

Hydraulic Rotary Rig

SR-115

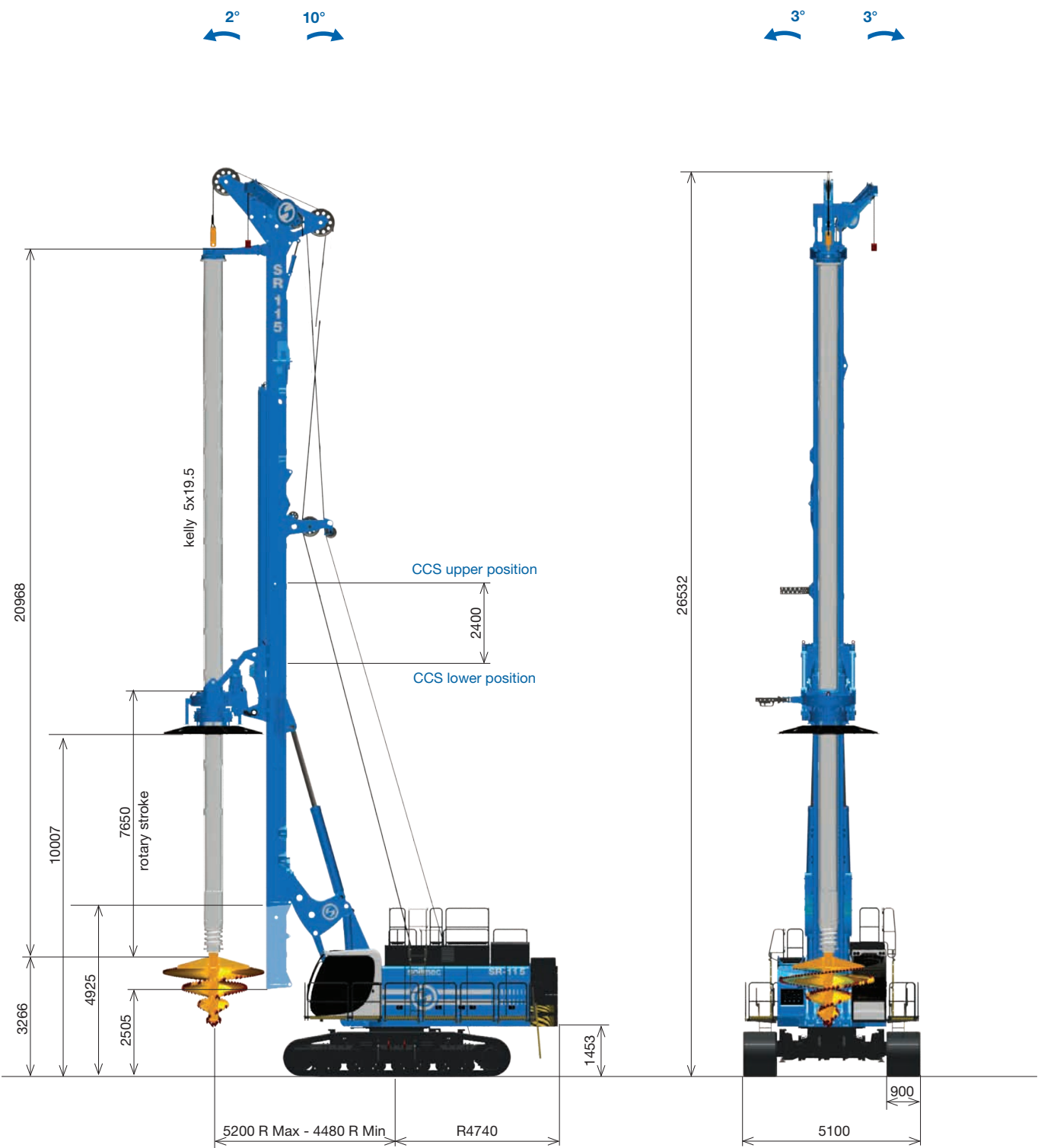
HIT



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Drilling and Foundation Equipment

SR-115 HIT Hydraulic Rotary Rig

LDP APPLICATIONS - Cylinder crowd system



LDP Large Diameter Piles - CCS version		
Operating weight w/o kelly bar	117400 kg	258820 lb
Max pile diameter along mast	2500 (3000*) mm	98 (118*) in
Max pile diameter w/o lower mast section, tool below mast	3000 (3500*) mm	118 (138*) in
Max pile depth - friction kelly	108,4 m	356 ft
Max pile depth - locking kelly	90,3 m	296 ft

