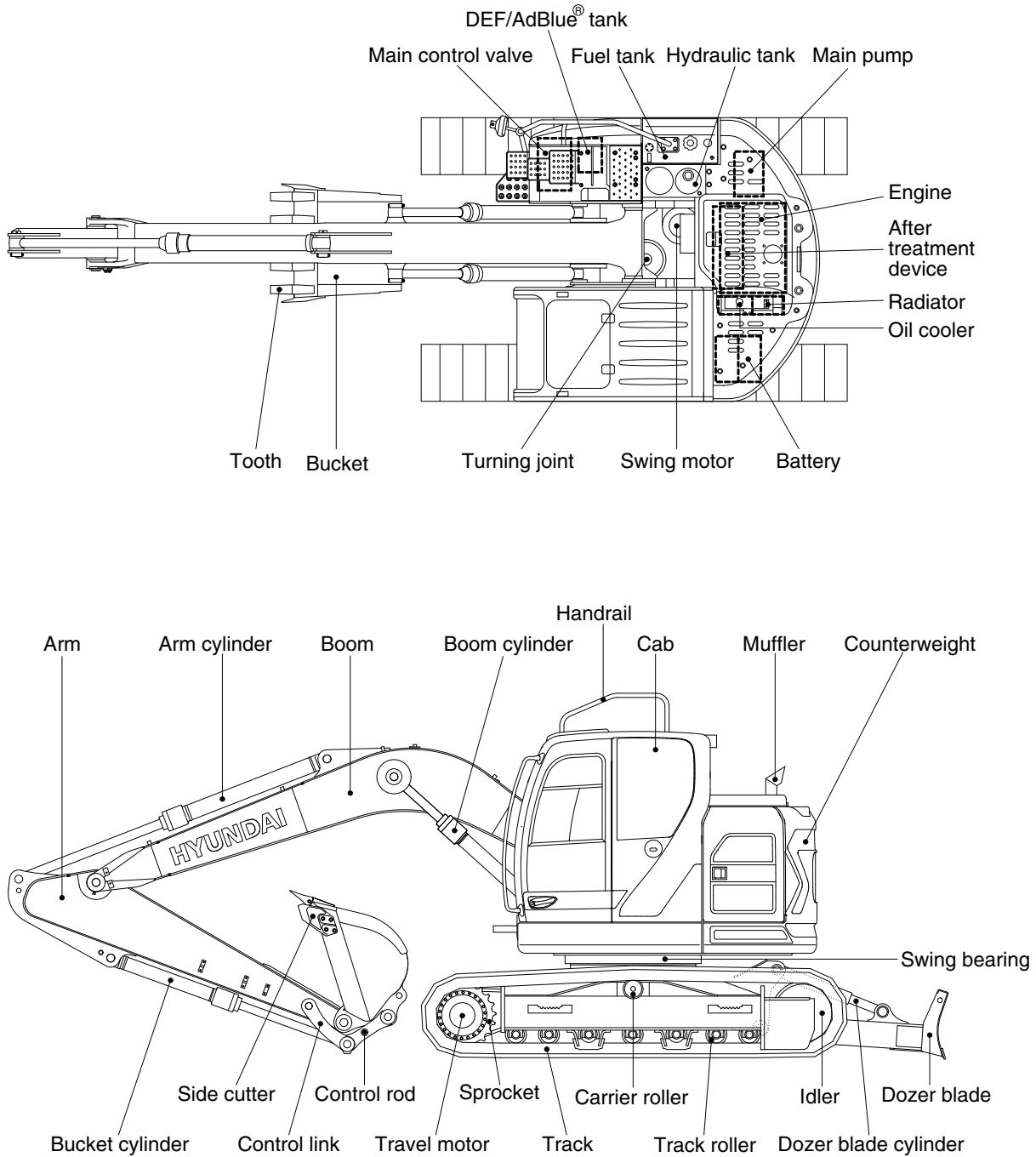


SPECIFICATIONS

1. MAJOR COMPONENT

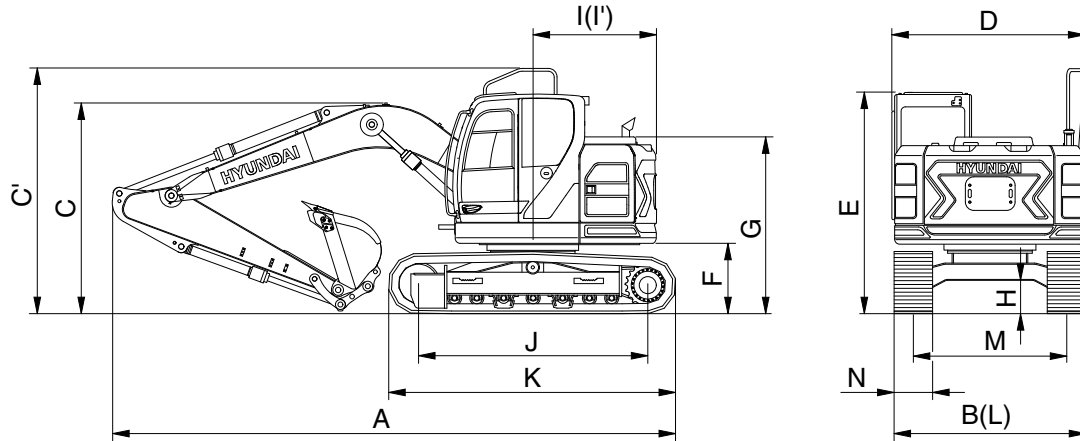


145ZF2SP01A

2. SPECIFICATIONS

1) HX145 CR

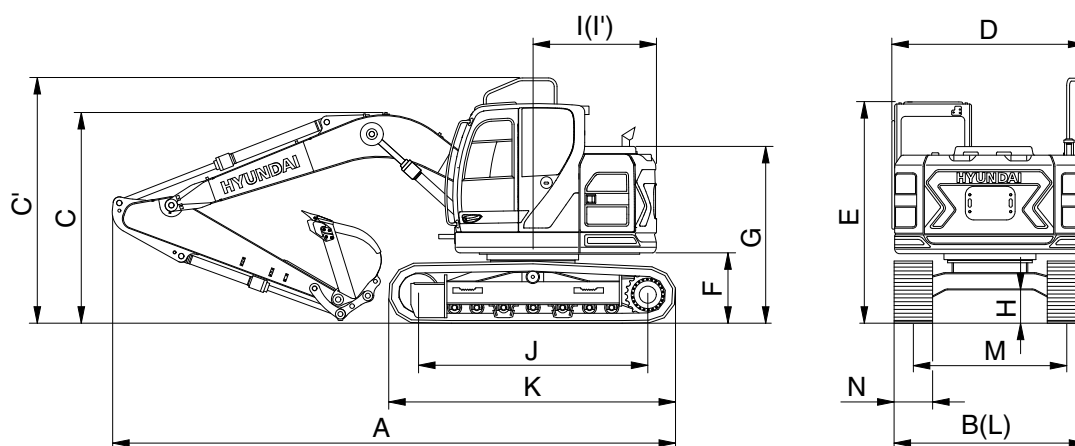
(1) 4.60 m (15' 1") boom and 1.9 m (6' 3"), 2.1 m (6' 11") arm



145ZF2SP02

Description		Unit	Specification	
			1.9 m (6' 3") arm	2.1 m (6' 11") arm
Operating weight		kg (lb)	15180 (33470)	15210 (33530)
Bucket capacity (SAE heaped), standard		m ³ (yd ³)	0.52 (0.68)	←
Overall length	A	mm (ft-in)	7290 (23' 11")	7310 (24' 0")
Overall width, with 600 mm shoe	B		2600 (8' 6")	←
Overall height	C		2630 (8' 8")	2710 (8' 11")
Overall height of handrail	C'		3215 (10' 7")	←
Superstructure width	D		2500 (8' 2")	←
Overall height of cab	E		2900 (9' 6")	←
Ground clearance of counterweight	F		930 (3' 1")	←
Engine cover height	G		2320 (7' 7")	←
Minimum ground clearance	H		440 (1' 5")	←
Rear-end distance	I		1500 (4' 11")	←
Rear-end swing radius	I'		1500 (4' 11")	←
Distance between tumblers	J		2910 (9' 7")	←
Undercarriage length	K		3618 (11' 8")	←
Undercarriage width	L		2600 (8' 6")	←
Track gauge	M		2000 (6' 7")	←
Track shoe width, standard	N		600 (24")	←
Travel speed (low/high)		km/hr (mph)	3.3/5.5 (2.1/3.4)	←
Swing speed		rpm	11.2	←
Gradeability		Degree (%)	35 (70)	←
Ground pressure (600 mm shoe)		kgf/cm ² (psi)	0.40 (5.7)	0.40 (5.72)
Max traction force		kg (lb)	12000 (26455)	←

