



**IMT**®

**4 275**

hydraulic drill rig

**IMT**

INVT<sup>®</sup>



# A 215

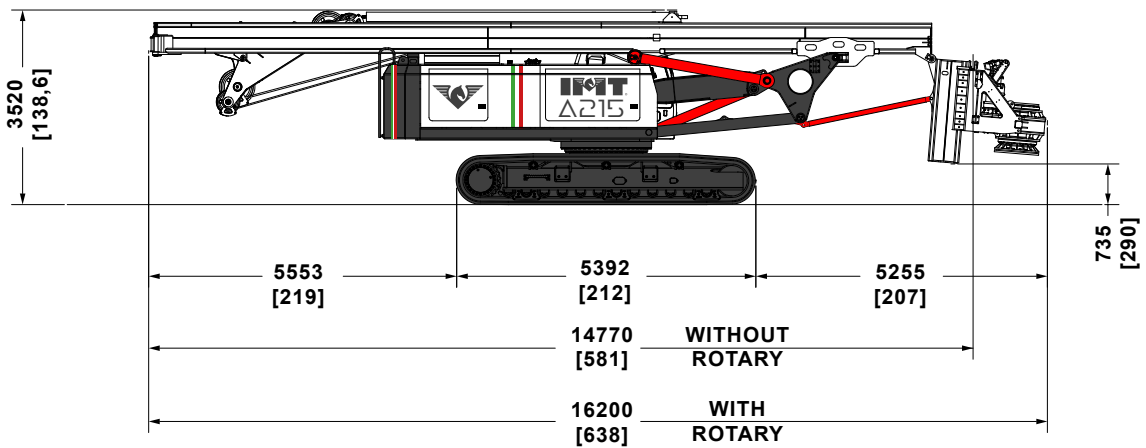
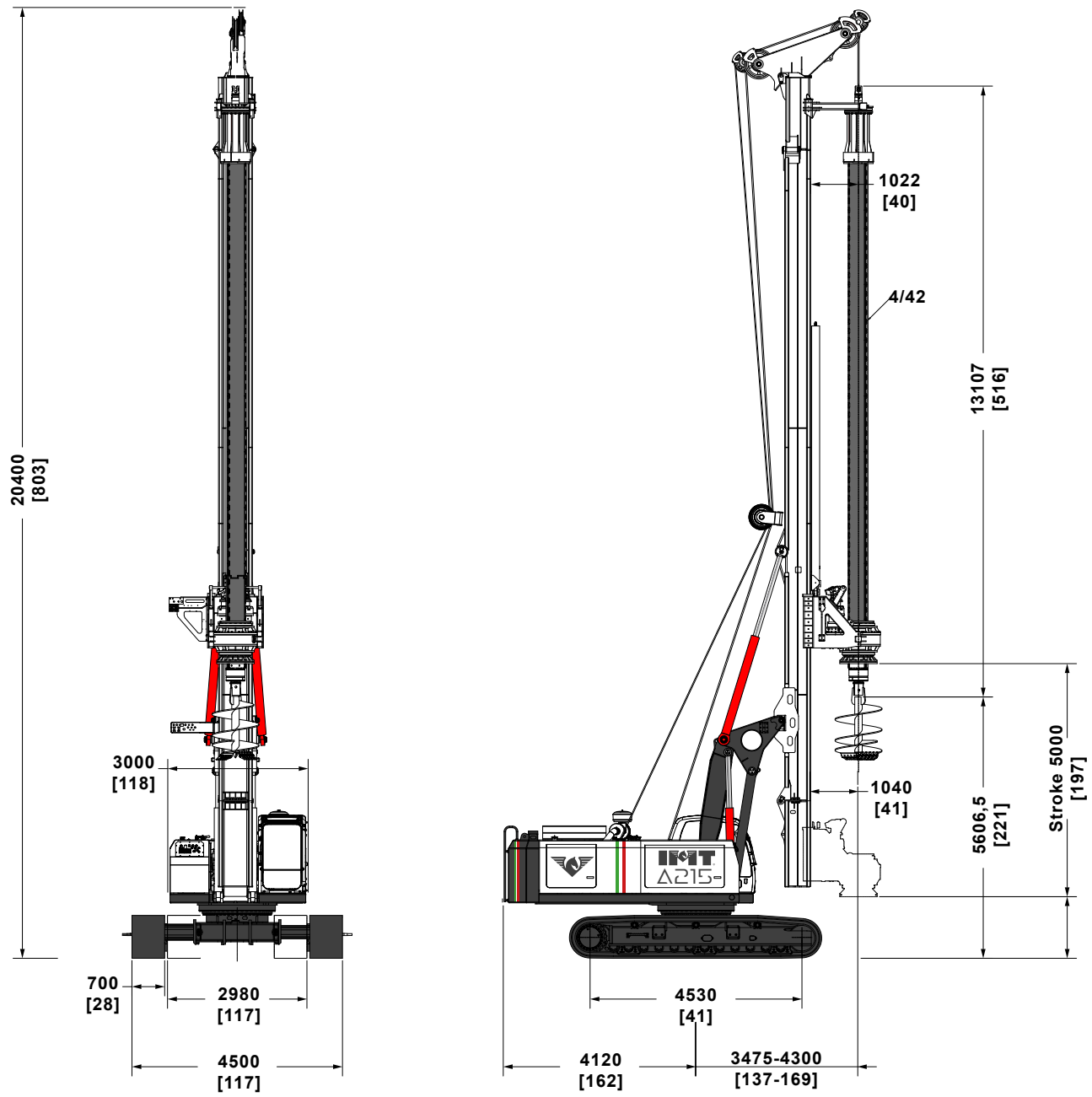
IMT, a global leader in the manufacture of drill rigs and a brand which has always been synonymous with quality and reliability in the pursuit of satisfying market demand, is pleased to present a new series of A drill rigs. This new line is unique in its simplicity and flexibility of use, while also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

The A215 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.



# Δ 215 - Hydraulic Drill Rig

## Crowd cylinder version

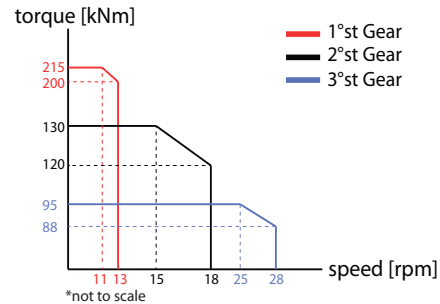




## Technical specifications

### A215 Crowd Cylinder

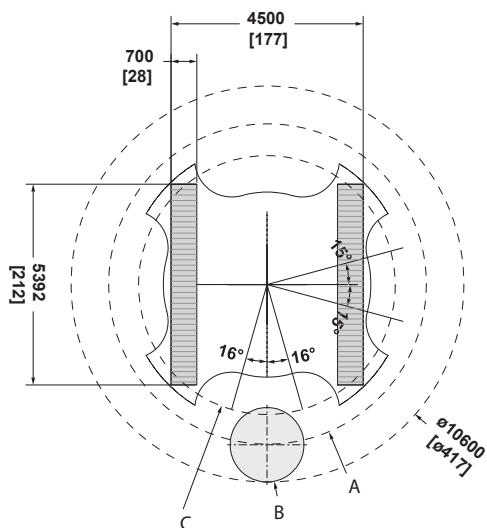
Rotary		
Max. torque	kNm	215
	lbf ft	158575
Min. Working speed	rpm	13
Max. Working speed	rpm	28
Min. Discharge speed	rpm	67
Max. Discharge speed	rpm	104



Winches		
Main winch pull force	kN	200
	lbf	44500
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
Base		IMT
Undercarriage length / widening range / shoe	mm	5392 / 2980 - 4500 / 700
	in	212 / 117 - 177 / 27,5
Engine type		Cummins QSL9 T3 / CAT C 9.3 STAGE V
		254 KW (340 HP) @1800 rpm / 250 KW (335 HP) @1800 rpm
Oil tank capacity	l	600
Fuel tank capacity	l	530
Mast		
Mast raking forward	degree	4°
Mast side raking	degree	±5°
Mast raking backwards	degree	15°
Pile max diameter in front of mast	mm	2000
	in	79
Kelly bar		
Standard		4/42
Options available		4/46 - 4/48 - 5/60
Operating Weight w/standard kelly bar	t (metric)	60
	lbs	132280

