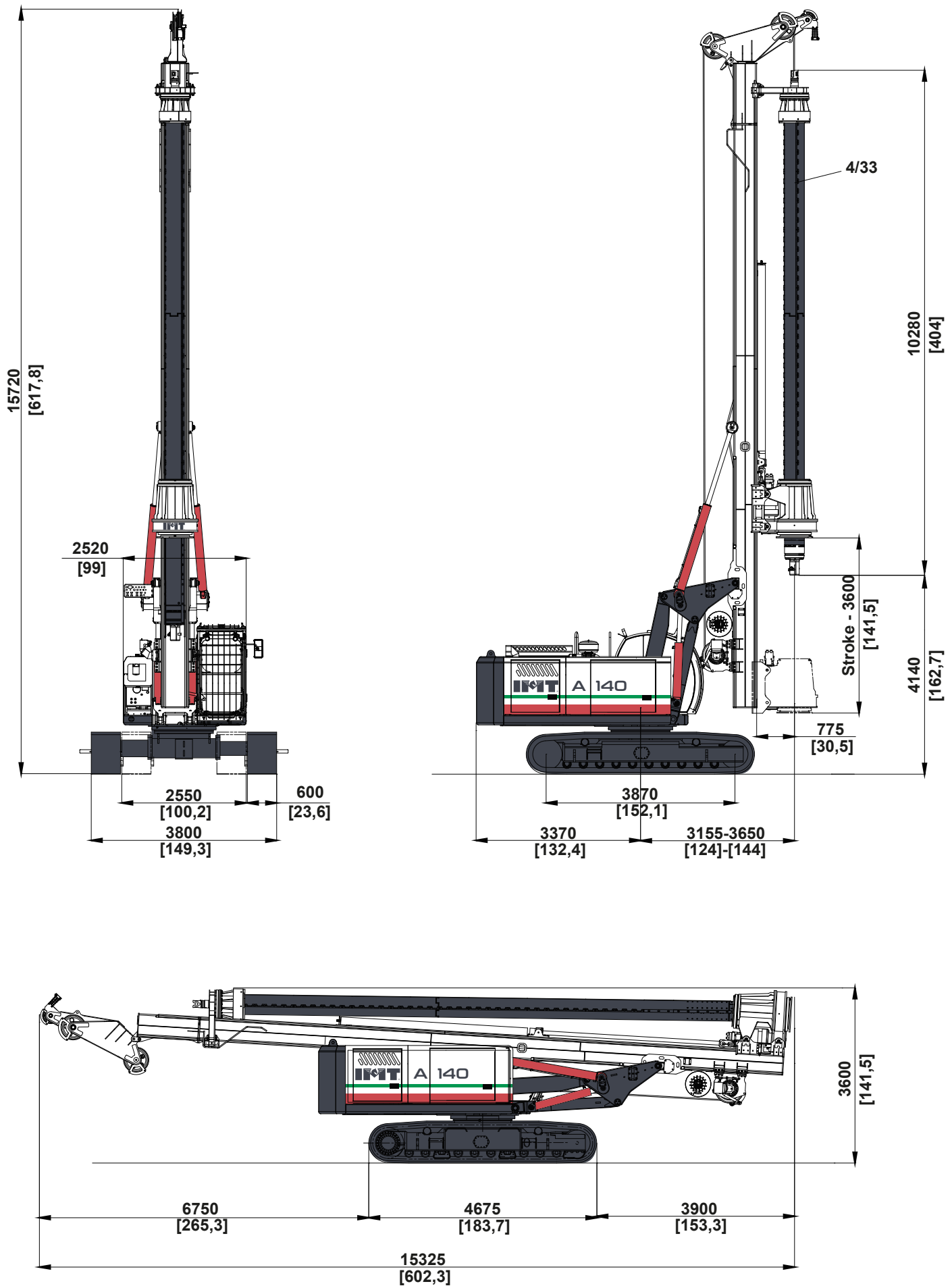
IMT, a global leader in the manufacture of drill rigs and a brand which has always been synonymous with quality and reliability in the pursuit of satisfying market demand, is pleased to present a new series of A drill rigs. This new line is unique in its simplicity and flexibility of use, while also perfectly maintaining sturdiness and productivity.

The A140 drill rig is suitable for the use in several different configurations, with very simple procedures for the passage from one version to another. The machine was designed for very arduous applications as, thanks to its high torque and high-performing winch, it is capable of reaching great depths, also with great diameters. Its heavy-duty undercarriage guarantees optimal stability in various working conditions and configurations.