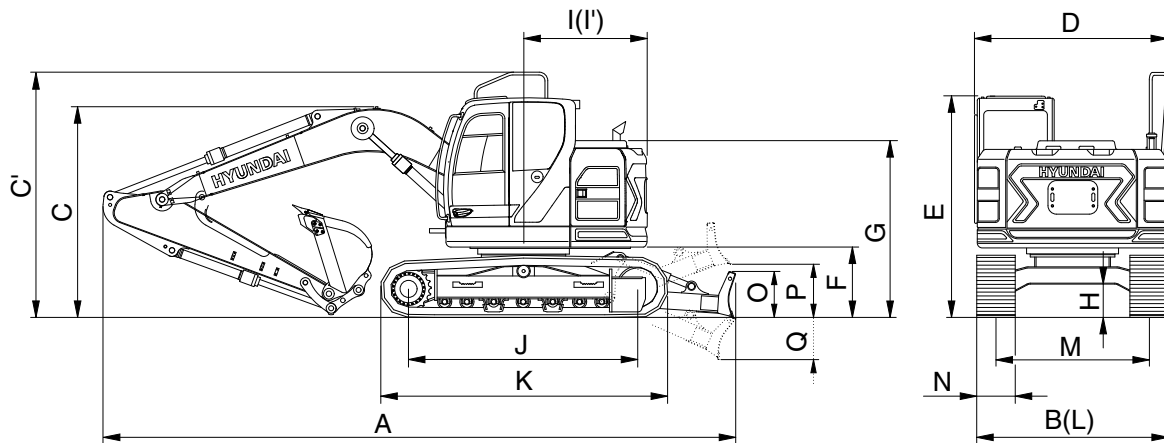
(2) 4.60 m (15' 1") boom and 2.50 m (8' 2"), 3.0 m (9' 10") arm



145ZF2SP02

Description		Unit	Specification	
			2.50 m (8' 2") arm	3.0 m (9' 10") arm
Operating weight		kg (lb)	15270 (33660)	15320 (33770)
Bucket capacity (SAE heaped), standard		m ³ (yd ³)	0.52 (0.68)	←
Overall length	A	mm (ft-in)	7270 (23' 10")	7210 (23' 8")
Overall width, with 600 mm shoe	B		2600 (8' 6")	←
Overall height	C		2860 (9' 5")	3210 (10' 6")
Overall height of handrail	C'		3215 (10' 7")	←
Superstructure width	D		2500 (8' 2")	←
Overall height of cab	E		2900 (9' 6")	←
Ground clearance of counterweight	F		930 (3' 1")	←
Engine cover height	G		2320 (7' 7")	←
Minimum ground clearance	H		440 (1' 5")	←
Rear-end distance	I		1500 (4' 11")	←
Rear-end swing radius	I'		1500 (4' 11")	←
Distance between tumblers	J		2910 (9' 7")	←
Undercarriage length	K		3618 (11' 8")	←
Undercarriage width	L		2600 (8' 6")	←
Track gauge	M		2000 (6' 7")	←
Track shoe width, standard	N		600 (24")	←
Travel speed (low/high)		km/hr (mph)	3.3/5.5 (2.1/3.4)	←
Swing speed		rpm	11.2	←
Gradeability		Degree (%)	35 (70)	←
Ground pressure (600 mm shoe)		kgf/cm ² (psi)	0.40 (5.74)	0.40 (5.76)
Max traction force		kg (lb)	12000 (26455)	←