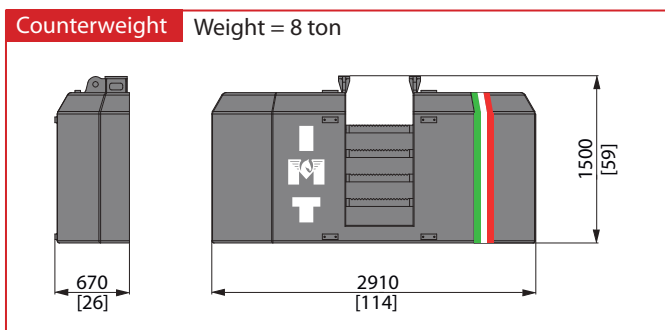
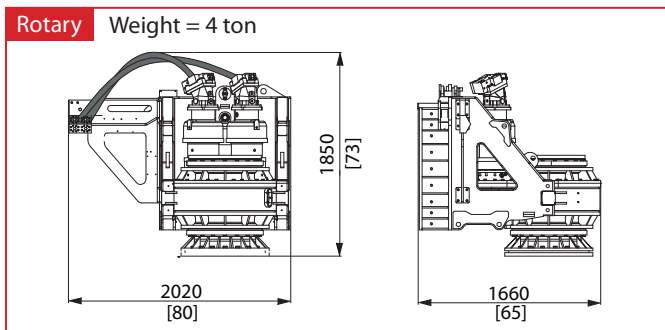
# Δ 215 - Hydraulic Drill Rig

## Working area A215 crowd cylinder



<b>A</b>	MAX WORKING RADIUS 4300 [R 170]
<b>B</b>	MAX TOOL DIAMETER 2000 [ø 79]
<b>C</b>	MIN WORKING RADIUS 3475 [R 1368]

## Removable parts for transport phase



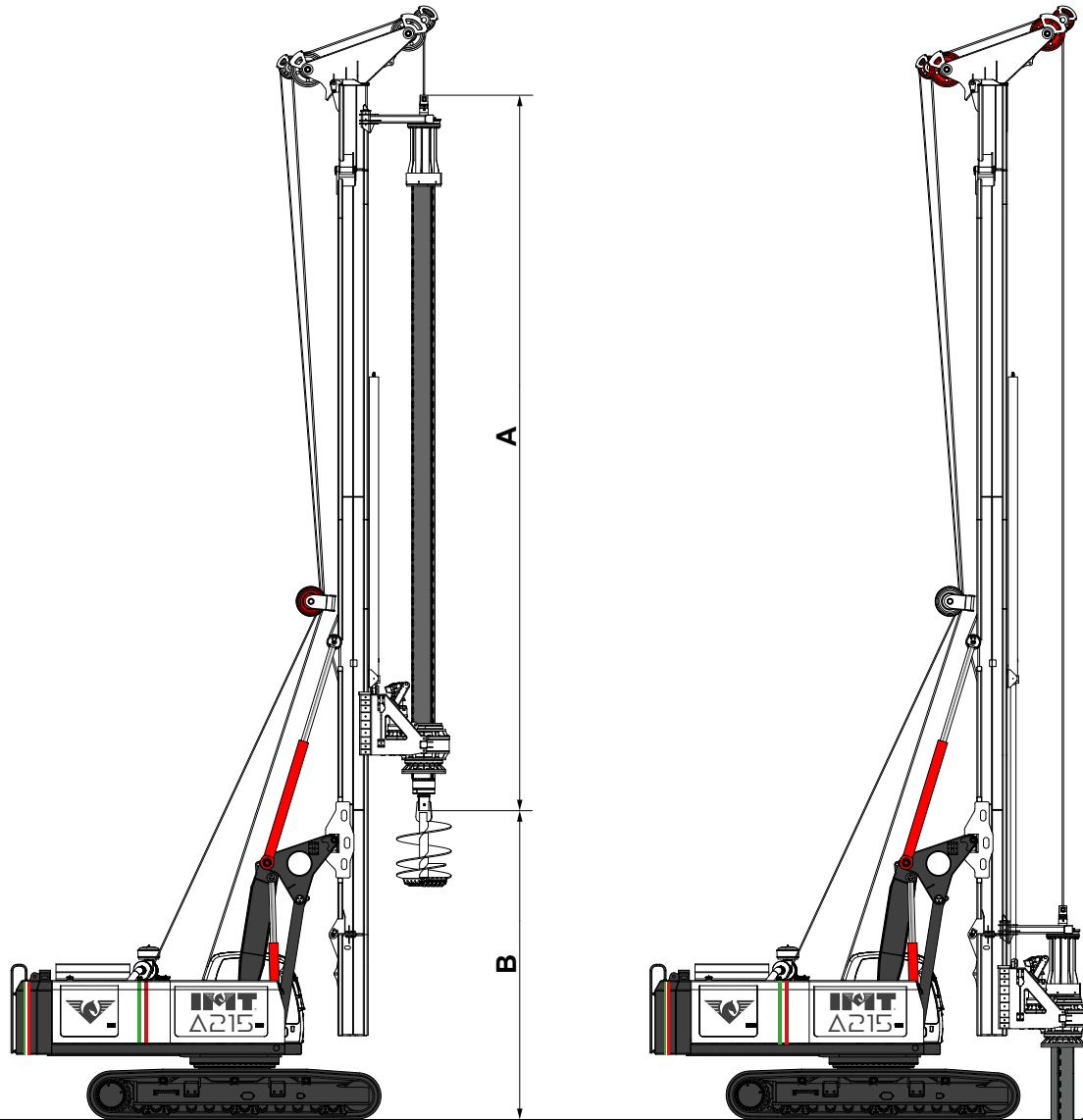
## Equipment

- STANDARD EQUIPMENT -
Air conditioner
Neutral lever (lock out) for all control
Guard cab front
Guard cat top
Winches spot light
Top cabin working lights
Fuel refill pump
Engine diagnostic system
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 interlocking 4/42 (42m depth)

- OPTIONAL EQUIPMENT-
Biodegradable oil
Rear camera / Lateral camera
Crowd winch kit
CFA kit
Grab kit
Vibro displacement kit
Cardanic universal joint kit
Casing oscillator kit
Removable racks rotary
Every kind of Kelly bar
Tier 4 final / Eu stage V engine
Mast foot kit
Different length of mast extension
"Y" shape derrick
GPS kit