# A 140 - Hydraulic Drill Rig

## Crowd cylinder version

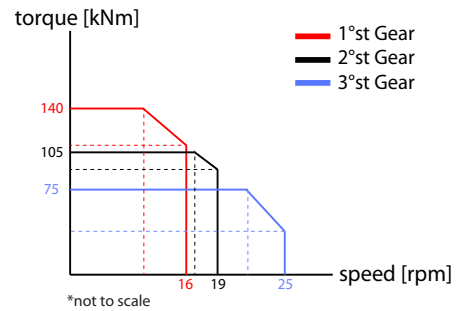


# A 140 - Hydraulic Drill Rig

## Technical specifications

### A140 Crowd Cylinder

Rotary		
Installed torque	kNm	140
	lbf ft	110600
Min. Working speed	rpm	7,5
Max. Working speed	rpm	25
Min. Discharge speed	rpm	45
Max. Discharge speed	rpm	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	40
	ft/min	131
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	3600
	in	142

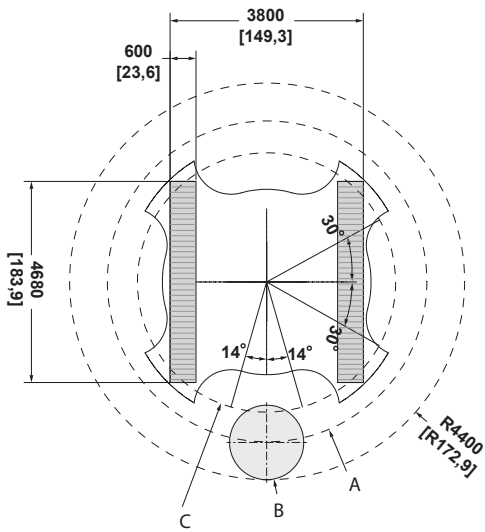
Base	IMT	
Undercarriage length / widening range / shoe	mm	4690 / 2550 - 3800 / 600
	in	185 / 100 - 149,3 / 23,6
Engine type	Cummins QSB 6,7 T3/T4 169 KW (227 HP) @1900 rpm	
Oil tank capacity	l	250
Fuel tank capacity	l	290

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

Kelly bar		
Standard		4/33
Options available		3/27 - 4/38 - 5/47 - 6/57
Operating Weight w/standard kelly bar	t (metric)	39
	lbs	85980

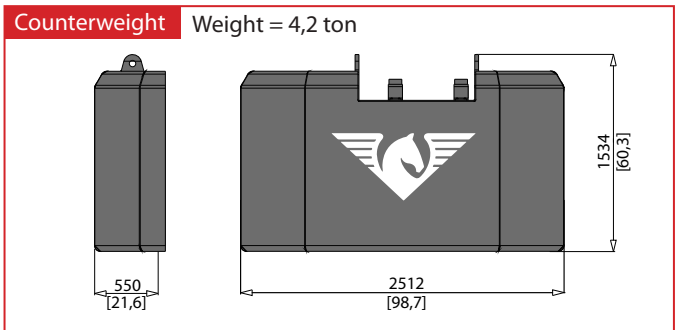
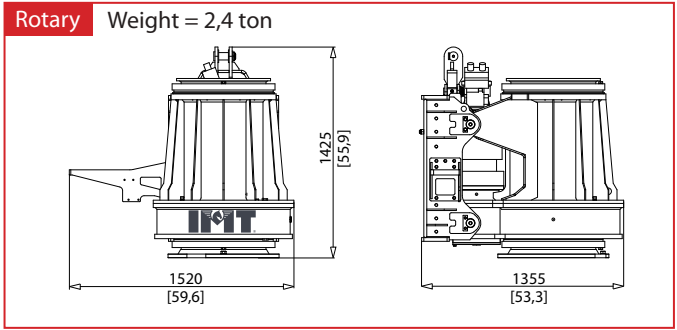
# A 140 - Hydraulic Drill Rig

## Working area A140 crowd cylinder



<b>A</b>	MAX WORKING RADIUS 3650 [R 143,4]
<b>B</b>	MAX TOOL DIAMETER Ø1500 [R 59]
<b>C</b>	MIN WORKING RADIUS 3155 [R 124]

