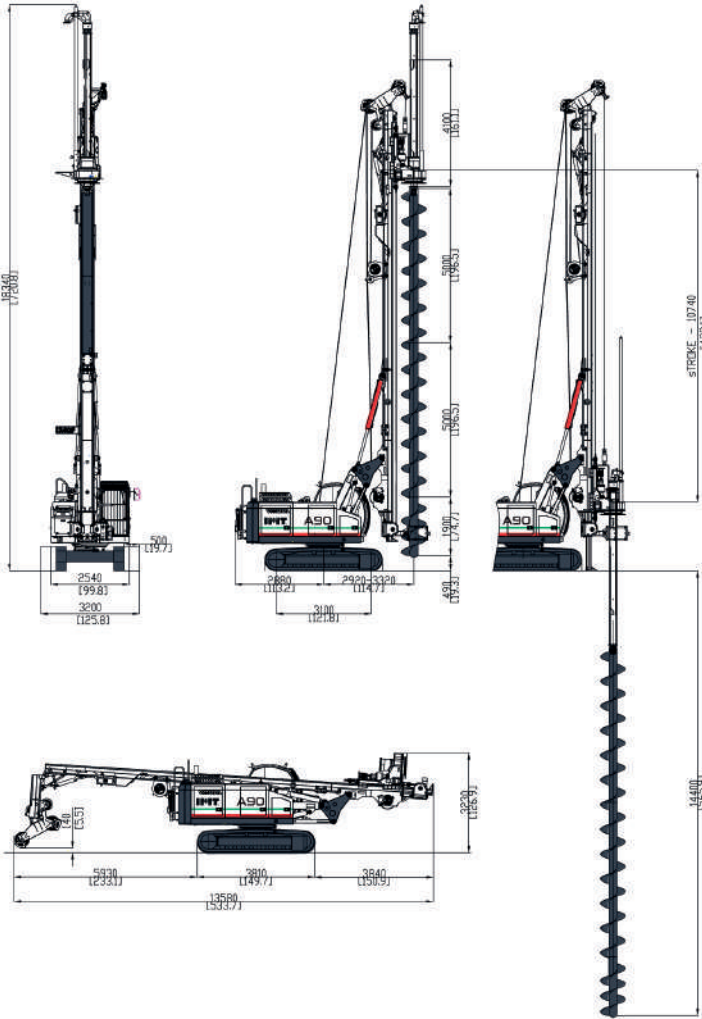


A90 CFA II° LINE PULL		
Rotary		
Installed torque	kNm	90
	lbf ft	66300
Working speed	rpm	15-34
Crowd system		
Pushing nominal force (optional)	kN	25
	lbf	26450
Pulling nominal force	kN	200
	lbf	46300
Max pull/push speed	m/min	30
		/
Rotary stroke w/o pushing force	mm	11700
	in	460
Rotary stroke with pushing force	mm	11350
	in	429
Pull rope diameter	mm	20
Push rope diameter	mm	10
Drilling depth maximum w/o auger extension	m	11,2
	ft	36,7
Drilling depth maximum w auger extension	m	15,3
	ft	50,2
Drilling depth maximum w/o auger extension and with pushing winch	m	10,85
	ft	35,6
Drilling depth maximum w/o auger extension and with pushing winch	m	14,95
	ft	49
Mast		
Mast raking forward		4°
Mast side raking		±5
Mast raking backwards		15°
Pile max.diameter	mm	600
	in	24
Base		
Undercarriage lenght/widening range/shoe	mm	3810/2540 - 3200/500
	in	150/100 - 126/19,7
Engine type		Cummins F3.8 3/stage V
Power		100 kW (135 HP) @1800 rpm
Operating Weight w/o auger	t	250
	lbs	55120