* increased drilling axis package

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LDP APPLICATIONS - Winch crowd system



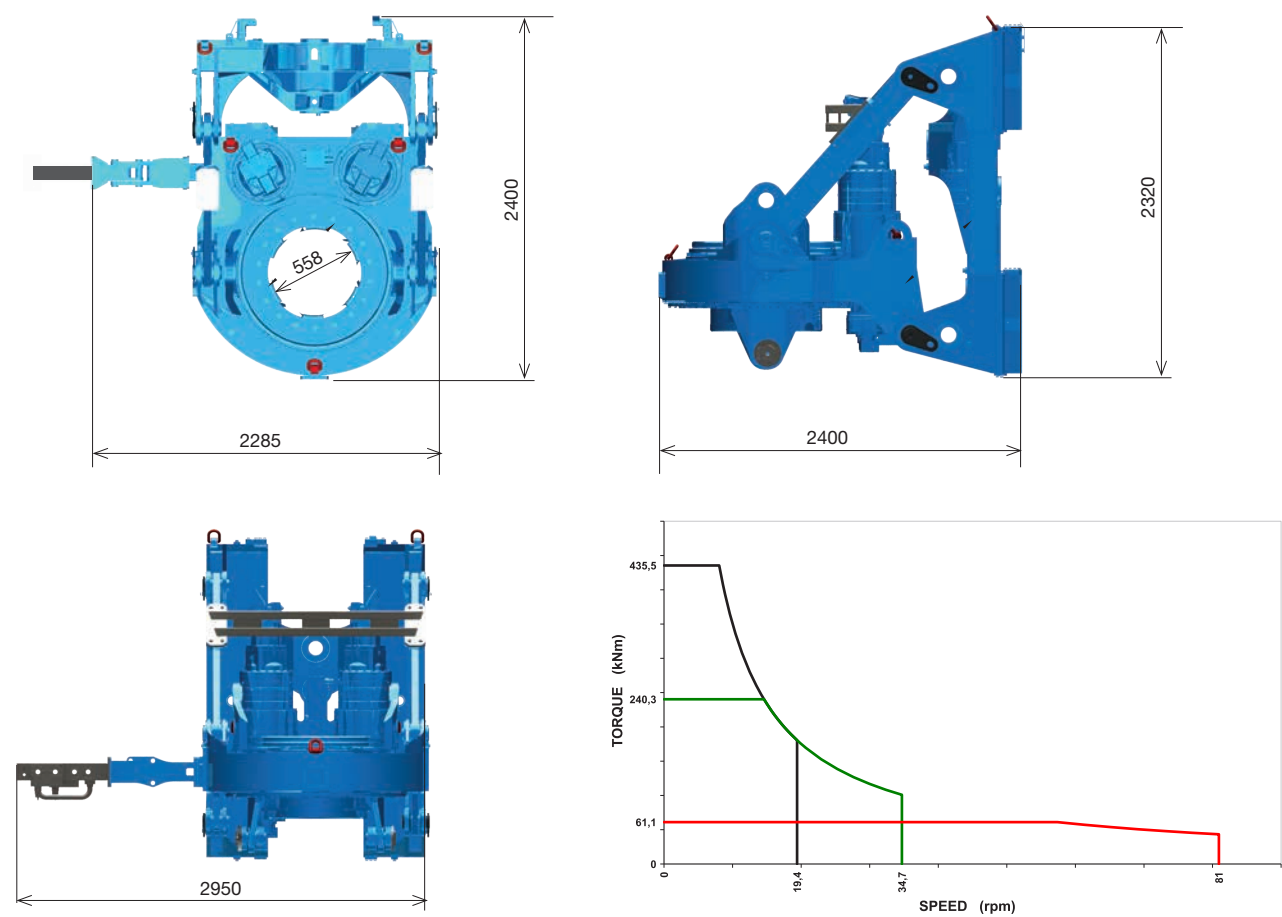
LDP_Large Diameter Piles - WCS version

Operating weight w/o kelly bar	119500 kg	2634450 lb
Max pile diameter along mast	2300 (2800*) mm	91 (110*) in
Max pile diameter w/o lower mast section, tool below mast	3000 (3500*) mm	118 (138*) in
Max pile depth - friction kelly	108,4 m	356 ft
Max pile depth - locking kelly	90,3 m	296 ft