# Δ 215 - Hydraulic Drill Rig

## Kelly bar standard version



3 PARTS

4 PARTS

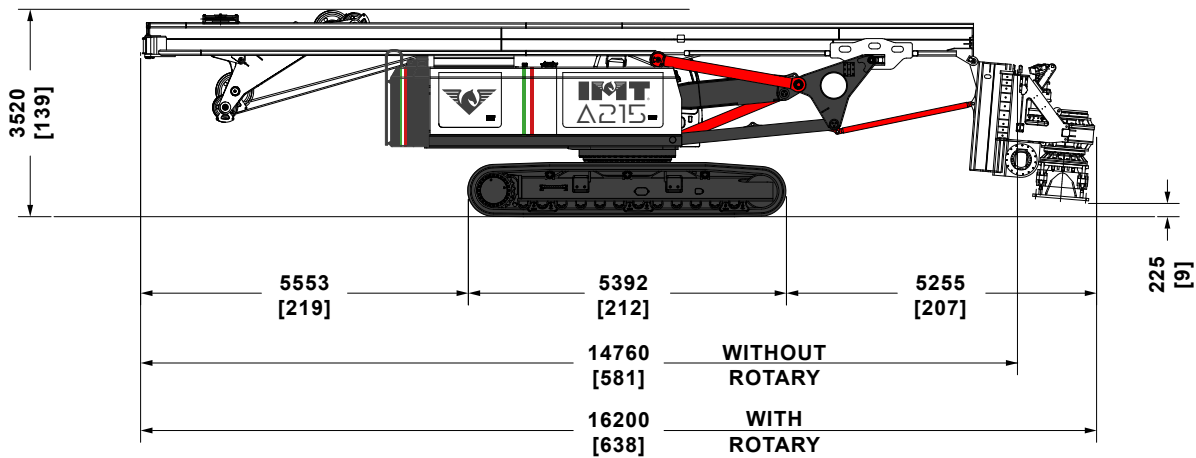
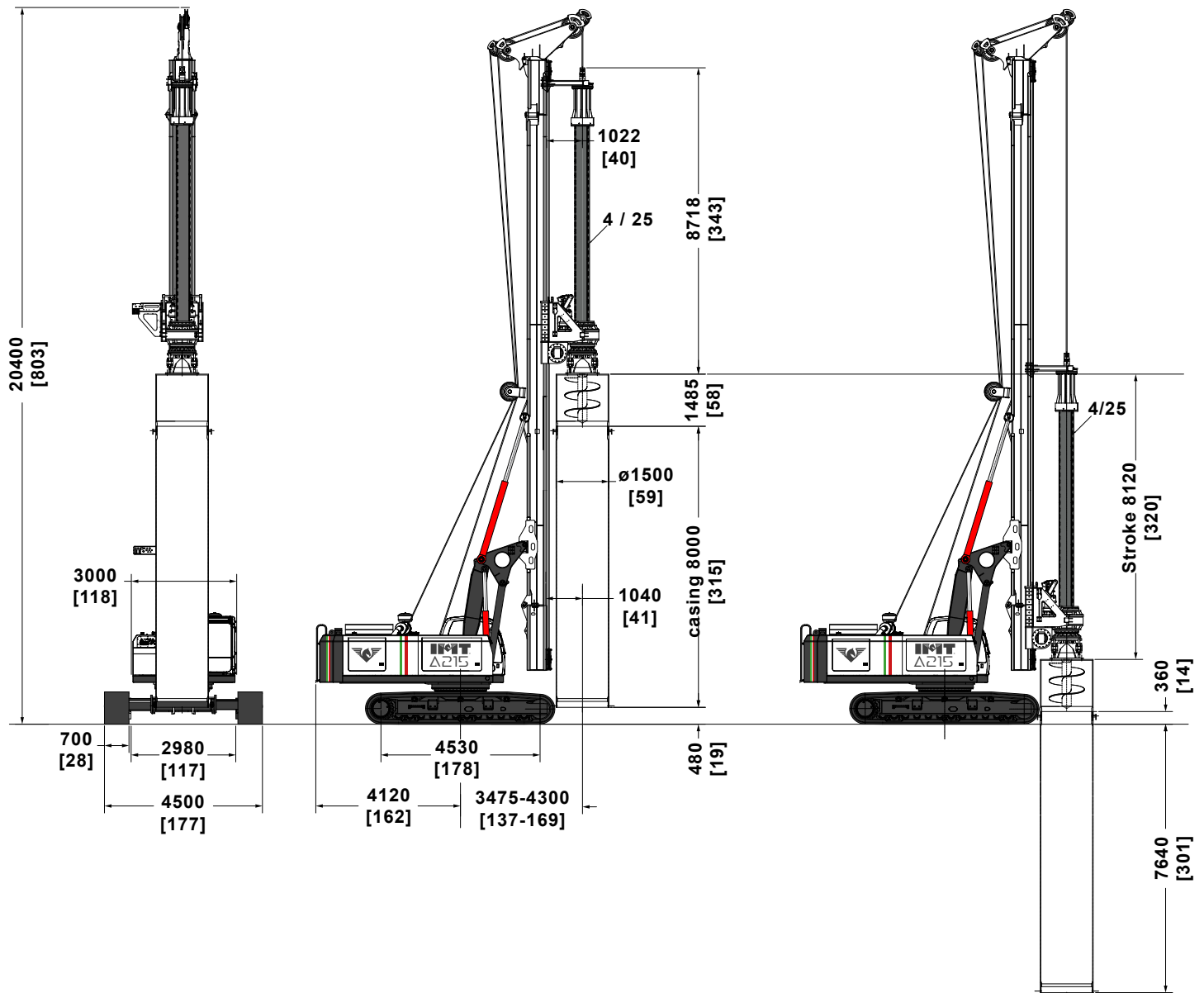
5 PARTS

Kelly bar	A (m)	W (kg)	C (m)	B (m)
3 / 30 / 406	13,0	7000	31,3	5,70
3 / 38 / 406	15,4	8050	38,5	2,80
4 / 25 / 406	8,9	5350	26,1	9,95
4 / 35 / 406	11,5	6600	36,0	7,20
4 / 42 / 406	13,3	7650	43,1	5,60
4 / 46 / 406	14,1	8100	46,3	4,60
4 / 48 / 406	14,9	8500	50,0	3,80
4 / 50 / 406	15,5	8600	51,9	3,20
5 / 60 / 406	14,9	8100	61,8	3,80

D	1500 mm	200 x 200 mm
Standard square joint other dimension available		

# Δ 215 - Hydraulic Drill Rig

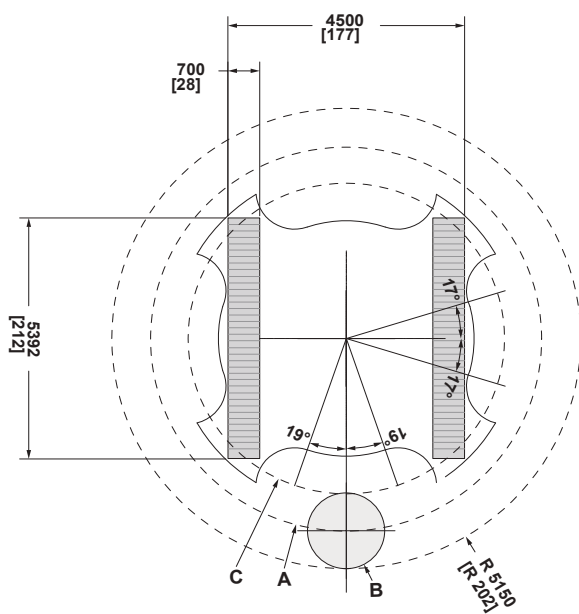
## Crowd winch version



## Technical specifications

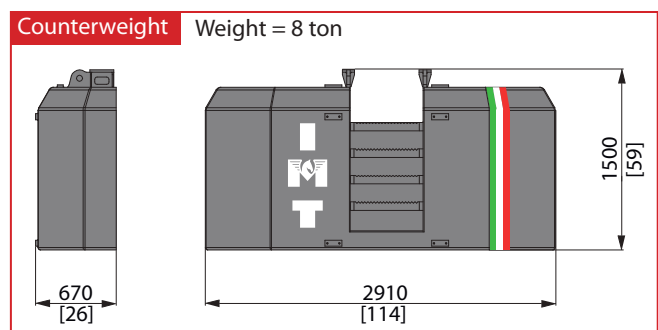
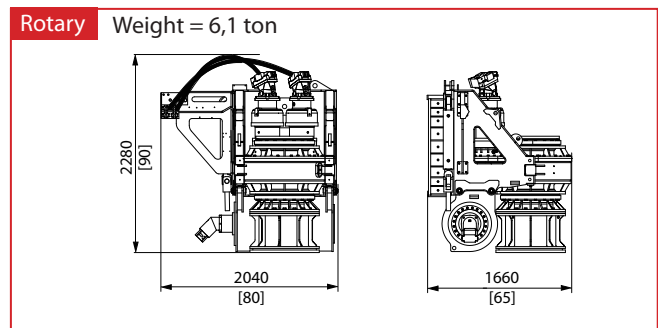
Winch Crowd System		
Kelly crowd push	kN	260
	lbf	58455
Kelly crowd pull	kN	260
	lbf	58455
Max stroke (mm)	mm	11000
	in	433
Casing length / max diameter	mm	8000 / Ø1700
	in	315 / Ø67
Pile max diameter	mm	1700
	in	79
Operating Weight w/standard kelly bar	t (metric)	60
	lbs	132280