## Removable parts for transport phase



## Equipment

### - STANDARD EQUIPMENT -

- Air conditioner
- Neutral lever (lock out) for all control
- Guard cab front
- Guard cat top
- Top cabin working lights
- Main and auxiliary load sensing circuit
- Free flow during drilling phase
- Automatic bottom hole stop
- Depth measuring device on main winch
- Mast inclination measurement
- Kelly bar intelocking 4/38

### - OPTIONAL EQUIPMENT-

- Biodegradable oil
- Rear camera
- Crowd winch kit
- CFA kit
- Grab kit
- Vibro displacement kit
- Cardanic universal joint kit
- Every kind of Kelly bar

# A 140 - Hydraulic Drill Rig

## Kelly bar standard version



3 PARTS

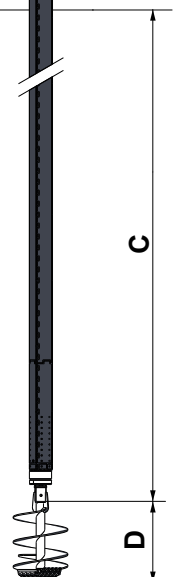
4 PARTS

5 PARTS

Kelly bar	A (m)	W (kg)	C (m)	B (m)
*3 / 20	8,3	3500	20	6,20
3 / 27	11,7	4500	27	2,70
*4 / 33	10,1	4200	33	4,30
4 / 38	11,7	4900	38	2,70
5 / 47	11,7	4800	47	2,70

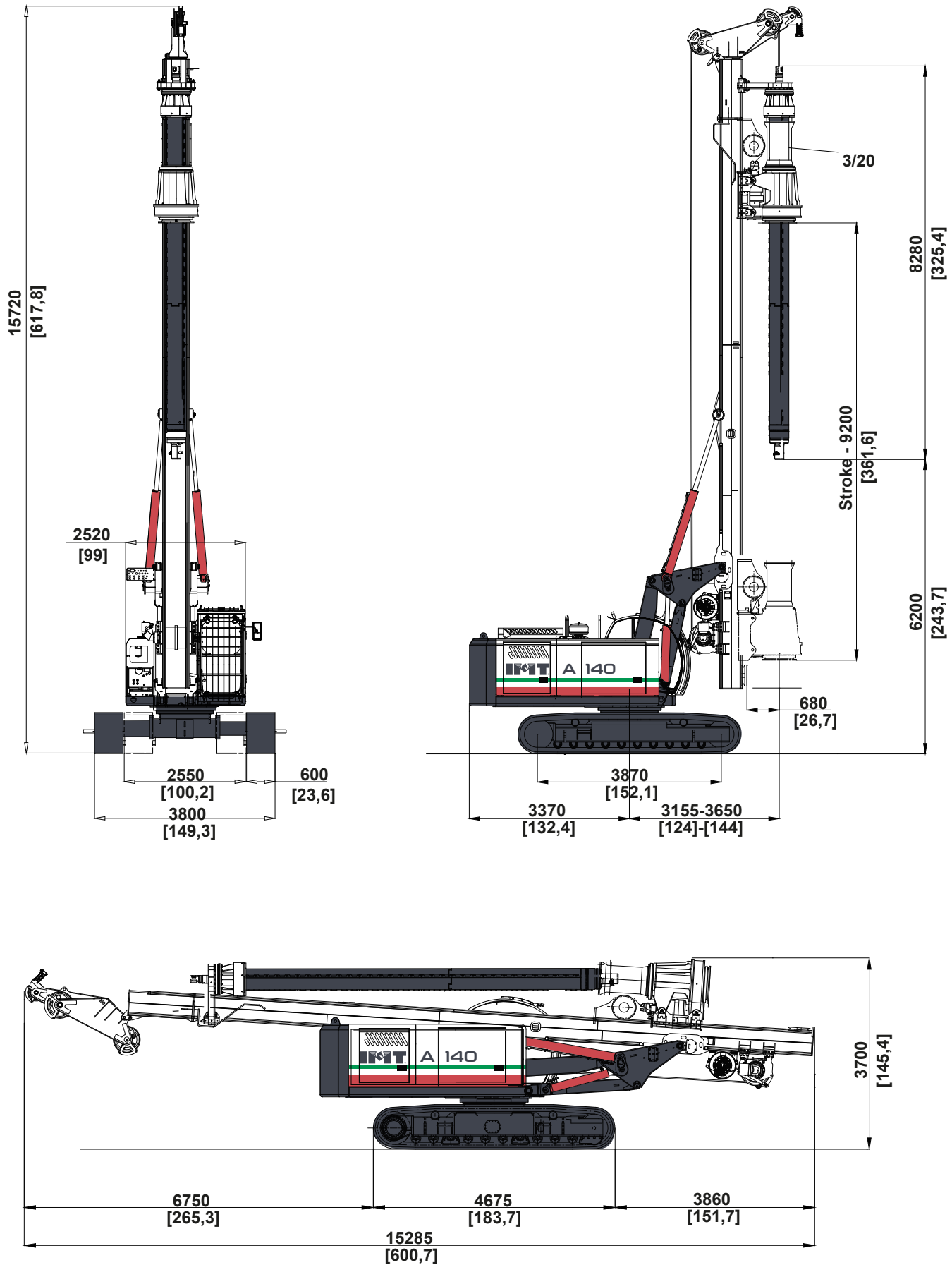
\* Self mounthing on crowd winch version