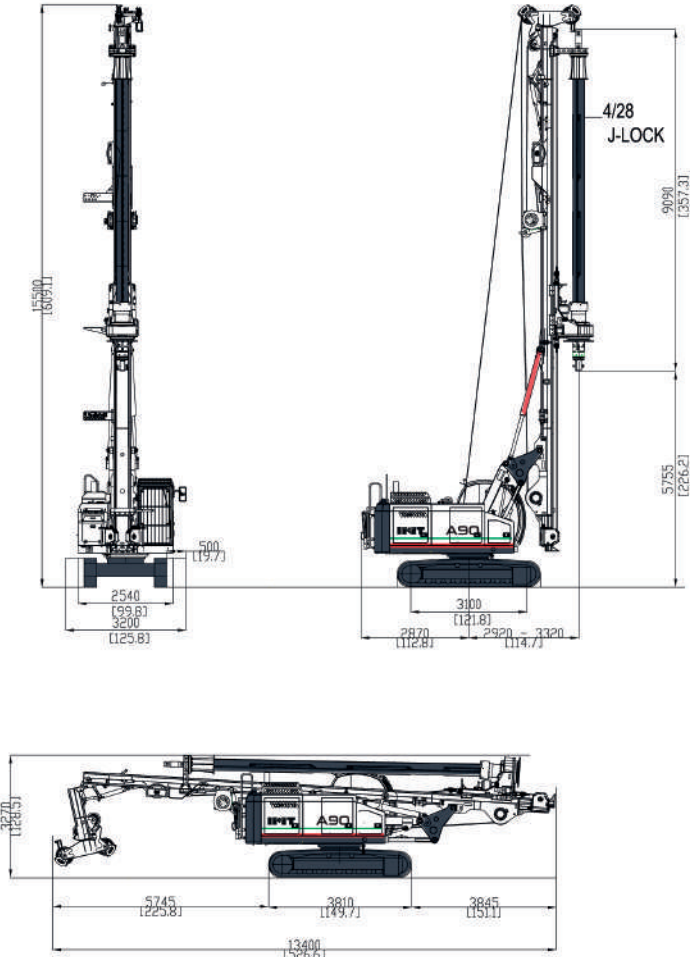


A 90
hydraulic drill rig

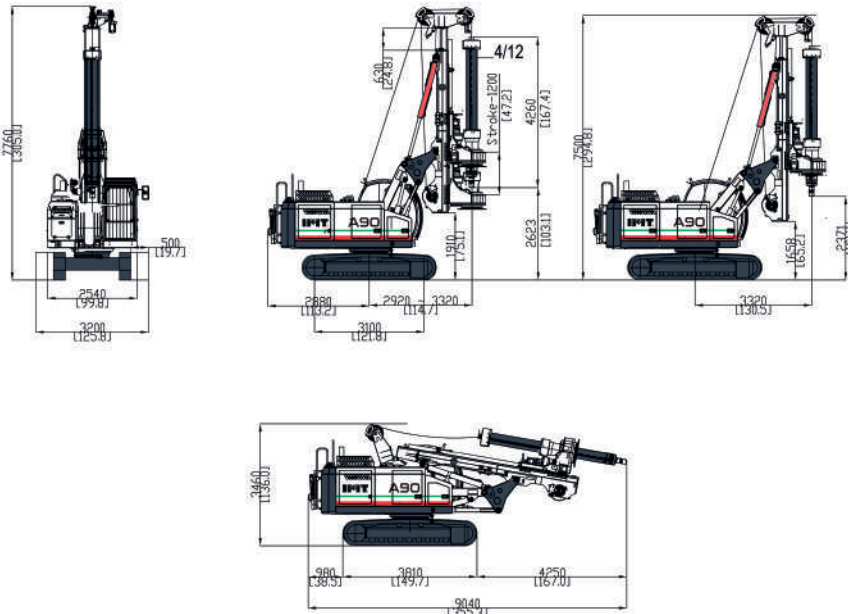
A 90 - Hydraulic Drill Rig



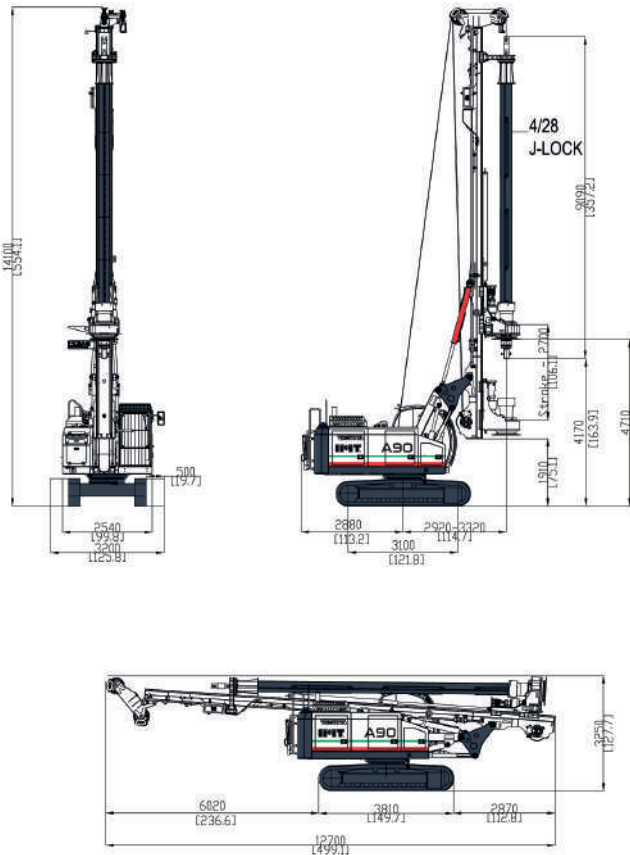
A90 CFA COMBINED LINE PULL		
Rotary		
Installed torque	kNm	90
	lbf ft	66300
Working speed	rpm	15-34
Discharge speed	rpm	60-90
Crowd system		
Pushing nominal force	kN	120
	lbf	26450
Pulling nominal force	kN	220
	lbf	46300
Max pull/push speed	m/min	35
		/
Rotary stroke	mm	10740
	in	422.8
Pull rope diameter	mm	20
Push rope diameter	mm	16
Drilling depth maximum w/o auger extension	m	10.3
	ft	33.8
Drilling depth maximum w auger extension	m	14.4
	ft	47.2
Mast		
Mast raking forward		4°
Mast side raking		±5
Mast raking backwards		15°
Pile max.diameter	mm	600
	in	24
Base		
		IMT
Undercarriage lenght/widening range/shoe	mm	3810/2540 - 3200/500
	in	150/100 - 126/19.7
Engine type		Cummins F3.8 3/stage V
Power		100 kW (135 HP) @1800 rpm
Operating Weight w/o auger	t	25.5
	lbs	56220