### Working area crowd winch



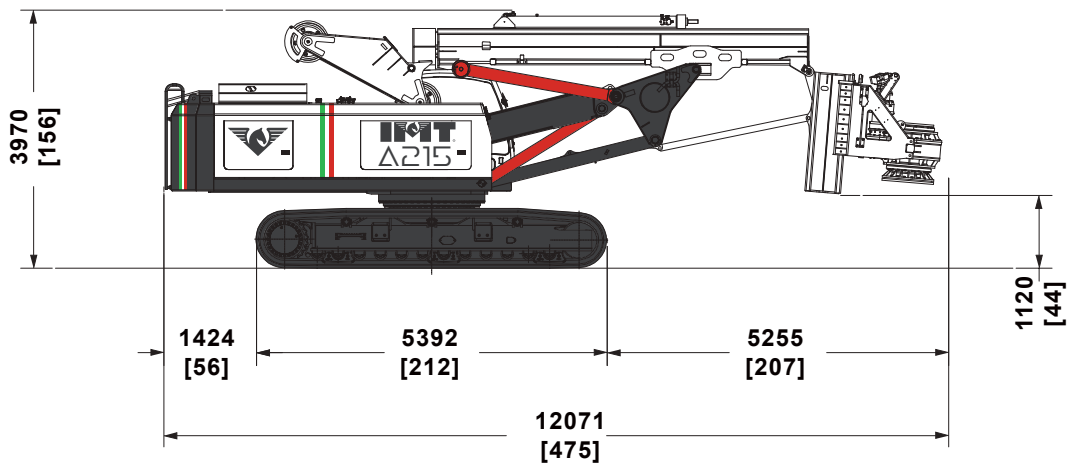
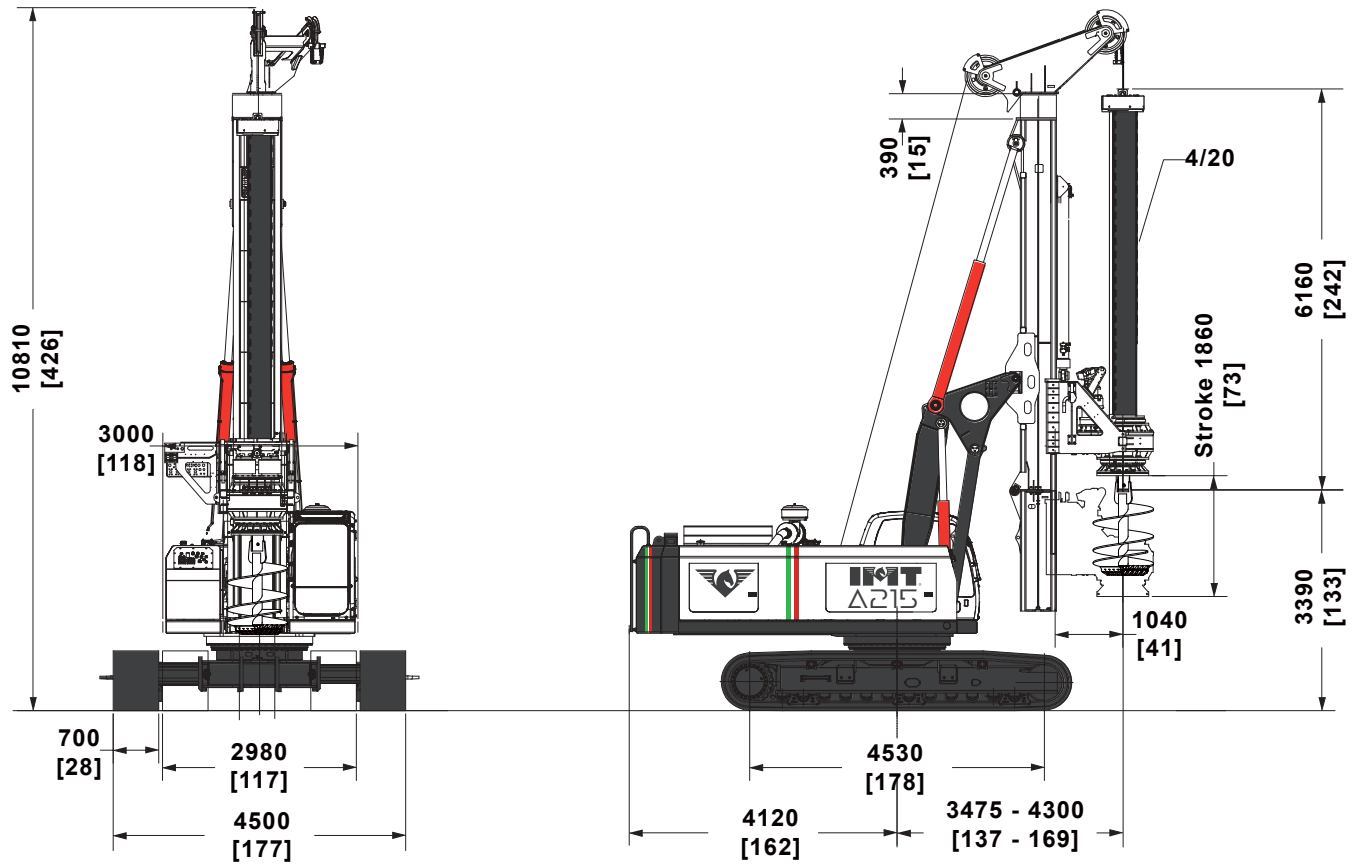
- A** MAX WORKING RADIUS 4300 [R 170]
- B** MAX TOOL DIAMETER 1700 [Ø 67]
- C** MIN WORKING RADIUS 6950 [Ø 274]

### Removable parts for transport phase



# Δ 215 - Hydraulic Drill Rig

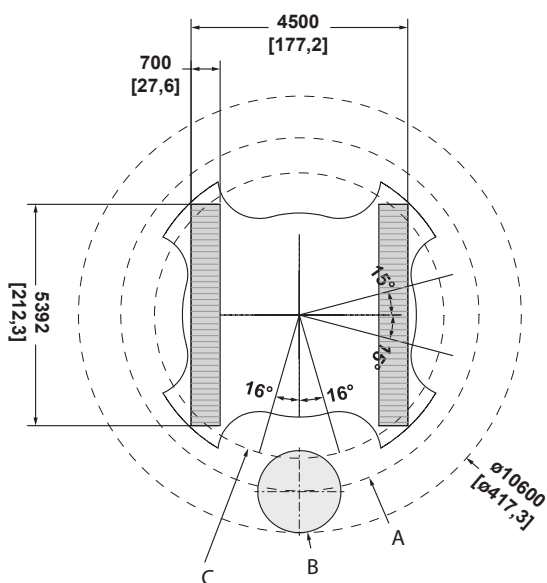
## LCA crowd cylinder Y derrick





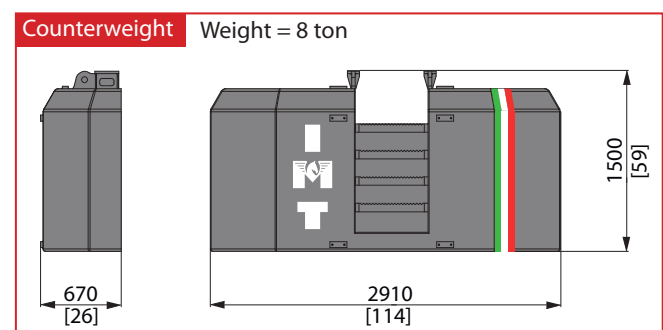
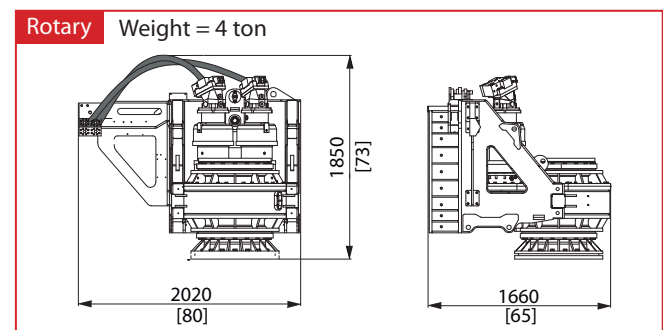
Cylinder Crowd System		
Kelly crowd push	kN	180
	lbf	40470
Kelly crowd pull	kN	200
	lbf	44965
Stroke	mm	1860
	in	73,2
Mast		
Pile max diameter	mm	2000
	in	79
Kelly bar		
Standard		4/20
Options available		4/15 - 4/17
Operating Weight w/standard kelly bar*	t (metric)	54
	lbs	119050