D	1500 mm	150 x 150 mm
Other kelli bars available on request		



# A 140 - Hydraulic Drill Rig

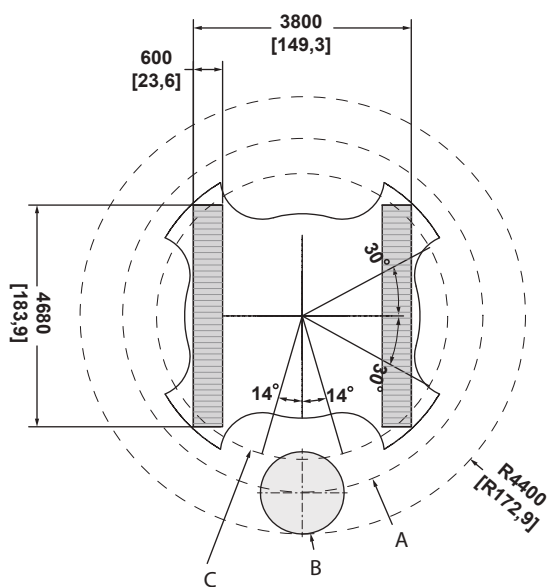
Crowd winch version



## Technical specifications

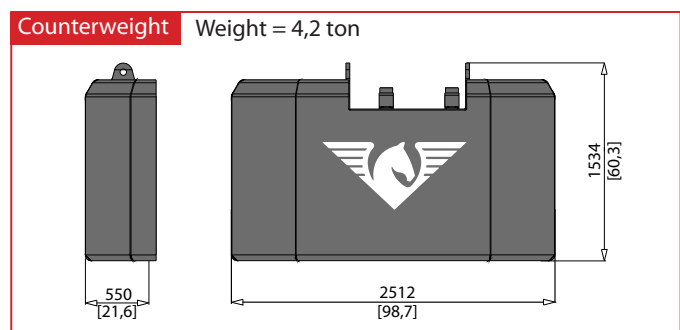
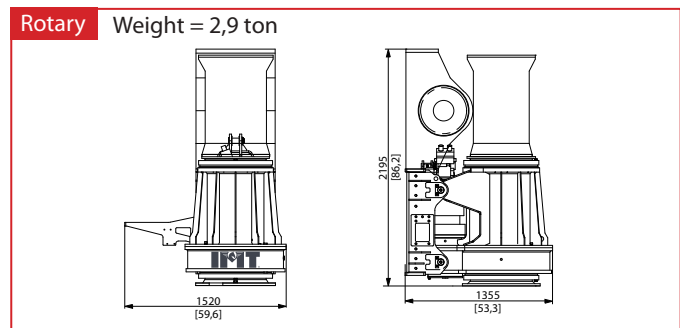
Winch Crowd System		
Kelly crowd push	kN	150
	lbf	33725
Kelly crowd pull	kN	150
	lbf	33725
Max stroke (mm)	mm	9200
	in	362
Mast		
Pile max diameter	mm	1300
	in	52
Kelly bar		
Standard		3/20
Operating Weight w/standard kelly bar	t (metric)	39,5
	lbs	87090