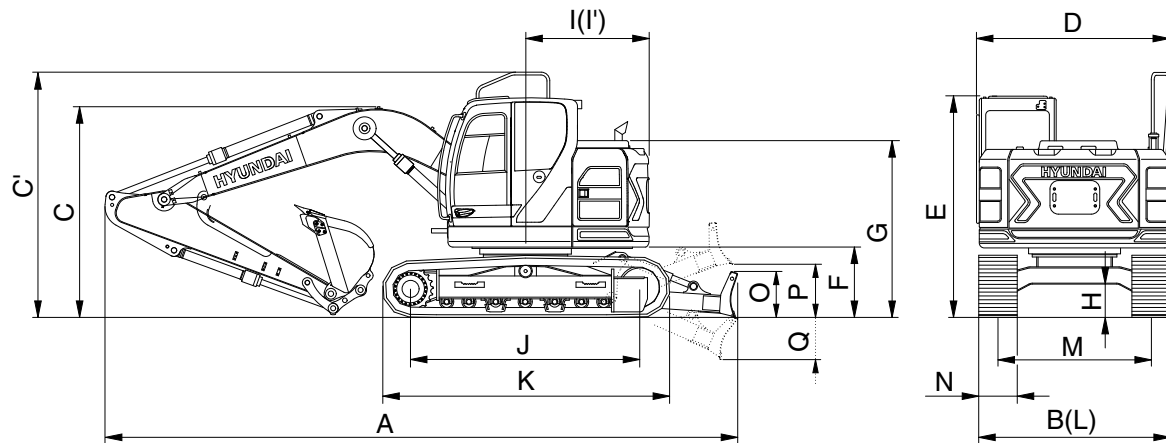
(3) 4.60 m (15' 1") boom and 1.9 m (6' 3"), 2.1 m (6' 11") arm with dozer



145ZF2SP03

Description		Unit	Specification	
			1.9 m (6' 3") arm	2.1 m (6' 11") arm
Operating weight		kg (lb)	16020 (35320)	16050 (35380)
Bucket capacity (SAE heaped), standard		m ³ (yd ³)	0.52 (0.68)	←
Overall length	A	mm (ft-in)	7840 (25' 9")	7860 (25' 9")
Overall width, with 600 mm shoe	B		2600 (8' 6")	←
Overall height	C		2630 (8' 8")	2710 (8' 11")
Overall height of handrail	C'		3215 (10' 7")	←
Superstructure width	D		2500 (8' 2")	←
Overall height of cab	E		2900 (9' 6")	←
Ground clearance of counterweight	F		930 (3' 1")	←
Engine cover height	G		2320 (7' 7")	←
Minimum ground clearance	H		440 (1' 5")	←
Rear-end distance	I		1500 (4' 11")	←
Rear-end swing radius	I'		1500 (4' 11")	←
Distance between tumblers	J		2910 (9' 7")	←
Undercarriage length	K		3618 (11' 8")	←
Undercarriage width	L		2600 (8' 6")	←
Track gauge	M		2000 (6' 7")	←
Track shoe width, standard	N		600 (24")	←
Height of blade	O		575 (1' 11")	←
Ground clearance of blade up	P		420 (1' 5")	←
Depth of blade down	Q		430 (1' 5")	←
Travel speed (low/high)		km/hr (mph)	3.3/5.5 (2.1/3.4)	←
Swing speed		rpm	11.2	←
Gradeability		Degree (%)	35 (70)	←
Ground pressure (600 mm shoe)		kgf/cm ² (psi)	0.42 (6.02)	0.42 (6.03)
Max traction force		kg (lb)	12000 (26455)	←