* increased drilling axis package

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ROTARY TABLE



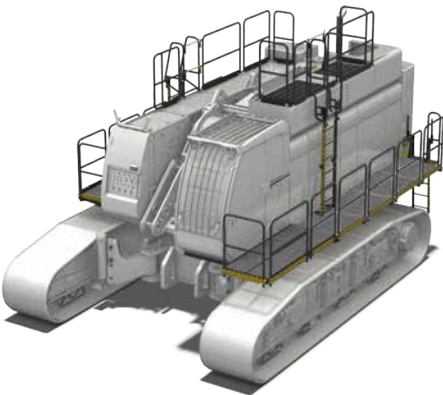
Rotary drive	Multigear version	Multigear version
- Max torque	435 kNm	320834 lbf*ft
- 1 st gear rated torque	411 kNm	303133 lbf*ft
- Speed of rotation (1 st gear)	19,4 rpm	19.4 rpm
- Speed of rotation (3 rd gear)	81 rpm	81 rpm
- Weight (w/o cradle & casing flange)	7000 kg	15432 lb

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Safety equipment compulsory for EC marking

On request whenever EC marking is not needed

- Catwalks 900 mm (3 ft) wide
- Ladder and handrails for both access levels
- Acoustic alarm for rotation and translation
- Radio remote control for tramming on ramp
- Video-camera set with 5 cameras included
- Rearview mirrors
- Led lights
- Oil discharge conveying system
- Load cell for service winch



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TECHNICAL DATA SHEET

CCS_Cylinder crowd system		
- Stroke	7650 mm	301 in
- Crowd force pull (down/up)	345 / 412 kN	77558 / 92620 lbf
- Fast speed up/down	20 m/min	66 ft/min
- Slow speed up/down	5,5 m/min	18 ft/min
WCS_Winch crowd system		
- Stroke	18900 mm	745 in
- Crowd force pull (down/up)	540 / 540 kN	121395 / 121395 lbf
- Fast speed up/down	33 m/min	108 ft/min
- Slow speed up/down	8,6 m/min	28 ft/min
Engine		
	CAT C18 Acert	CAT C18 Acert
- Rated output	470 kW @ 1800 rpm	630 HP @ 1800 rpm
- Engine conforms to Exhaust emission Standard	EU stage V-US EPA Tier4f	EU stage V-US EPA Tier4f
- Diesel tank capacity	1048 l	277 US gal
Main winch		
	controlled descent	controlled descent
- Line pull (1st layer)	370 kN	83178 lbf
- Rope diameter	34 mm	1.2 in
- Line speed (max.)	67 m/min	220 ft/min
Auxiliary winch		
	controlled descent	controlled descent
- Line pull (1st layer)	132 kN	29674 lbf
- Rope diameter	22 mm	0.9 in
- Line speed (max.)	71 m/min	233 ft/min
Hydraulic system		
- Flow rates (main circuits)	2x 444 l/min	2x 117 US gal/min
- Third pump flow	140 l/min	37 US gal/min
- Hydraulic oil tank capacity	1175 l	310 US gal
Undercarriage		
	variable gauge, telescoping removable sides	variable gauge, telescoping removable sides
- Overall width with retracted crawlers	3400 mm	134 in
- Overall width with extended crawlers	5100 mm	201 in
- Width of triple grouser track shoes	900 mm	35 in
- Overall length of crawlers	6360 mm	251 in
- Traction force effective/nominal	752 kN	169053 lbf
- Travel speed	1,6 km/h	1.0 mph
Mast inclination (Backward/ Forward/Lateral)		
	10°/2°/3°	10°/2°/3°

STANDARD EQUIPMENT

• Rotary table replaceable drive ribs • Emergency mode of operation for engine • Main and auxiliary winch controlled descent type with special grooving • Hoist limit switch on main and service rope • Service rope parking point • GSM/GPRS/GPS modem kit • DMS system electronic monitoring and visualization system • Mast inclination measurement on X/Y axes (digital/ analog display) • Automatic vertical mast alignment • Depth measuring device • Automatic greasing kit • Lubricator pump kit for rotary pads cradle	• Rotary speed measuring device • Rotary power control • Variably stackable counterweight • Removable undercarriage • Variable gauge undercarriage • Wider triple grouser track shoes • Transport securing lugs on crawler units • Oscillator attachment brackets • Lower foldable mast element • Cardan joint • Flange for casing driving • Kelly swivel • Kelly guide • On board lighting set • On board tool set	• Electric refuelling pump • High comfortable H-Cab 1050 mm (3,4 ft) wide • Protective roof grate (FOPS compliant) • Sliding door • Adjustable console with sliding support for DMS 12" touch screen • Engine and Diesel particulate diagnostic panel • Auto low idle system • Ergonomic seat with air suspension, fully-adjustable positioning and lumbar support • Heat and Air Conditioning control unit • Courtesy lights in the cab • Radio and CD player
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OPTIONAL EQUIPMENT