### Working area crowd winch



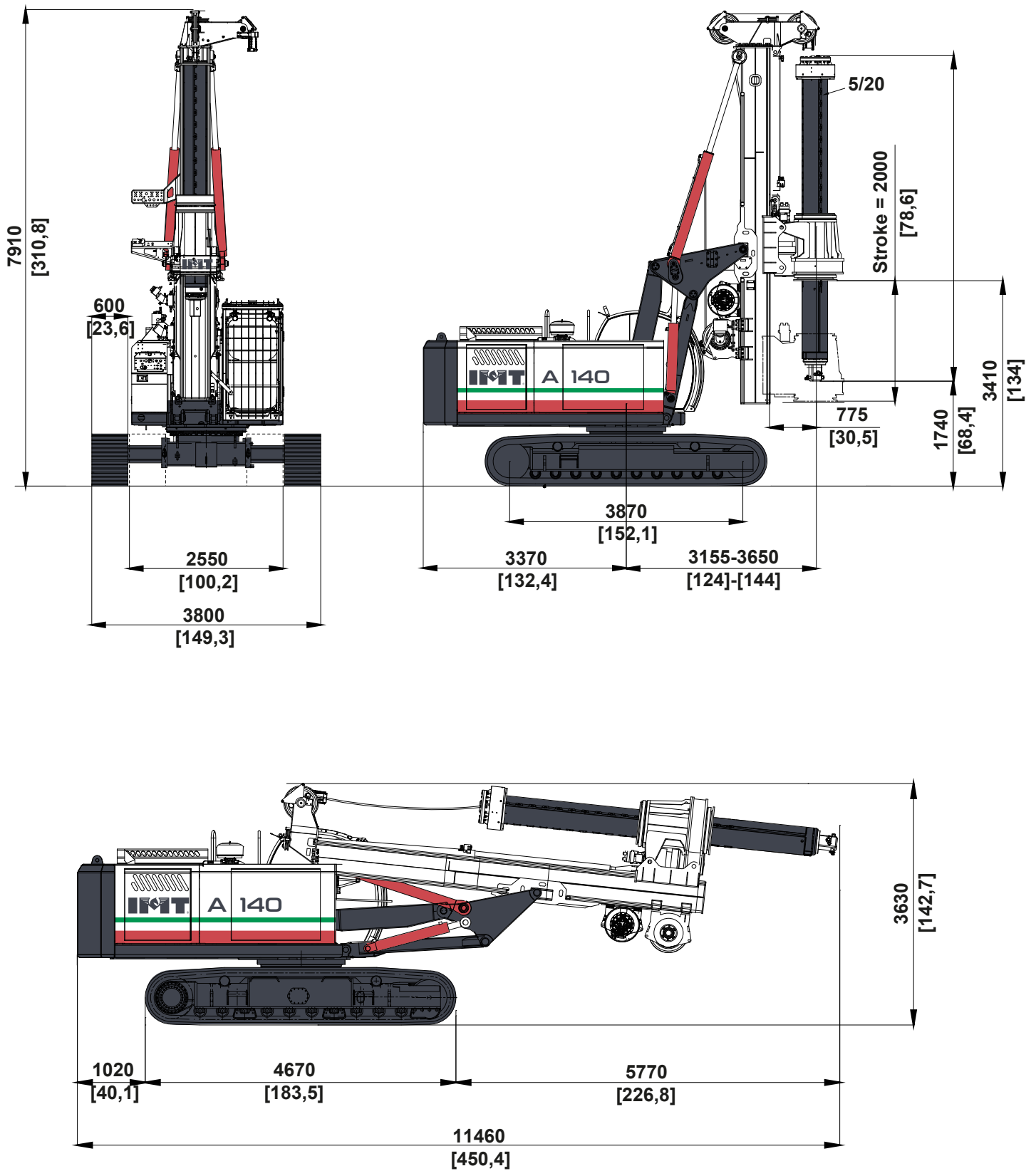
- A MAX WORKING RADIUS 3650 [R 143,4]
- B MAX TOOL DIAMETER 1500 [ø 59]
- C MIN WORKING RADIUS 3155 [ø 124]