### Working area LCA crowd cylinder Y derrick



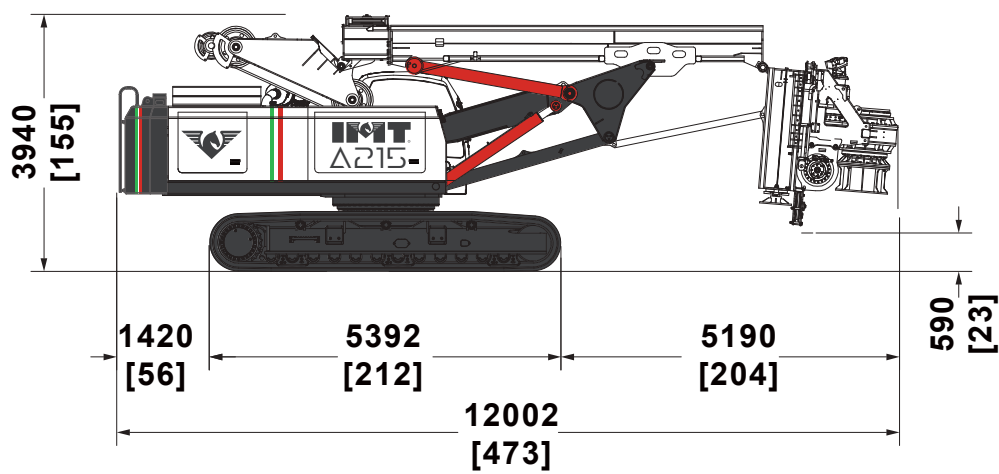
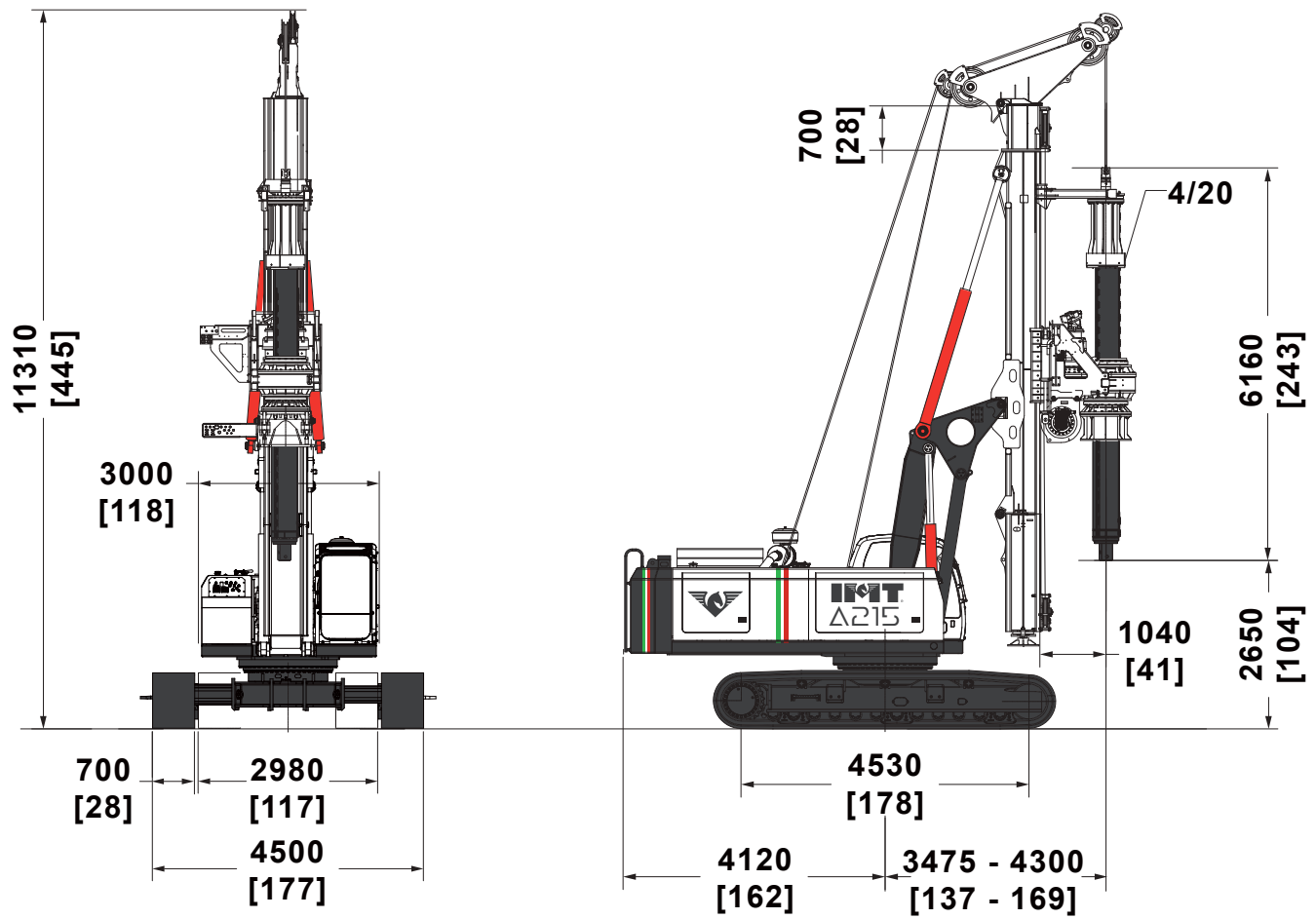
A	MAX WORKING RADIUS 4300 [R 169]
B	MAX TOOL DIAMETER 2000 [ø 79]
C	MIN WORKING RADIUS 3475 [R 1368]

### Removable parts for transport phase



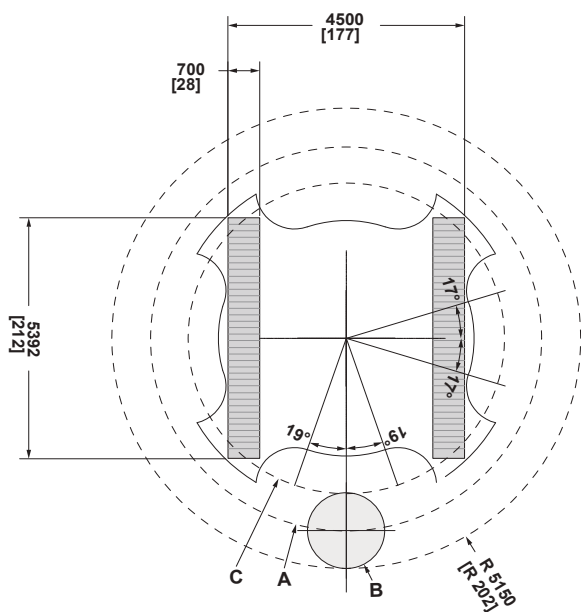
# Δ 215 - Hydraulic Drill Rig

LCA crowd winch version



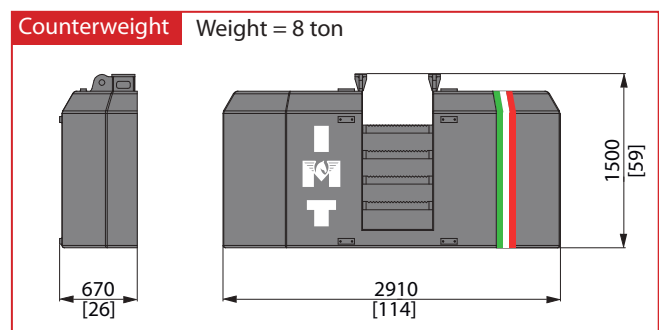
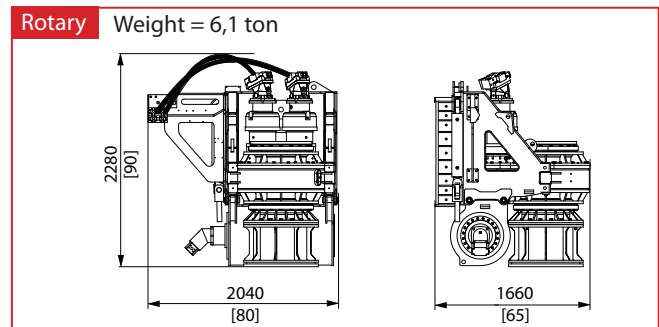
Winch Crowd System		
Kelly crowd push	kN	260
	lbf	58455
Kelly crowd pull	kN	260
	lbf	58455
Pile max diameter	mm	1700
	in	79
Kelly bar		
Standard		4/20
Options available		4/15 - 4/17
Operating Weight w/standard kelly bar*	t (metric)	56
	lbs	123460
*Weight w/o mast foot	t (metric)	55,4

### Working area LCA crowd winch version



A	MAX WORKING RADIUS 4300 [R 170]
B	MAX TOOL DIAMETER 1700 [ø 67]
C	MIN WORKING RADIUS 6950 [ø 274]