• Diesel Engine with EU Stage III A - US EPA Tier 3 motorization • Kit for disassembling undercarriage • Fiberglass canopies • Swivel for auxiliary rope • Flange for bucket opening • Hydraulic prearrangement for casing oscillator • Mast extension for special configuration	• Mast ladder kit • Parachute safety kit • Automatic hydraulic kit for upper mast folding • Limit switch for rope winding and winches • Free fall service winch • Double roller auger cleaner • Prearrangement for VTH-1 • Color warning light	• Air compressor kit • Mast disassembled kit • Increased drilling axis kit • Led lighting kit • Main winch 420 kN (94418 lbf) • Main rope antislak kit • Water jet cleaner kit • Machine lifting kit
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KELLY DRILLING SYSTEM

	Kelly Type	Kelly Dimensions	Drilling Depth		Weight		CCS SYSTEM		WCS SYSTEM	
							H		H	
		section x m	m	ft	t	ton (US)	m	ft	m	ft
3 parts	BL HD	3 x 11	28,6	93.8	7,8	8.6	9,7	31.8	11,7	38.4
	BL HD	3 x 12	32,2	105.6	8,4	9.3	9,7	31.8	10,5	34.4
	BL HD	3 x 13,5	36,1	118.4	9,2	10.1	9,2	30.2	9,2	30.2
	BL HD	3 x 14,5	39,2	128.6	9,8	10.8	8,2	26.9	8,2	26.9
	BL HD	3 x 16	43,2	141.7	10,6	11.7	6,8	22.3	6,8	22.3
	BL HD	3 x 17,5	48,6	159.4	11,4	12.6	5,0	16.4	5,0	16.4
	BL HD	3 x 19,5	53,9	176.8	12,5	13.8	3,3	10.8	3,3	10.8
4 parts	BL HD	4 x 11	38,1	125.0	9,2	10.1	9,7	31.8	11,7	38.4
	BL HD	4 x 12	43,3	142.1	9,8	10.8	9,7	31.8	10,5	34.4
	BL HD	4 x 13,5	48,0	157.5	10,8	11.9	9,2	30.2	9,2	30.2
	BL HD	4 x 14,5	52,5	172.2	11,5	12.7	8,2	26.9	8,2	26.9
	BL HD	4 x 16	57,9	190.0	12,4	13.7	6,8	22.3	6,8	22.3
	BL HD	4 x 17,5	65,0	213.3	13,4	14.8	5,0	16.4	5,0	16.4
	BL HD	4 x 19,5	72,1	236.5	14,7	16.2	3,3	10.8	3,3	10.8
5 parts*	FR/BL HD	5 x 11*	48,1	157.8	9,9	10.9	9,7	31.8	11,7	38.4
	FR/BL HD	5 x 12*	54,0	177.2	10,7	11.8	9,7	31.8	10,5	34.4
	FR/BL HD	5 x 13,5*	60,4	198.2	11,8	13.0	9,2	30.2	9,2	30.2
	FR/BL HD	5 x 14,5*	65,7	215.6	12,6	13.9	8,2	26.9	8,2	26.9
	FR/BL HD	5 x 16*	72,4	237.5	13,7	15.1	6,8	22.3	6,8	22.3
	FR/BL HD	5 x 17,5*	81,4	267.1	14,8	16.3	5,0	16.4	5,0	16.4
	FR/BL HD	5 x 19,5	90,3	296.3	16,3	18.0	3,3	10.8	3,3	10.8
6 parts*	FR HD	6 x 16 *	87,6	287.4	15,2	16.8	6,8	22.3	6,8	22.3
	FR HD	6 x 17,5 *	97,9	321.2	16,5	18.2	5,0	16.4	5,0	16.4
	FR HD	6 x 19 *	105,4	345.8	17,7	19.5	3,8	12.5	3,8	12.5
	FR HD	6 x 19,5 *	108,4	356.0	18,1	20.0	3,3	10.8	3,3	10.8

* Rotary head derated

Reduced drilling depth by 2,4 m (7.8 ft) w/o lower mast section or CCS in high position. With Kelly c/w stub 200x200.