### Removable parts for transport phase

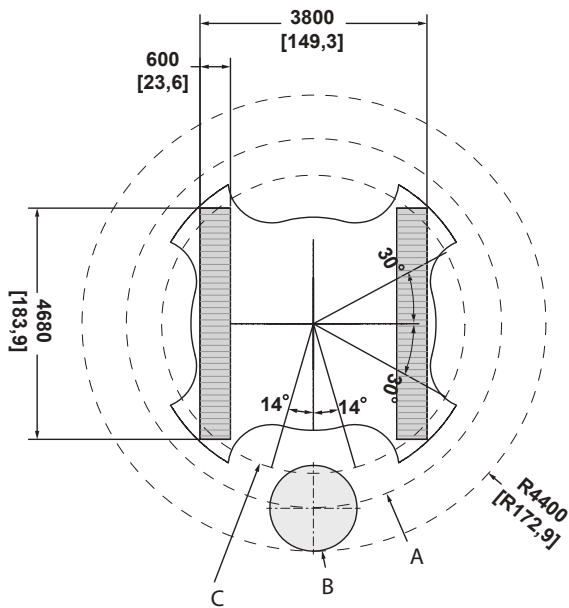


# A 140 - Hydraulic Drill Rig

LCA version

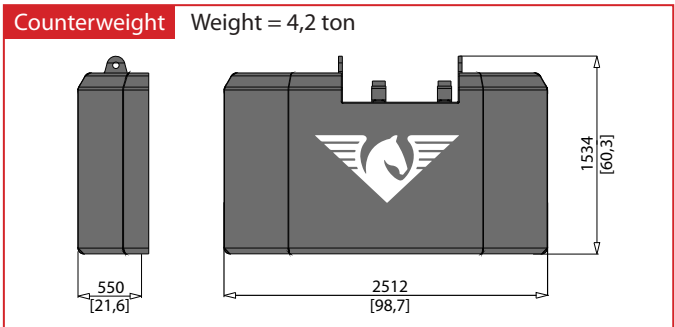
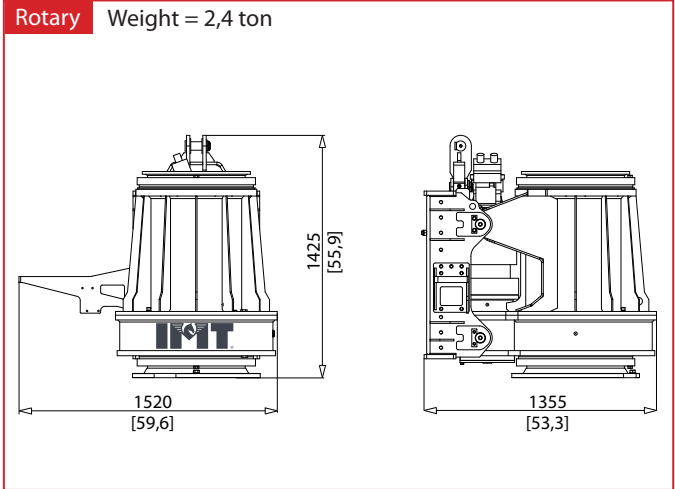


## Working area LCA



A	MAX WORKING RADIUS 3650 [R 143,4]
B	MAX TOOL DIAMETER 1500 [ø 59]
C	MIN WORKING RADIUS 3155 [R 124]