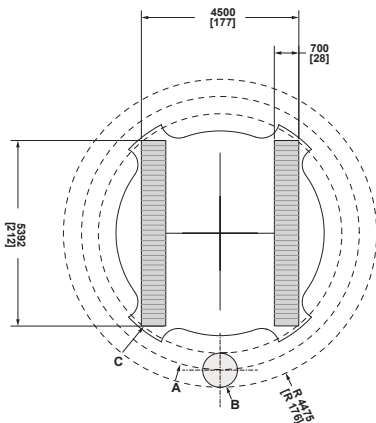
### Removable parts for transport phase





<b>Rotary</b>		
Max. torque	kNm	215
	lbf ft	151205
Working speed		11-28
Discharge speed		67-104
<b>Crowd system</b>		
Pushing force	kN	260
	lbf	58455
Pulling force	kN	400
	lbf	89925
Pulling force with combined line pull kit	kN	480
	lbf	10800
Max push/pull speed	m/min	20/30
	ft/min	66/99
Rotary stroke *(reduced of 500 mm with combined line pull kit)	mm	14250
	in	561
Push cable diameter	mm	24
Pull cable diameter	mm	26
Drilling depth maximum w/o auger extension	m	14
	ft	45,92
Drilling depth maximum w auger extension	m	20
	ft	65,60
<b>Auxiliary winch</b>		
Pulling force	kN	80
	lbf	262
Auxiliary winch speed	m/min	50
	ft/min	164
Auxiliary winch cable diameter	mm	20
<b>Mast</b>		
Pile max diameter	mm	1000
	in	40
Operating Weight w/o auger	t (metric)	55
	lbs	121260

### Working area CFA



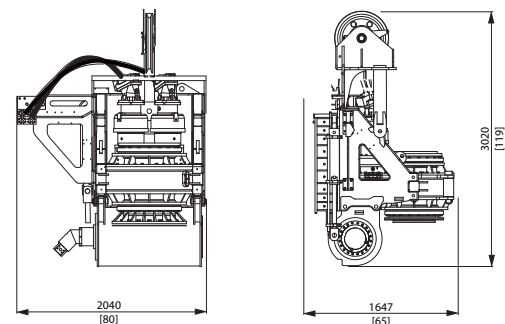
**A** MAX WORKING RADIUS 3975 [R 156]

**B** MAX TOOL DIAMETER 1000 [ø 39]

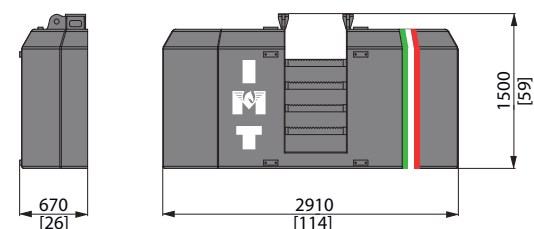
**C** MIN WORKING RADIUS 3475 [R 137]