(4) 4.60 m (15' 1") boom and 2.50 m (8' 2"), 3.0 m (9' 10") arm with dozer

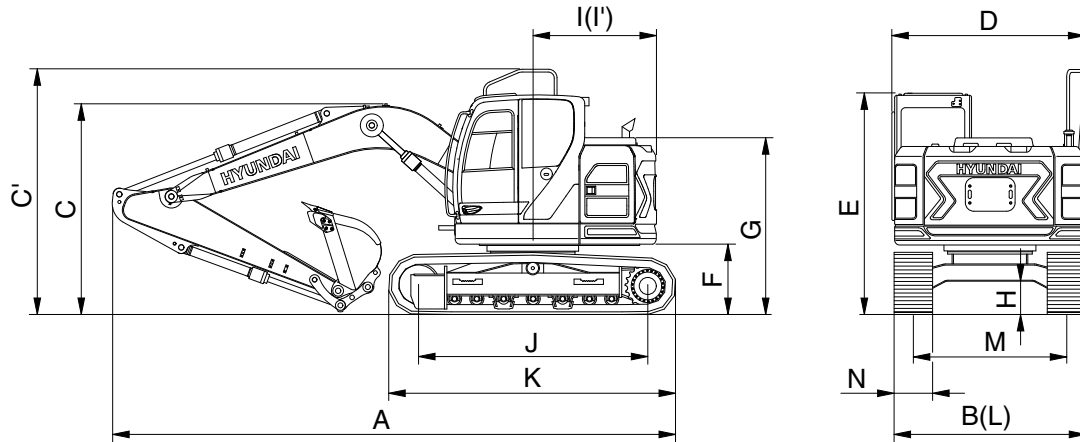


145ZF2SP03

Description		Unit	Specification	
			2.50 m (8' 2") arm	3.0 m (9' 10") arm
Operating weight		kg (lb)	16110 (35520)	16160 (35630)
Bucket capacity (SAE heaped), standard		m ³ (yd ³)	0.52 (0.68)	←
Overall length	A	mm (ft-in)	7820 (25' 8")	7760 (25' 6")
Overall width, with 600 mm shoe	B		2600 (8' 6")	←
Overall height	C		2860 (9' 5")	3210 (10' 6")
Overall height of handrail	C'		3215 (10' 7")	←
Superstructure width	D		2500 (8' 2")	←
Overall height of cab	E		2900 (9' 6")	←
Ground clearance of counterweight	F		930 (3' 1")	←
Engine cover height	G		2320 (7' 7")	←
Minimum ground clearance	H		440 (1' 5")	←
Rear-end distance	I		1500 (4' 11")	←
Rear-end swing radius	I'		1500 (4' 11")	←
Distance between tumblers	J		2910 (9' 7")	←
Undercarriage length	K		3618 (11' 8")	←
Undercarriage width	L		2600 (8' 6")	←
Track gauge	M		2000 (6' 7")	←
Track shoe width, standard	N		600 (24")	←
Height of blade	O		575 (1' 11")	←
Ground clearance of blade up	P		420 (1' 5")	←
Depth of blade down	Q		430 (1' 5")	←
Travel speed (low/high)		km/hr (mph)	3.3/5.5 (2.1/3.4)	←
Swing speed		rpm	11.2	←
Gradeability		Degree (%)	35 (70)	←
Ground pressure (600 mm shoe)		kgf/cm ² (psi)	0.43 (6.05)	0.43 (6.07)
Max traction force		kg (lb)	12000 (26455)	←

2) HX145 LCR

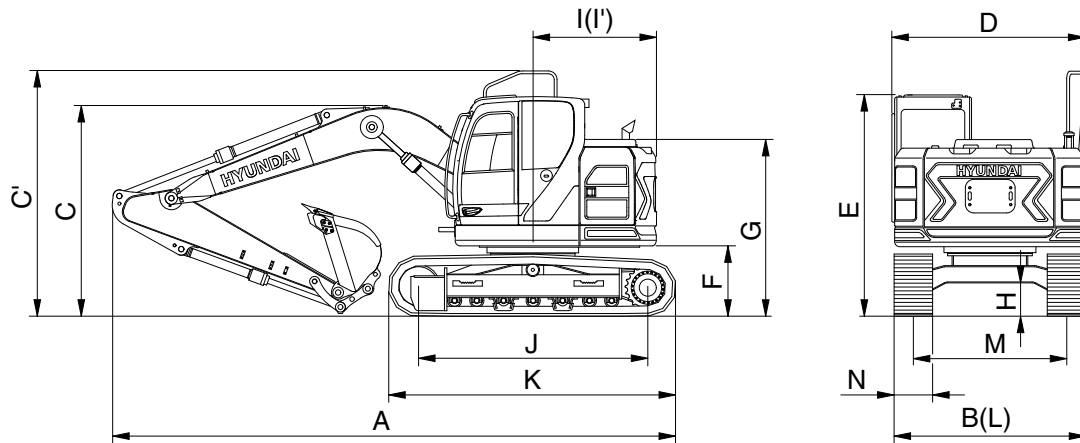
(1) 4.60 m (15' 1") boom and 1.9 m (6' 3"), 2.1 m (6' 11") arm