Drilling depth with tool 1500 mm (4.9 ft) long

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APPLICATIONS

CFA - Continuous Flight Auger - Quick Change

Max pile diameter	1200 mm	47.24 in
Max pile depth with star auger cleander and with 8,5 m auger extension	27,7 m	91 ft
Max pile depth with auger cleaner, with 8,5 m auger extension	26 m	86 ft
Extraction force	1200 kN	269766 lbf

CFA - Continuous Flight Auger - 4 Lines pull

Max pile diameter	1200 mm	47,24 in
Max pile depth with star auger cleander and with 8,5 m auger extension	34,5 m	113 ft
Max pile depth with auger cleaner, with 8,5 m auger extension	33,2 m	109 ft
Extraction force	1293 kN	290673 lbf

CFA - Continuous Flight Auger - 4 Lines pull - Special version

Max pile diameter	800 mm	31.50 in
Max pile depth without auger cleaner, with 8,5 m auger extension	38,5 m	126 ft
Max pile depth with auger cleaner, with 8,5 m auger extension	37,2 m	122 ft
Extraction force	984 kN	221208 lbf

CAP/CSP - Cased Augered & Secant Piles - 4 Lines pull

Max pile diameter	1000 mm	39.37 in
Max pile depth without auger cleaner, with 6 m auger extension	28,6 m	94 ft
Max pile depth with auger cleaner, with 6 m auger extension	28 m	92 ft
Max cased depth c/w - w/o auger cleaner	21,8/22,4 m	72/73 ft

CAP/CSP - Cased Augered & Secant Piles - Quick Change

Max pile diameter	800 mm	32 in
Max pile depth without auger cleaner, with 6 m auger extension	24,7 m	81 ft
Max pile depth with auger cleaner, with 6 m auger extension	24,1 m	79 ft
Max cased depth c/w - w/o auger cleaner	15,4/16 m	51/52 ft

DP - Displacement Piles - Quick Change

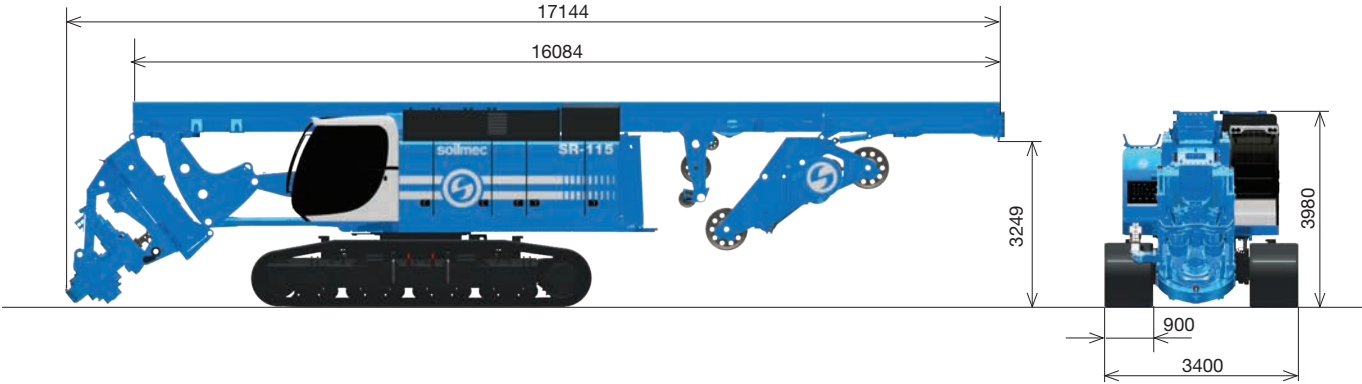
Max DP pile diameter	800 mm	31,50 in
Max TCT pile diameter	1000 mm	39.37 in
Max pile depth with 8,5 m string extension	26,5 m	87 ft
Max depth c/w lattice boom mast extension	34 m	111.55 ft

TJ - Turbojet® - Quick Change

Max treatment diameter	1500 (2000 special) mm	59 (79 special) in
Max pile depth with 6 m string extension	24 m	79 ft
Max depth c/w lattice boom mast extension	34 m	111.55 ft

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TRANSPORT, DIMENSIONS & WEIGHTS



Transport configuration		
- Transport width with/without crawlers	3400 / 3200 mm	134 / 126 in
- Transport length CCS version without rotary	16550 mm	652 in
- Transport height	3980 mm	156,69 in
- CCS Version - Transport weight std - min	84700 / 48300 kg	186730 / 106482 lb
- WCS Version - Transport weight std - min	91000 / 48300 kg	200619 / 106482 lb

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