### Removable parts for transport phase

**Rotary** Weight = 7,1 ton

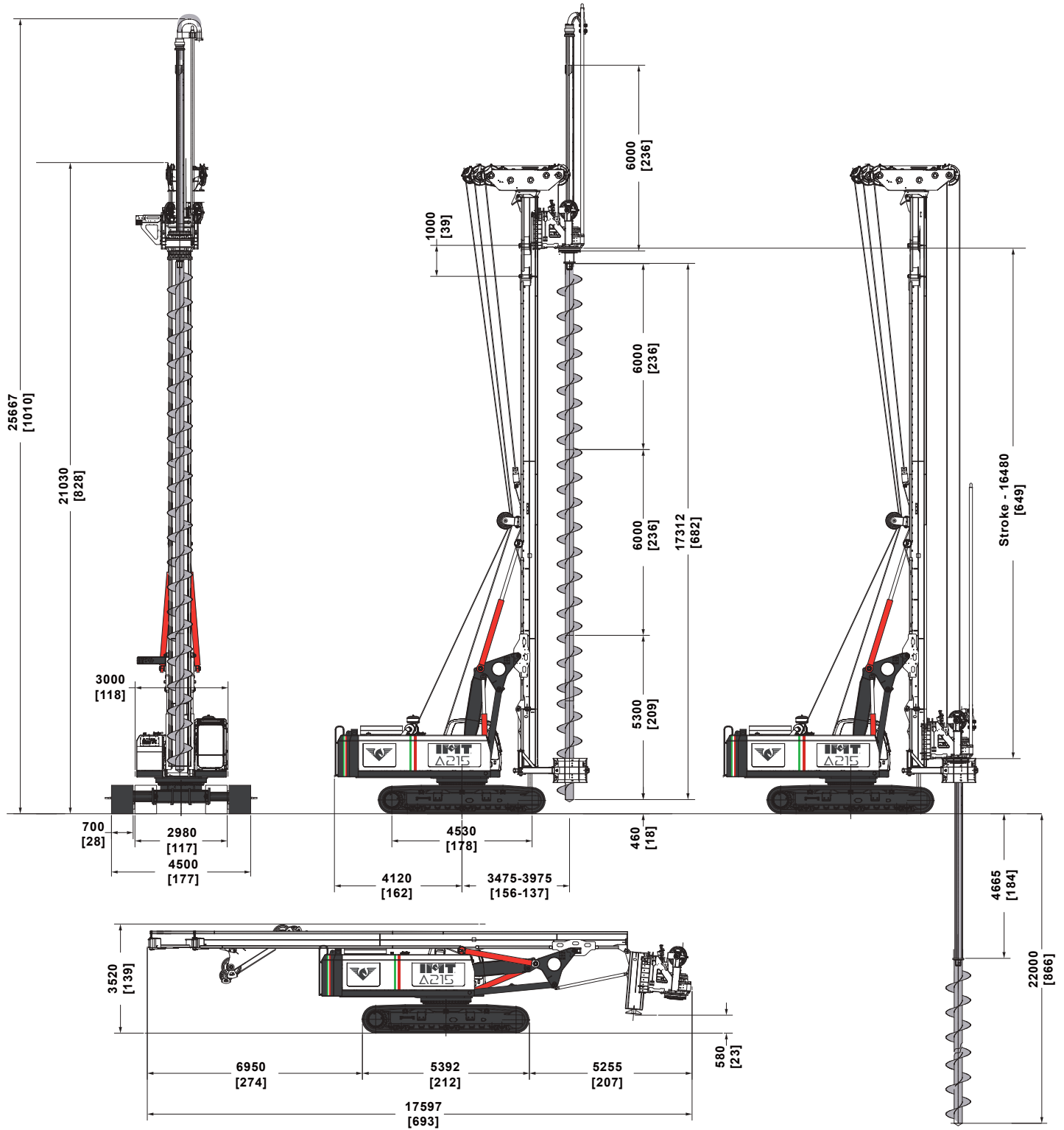


**Counterweight** Weight = 8 ton



# Δ 215 - Hydraulic Drill Rig

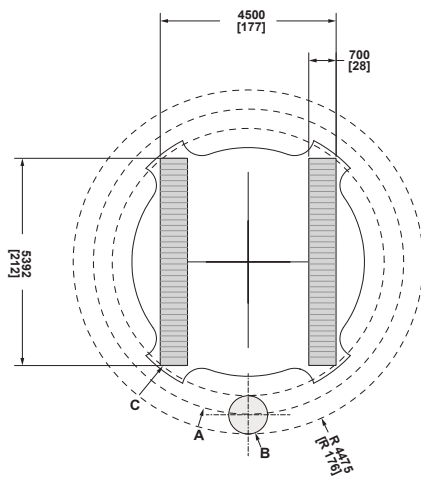
## CFA 4 line pull version





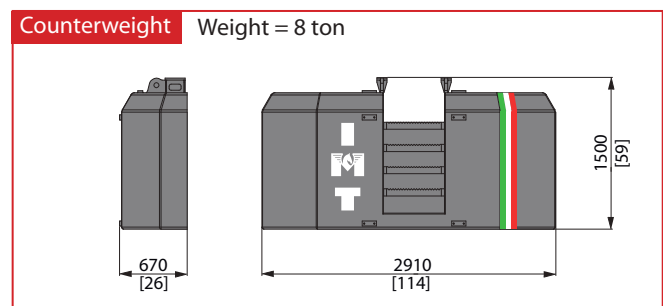
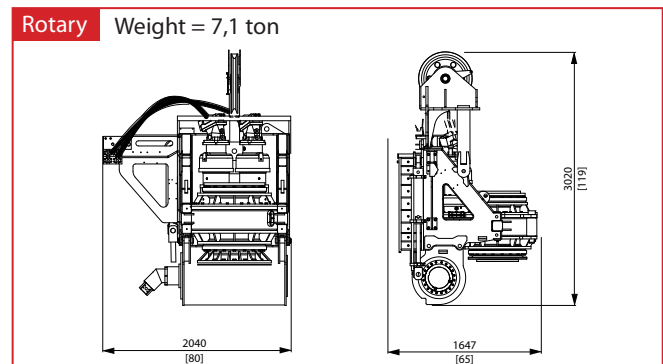
<b>Rotary</b>		
Max. torque	kNm	215
	lbf ft	158580
Working speed		11-28
<b>Crowd system</b>		
Pushing (force optional)	kN	100
	lbf	22485
Pulling force	kN	550
	lbf	123645
Max push/pull speed	m/min	20/20
	mm	16480
Rotary stroke	in	649
	mm	15
Push cable diameter	mm	26
Pull cable diameter	mm	16
Drilling depth maximum w/o auger extension	m	16
	ft	52,48
Drilling depth maximum w auger extension	m	22
	ft	72,16
<b>Mast</b>		
Pile max diameter	mm	1000
Operating Weight w/o auger	t (metric)	57
	lbs	125670

### Working area CFA 4 line pull



<b>A</b>	MAX WORKING RADIUS 3975 [R 156]
<b>B</b>	MAX TOOL DIAMETER 1000 [ø 39]
<b>C</b>	MIN WORKING RADIUS 3475 [R 137]

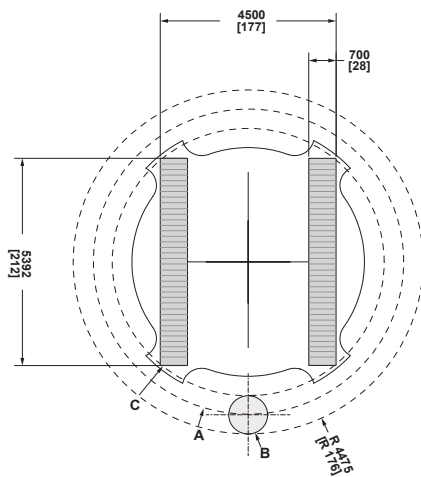
### Removable parts for transport phase





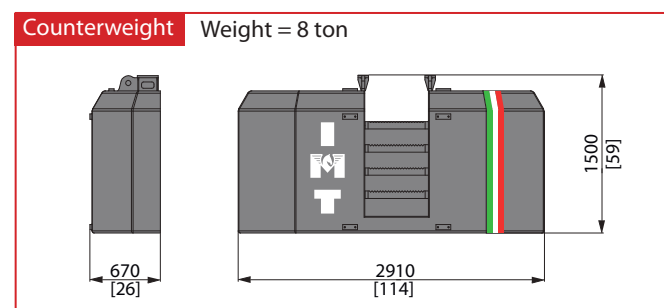
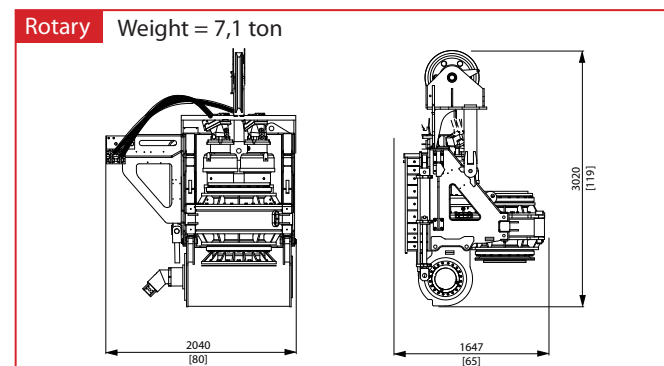
Crowd system		
Pushing force	kN	260
	lbf	58455
Pulling force	kN	400
	lbf	89925
Max push/pull speed	m/min	20/30
	ft/min	66/99
Rotary stroke	mm	14250
	in	561
Push cable diameter	mm	24
Pull cable diameter	mm	26
Drilling depth maximum w/o auger extension	m	14
	ft	45,92
Drilling depth maximum w auger extension	m	20
	ft	65,6
Mast		
Pile max diameter	mm	510
	in	21
Operating Weight w/o auger	t (metric)	55
	lbs	121260

### Working area Displacement pile



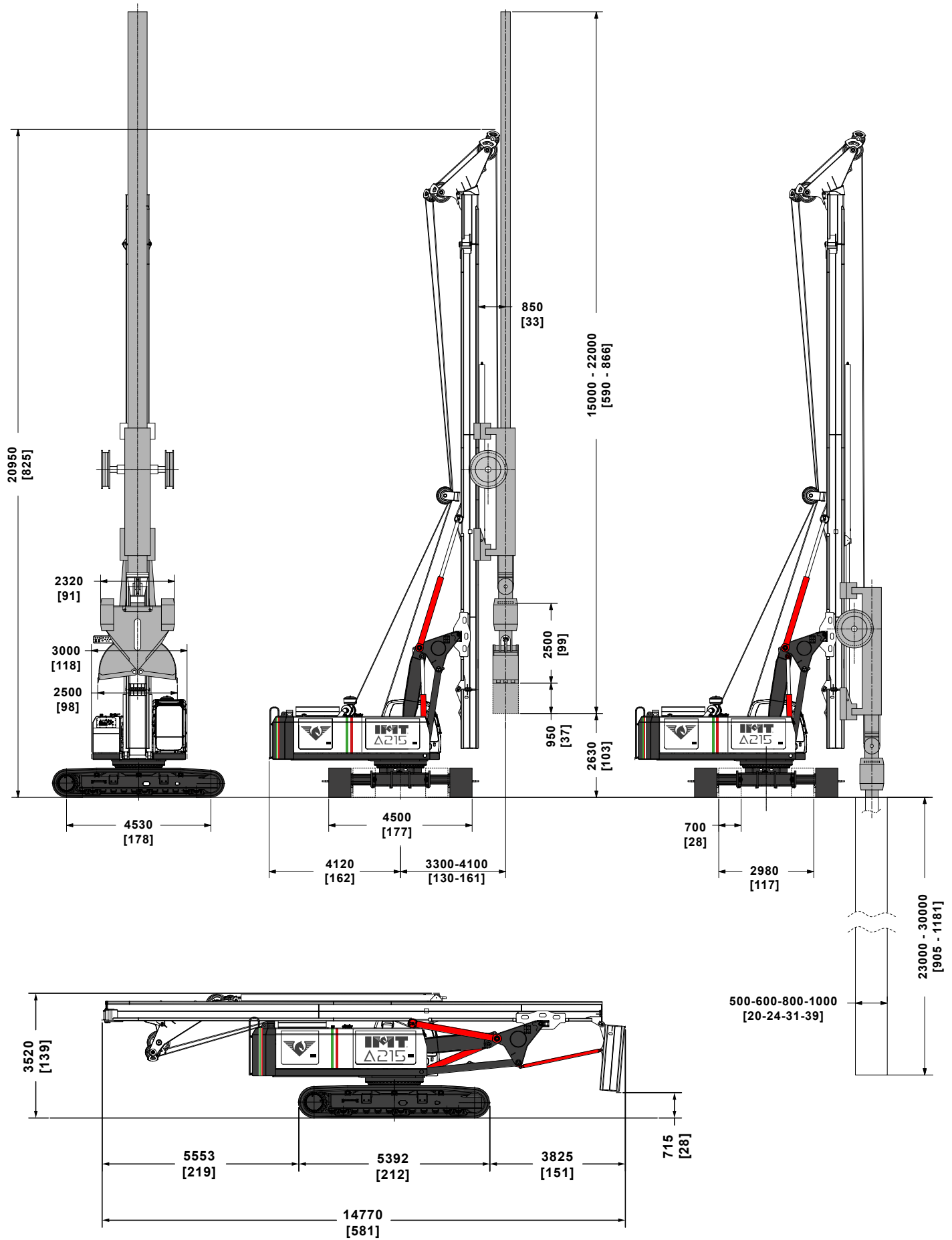
A	MAX WORKING RADIUS 3975 [R 156]
B	MAX TOOL DIAMETER 1000 [ø 39]
C	MIN WORKING RADIUS 3475 [R 137]