## Removable parts for transport phase

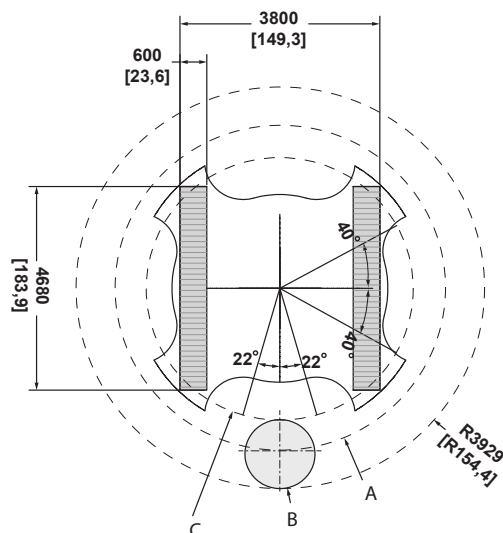




## Technical specifications

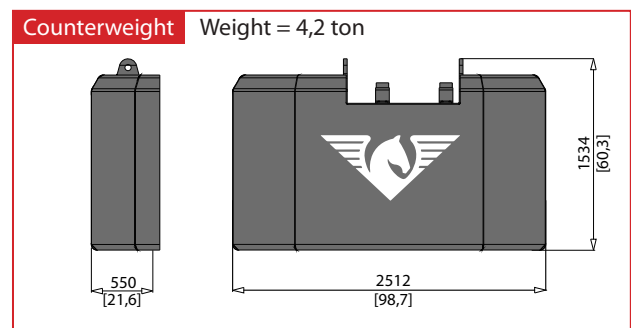
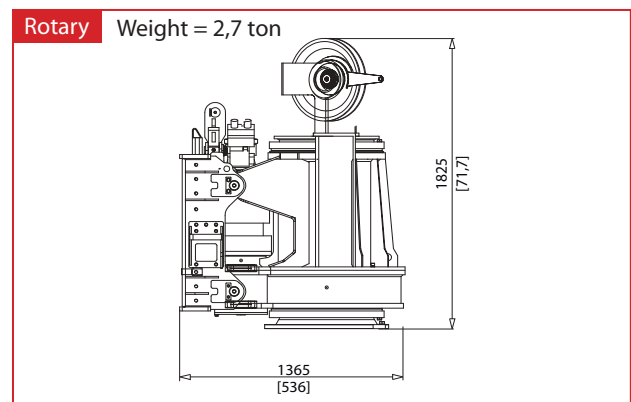
<b>Rotary</b>		
Installed torque	kNm	150
	lbf	110600
Min. working speed	rpm	7,5
Max. working speed	lbf	33725
<b>Crowd system</b>		
Pushing (force optional)	Kn	60
	lbf	13490
Pulling force	Kn	360
	lbf	80935
Max push/pull speed	m/min	20/20
Rotary stroke	mm	12000
	in	473
Pull cable diameter	mm	22
	in	/
Drilling depth maximum w/o auger extension	m	11,7
	ft	38,376
Drilling depth maximum w auger extension	m	17,7
	ft	58,056
<b>Mast</b>		
Mast raking forward	degree	5°
Mast side raking	degree	±5°
Mast raking backwards	degree	15°
Pile max diameter	mm	750
	in	30
Operating weight w/o auger	t (metric)	38
	lbs	85980

### Working area CFA



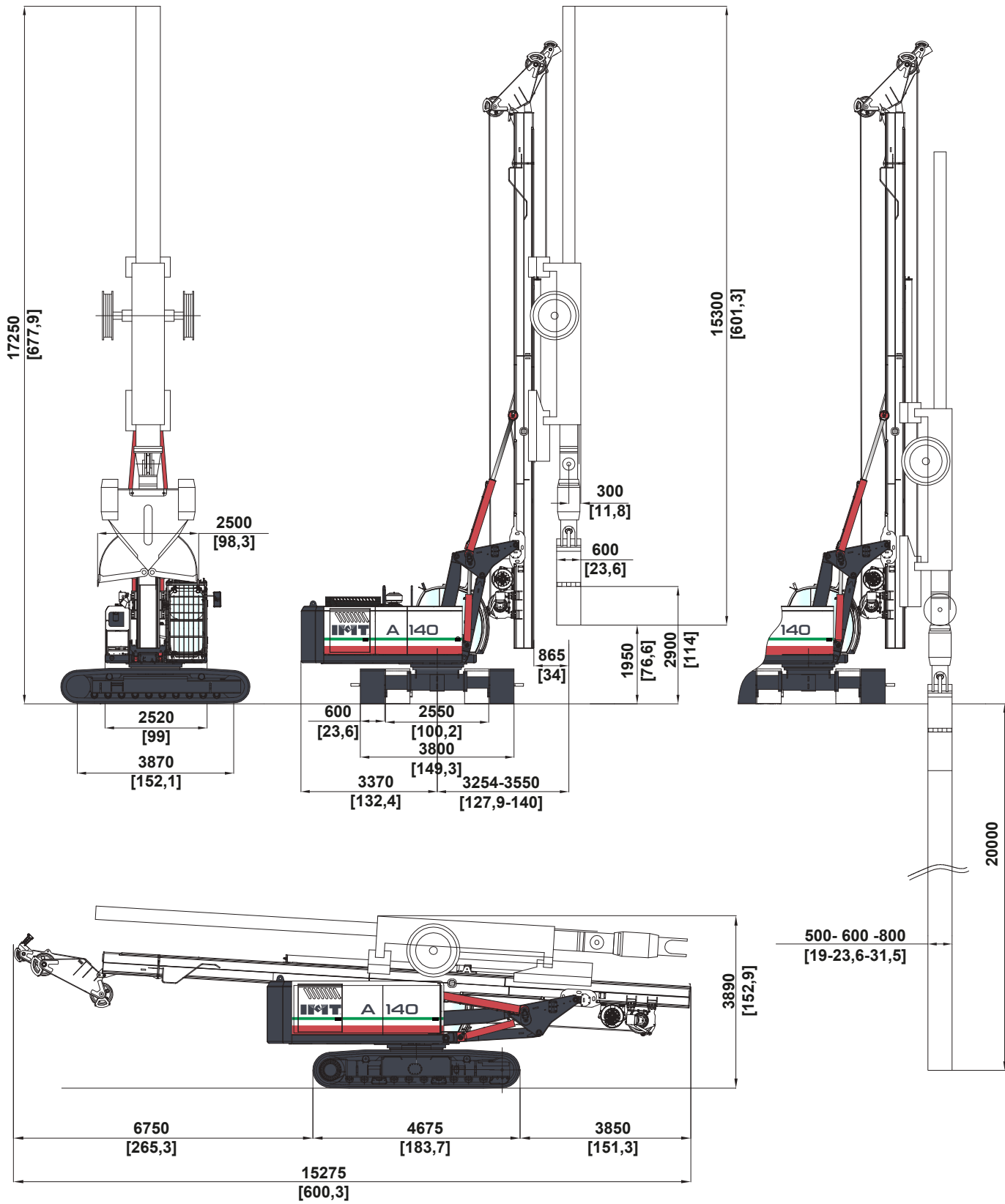
<b>A</b>	MAX WORKING RADIUS 3550 [R 139,5]
<b>B</b>	MAX TOOL DIAMETER 750 [ø 25,4]
<b>C</b>	MIN WORKING RADIUS 3145 [R 123,6]