A90 CROWD WINCH		
Rotary		
Installed torque	kNm	90
	lbf ft	66300
Working speed	rpm	15-34
Discharge speed	rpm	60-95
Winches		
Main winch nominal pull force	kN	100
	lbf	22485
Main winch speed	m/min	60
	ft/min	197
Main winch rope diameter	mm	20
	in	/
Auxiliary winch nominal pull force	Kn	35
	lbf	7870
Auxiliary winch Speed	m/min	35
	ft/min	115
Auxiliary winch rope diameter	mm	12
	in	/
Crowd system		
Kelly crowd nominal push	kN	120
	lbf	26980
Kelly crowd nominal pull	kN	120
	lbf	26980
Speed up/down	m/min	15
Crowd winch rope diameter	mm	16
Mast		
Mast raking forward	mm	4°
Mast side raking	in	±5
Mast raking backwards		15°
Pile max.diameter	mm	1000
	in	40
Kelly bar		
Standard		4/28
Options available		on request
Base		
	mm	IMT
Undercarriage lenght/widening range/shoe	in	3810/2540 - 3200/500
		150/100 - 126/19.7
Engine type		Cummins F3.8 3/stage V
Power		100 kW (135 HP) @1800 rpm
Operating Weight w/standard kelly bar	t	27.5
	lbs	60630



A90 LCA		
Rotary		
Installed torque	kNm	90
	lbf ft	66300
Working speed	rpm	15-34
Discharge speed	rpm	60-95
Winches		
Main winch nominal pull force	kN	100
	lbf	22485
Main winch speed	m/min	60
	ft/min	197
Main winch rope diameter	mm	20
	in	/
Auxiliary winch nominal pull force	Kn	35
	lbf	7870
Auxiliary winch Speed	m/min	35
	ft/min	115
Auxiliary winch rope diameter	mm	12
	in	/
Crowd system		
Kelly crowd push	kN	95
	lbf	21360
Kelly crowd pull	kN	110
	lbf	24730
Stroke	mm	1200
	in	106
Mast		
Mast raking forward		4°
Mast side raking		±5
Mast raking backwards	mm	15°
Pile max.diameter	in	1300
		52
Kelly bar		
Standard	mm	4/12
Options available	in	on request
Base		
		IMT
Undercarriage lenght/widening range/shoe	mm	3810/2540 - 3200/500
	in	150/100 - 126/19.7
Engine type		Cummins F3.8 3/stage V
Power		100 kW (135 HP) @1800 rpm
Operating Weight w/standard kelly bar	t	24.5
	lbs	54020



A90 CROWD CYLINDER		
Rotary		
Installed torque	kNm	90
	lbf ft	66300
Working speed	rpm	15-34
Discharge speed	rpm	60-95
Winches		
Main winch nominal pull force	kN	100
	lbf	22485
Main winch speed	m/min	60
	ft/min	197
Main winch rope diameter	mm	20
	in	/
Auxiliary winch nominal pull force	Kn	35
	lbf	7870
Auxiliary winch Speed	m/min	35
	ft/min	115
Auxiliary winch rope diameter	mm	12
	in	/
Crowd system		
Kelly crowd push	kN	120
	lbf	21360
Kelly crowd pull	kN	110
	lbf	24730
Stroke	mm	2700
	in	106
Mast		
Mast raking forward		4°
Mast side raking		±5
Mast raking backwards		15°
Pile max.diameter	mm	1300
	in	52
Kelly bar		
Standard		4/28
Options available		4/25-4/32
Base		
		IMT
Undercarriage lenght/widening range/shoe	mm	3810/2540 - 3200/500
	in	150/100 - 126/19.7
Engine type		Cummins F3.8 3/stage V
Power		100 kW (135 HP) @1800 rpm
Operating Weight w/standard kelly bar	t	26.5
	lbs	58430