### Removable parts for transport phase



# Δ 215 - Hydraulic Drill Rig

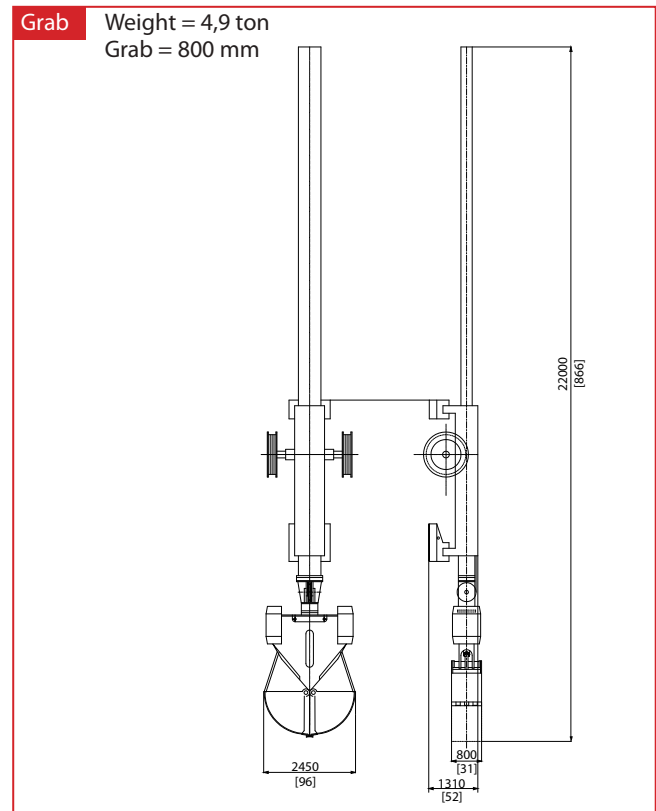
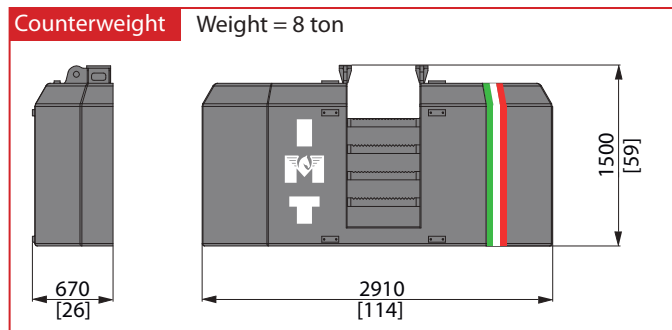
## Grab version



## Technical specifications

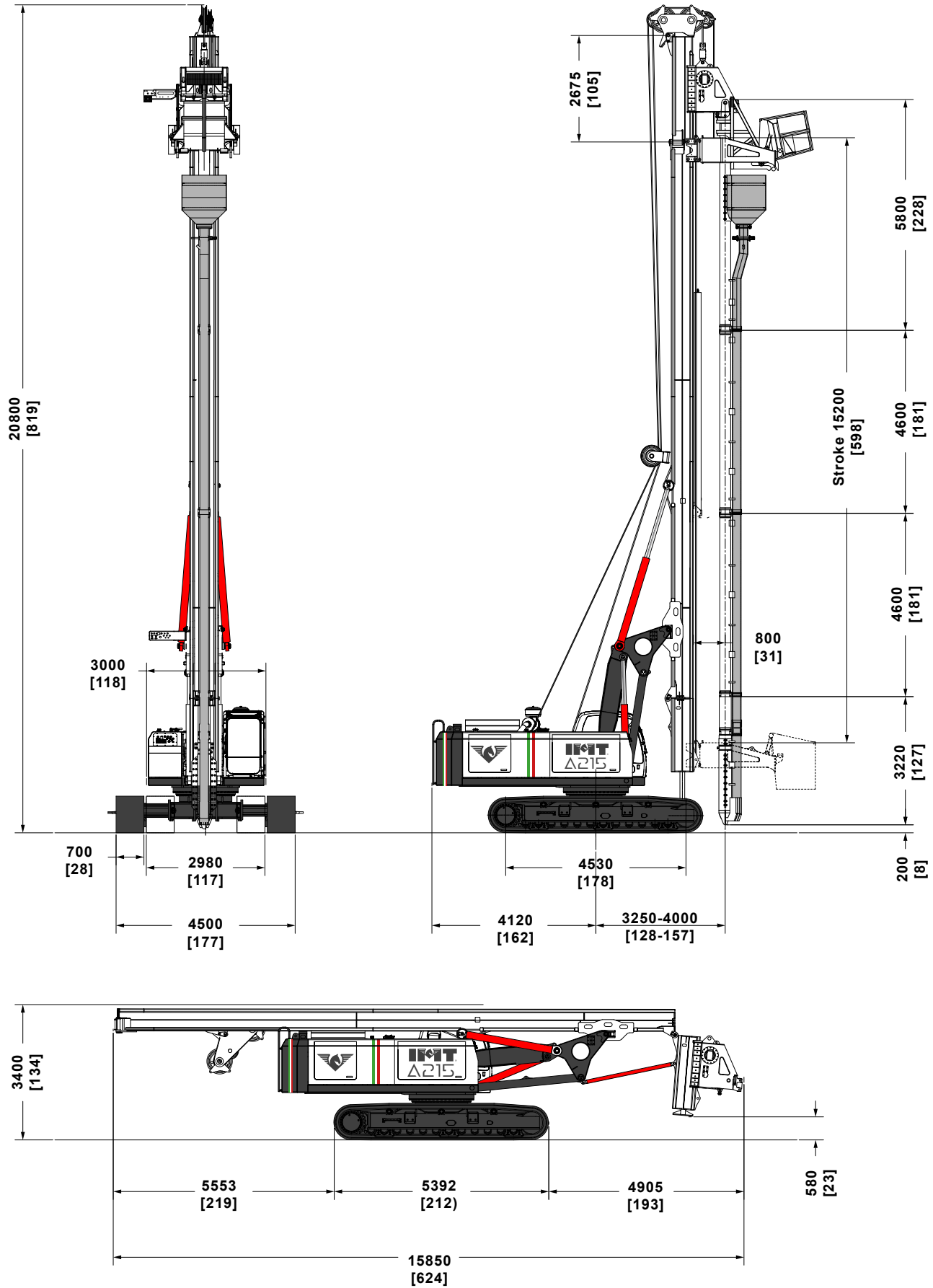
<b>Crowd System</b>		
Excavation width	mm	500-600-800-1000
Jaws opening	mm	2500
Excavation depth	m	23/30
Weight of grab	Kg	4000 / 4300 / 4900 / 5300
Continuous operating pressure	bar	320
Grab capacity	m <sup>3</sup>	/
Max closing force	kN	1630
Grab rotation	degree(°)	+45° / - 45°
<b>Winches</b>		
Main winch pull force	kN	400
	lbf	89925
Main winch speed	m/min	30
	ft/min	98
Operating Weight w/out grab	t (metric)	55
	lbs	121260

## Removable parts for transport phase



# Δ 215 - Hydraulic Drill Rig

## Vibroflotation version

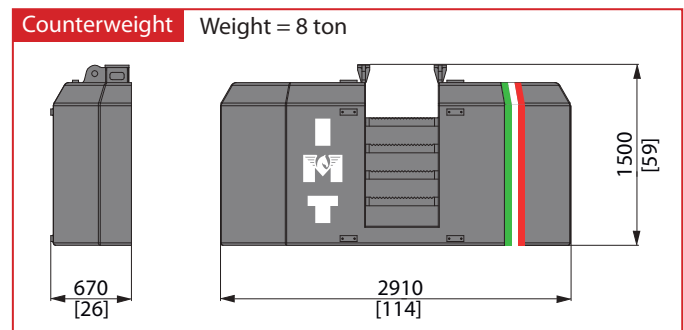




## Technical specifications

<b>Vibro</b>		
Power of vibrator	kW	154
Operative frequency	Hz	30
Speed	rpm	1700 / 1900
Operative centrifugal force	kN	230
Amplitude	mm	26
Overall weight incl. extension tube	Kg	6400
Penetration depth	m	15
Pull force	kN	200
Push force	kN	130
Operating Weight w/out vibrator system	t (metric)	55
	lbs	121260

## Removable parts for transport phase



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# Δ 215 - Hydraulic Drill Rig

















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