### Removable parts for transport phase



# A 140 - Hydraulic Drill Rig

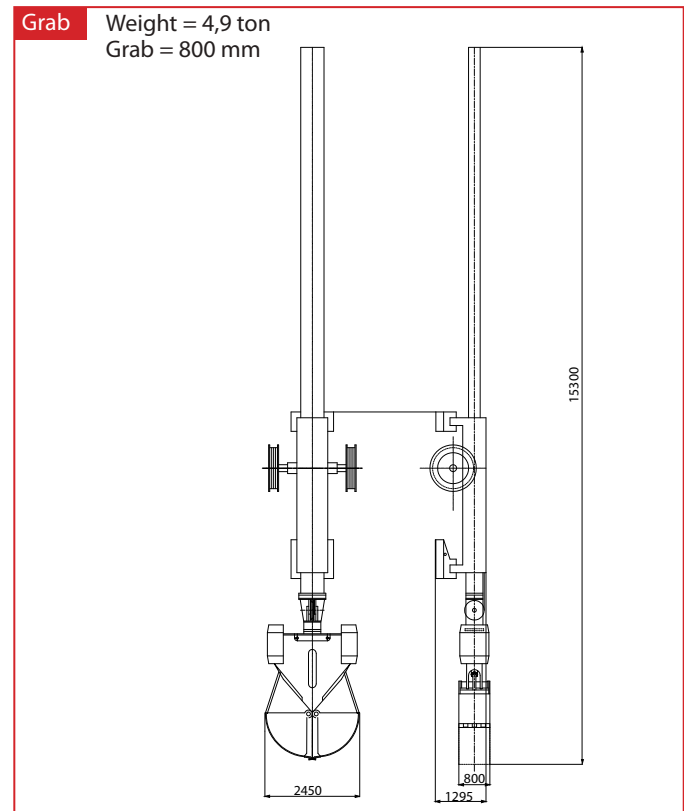
## Grab version



## Technical specifications

<b>Crowd System</b>		
Excavation width	mm	500-600-800
Jaws opening	mm	2500
Excavation depth	m	20
Weight of grab	Kg	4000 / 4300 / 4900
Continuous operating pressure	bar	320
Grab capacity	m <sup>3</sup>	/
Max closing force	kN	1630
Grab rotation	degree(°)	+45° / - 45°
<b>Winches</b>		
Main winch pull force	kN	290
	lbf	65200
Main winch speed	m/min	45
	ft/min	148
Operating Weight w/out grab	t (metric)	37
	lbs	81500

## Removable parts for transport phase



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# A 140 - Hydraulic Drill Rig

## Worldwide sales and assistance network



IMT dealers, a global network at your service  
IMT, like very few other companies in the field,  
has a global commercial and assistance network which is  
present in over 30 countries.  
From any part of the world IMT clients know which they  
can always count on fast and efficient service.









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