145ZF2SP02

Description		Unit	Specification	
			1.9 m (6' 3") arm	2.1 m (6' 11") arm
Operating weight		kg (lb)	15440 (34040)	15480 (34130)
Bucket capacity (SAE heaped), standard		m ³ (yd ³)	0.52 (0.68)	←
Overall length	A	mm (ft-in)	7380 (24' 3")	7400 (24' 3")
Overall width, with 600 mm shoe	B		2600 (8' 6")	←
Overall height	C		2630 (8' 8")	2710 (8' 11")
Overall height of handrail	C'		3215 (10' 7")	←
Superstructure width	D		2500 (8' 2")	←
Overall height of cab	E		2900 (9' 6")	←
Ground clearance of counterweight	F		930 (3' 1")	←
Engine cover height	G		2320 (7' 7")	←
Minimum ground clearance	H		440 (1' 5")	←
Rear-end distance	I		1500 (4' 11")	←
Rear-end swing radius	I'		1500 (4' 11")	←
Distance between tumblers	J		3090 (10' 2")	←
Undercarriage length	K		3798 (12' 6")	←
Undercarriage width	L		2600 (8' 6")	←
Track gauge	M		2000 (6' 7")	←
Track shoe width, standard	N		600 (24")	←
Travel speed (low/high)		km/hr (mph)	3.3/5.5 (2.1/3.4)	←
Swing speed		rpm	11.2	←
Gradeability		Degree (%)	35 (70)	←
Ground pressure (600 mm shoe)		kgf/cm ² (psi)	0.39 (5.49)	0.39 (5.5)
Max traction force		kg (lb)	12000 (26455)	←

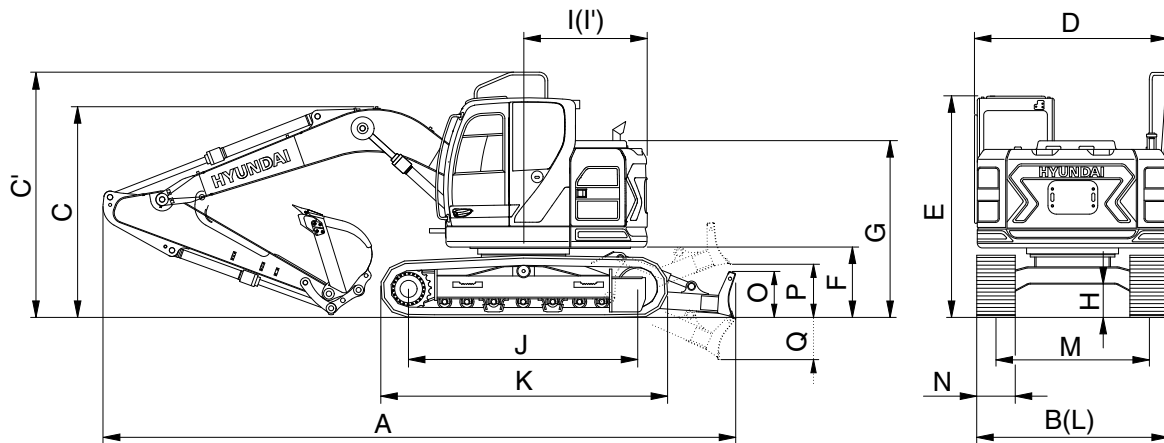
(2) 4.60 m (15' 1") boom and 2.50 m (8' 2"), 3.0 m (9' 10") arm



145ZF2SP02

Description		Unit	Specification	
			2.50 m (8' 2") arm	3.0 m (9' 10") arm
Operating weight		kg (lb)	15540 (34260)	15580 (34350)
Bucket capacity (SAE heaped), standard		m ³ (yd ³)	0.52 (0.68)	←
Overall length	A	mm (ft-in)	7360 (24' 2")	7300 (23' 11")
Overall width, with 600 mm shoe	B		2600 (8' 6")	←
Overall height	C		2860 (9' 5")	3210 (10' 6")
Overall height of handrail	C'		3215 (10' 7")	←
Superstructure width	D		2500 (8' 2")	←
Overall height of cab	E		2900 (9' 6")	←
Ground clearance of counterweight	F		930 (3' 1")	←
Engine cover height	G		2320 (7' 7")	←
Minimum ground clearance	H		440 (1' 5")	←
Rear-end distance	I		1500 (4' 11")	←
Rear-end swing radius	I'		1500 (4' 11")	←
Distance between tumblers	J		3090 (10' 2")	←
Undercarriage length	K		3798 (12' 6")	←
Undercarriage width	L		2600 (8' 6")	←
Track gauge	M		2000 (6' 7")	←
Track shoe width, standard	N		600 (24")	←
Travel speed (low/high)		km/hr (mph)	3.3/5.5 (2.1/3.4)	←
Swing speed		rpm	11.2	←
Gradeability		Degree (%)	35 (70)	←
Ground pressure (600 mm shoe)		kgf/cm ² (psi)	0.39 (5.52)	0.39 (5.54)
Max traction force		kg (lb)	12000 (26455)	←

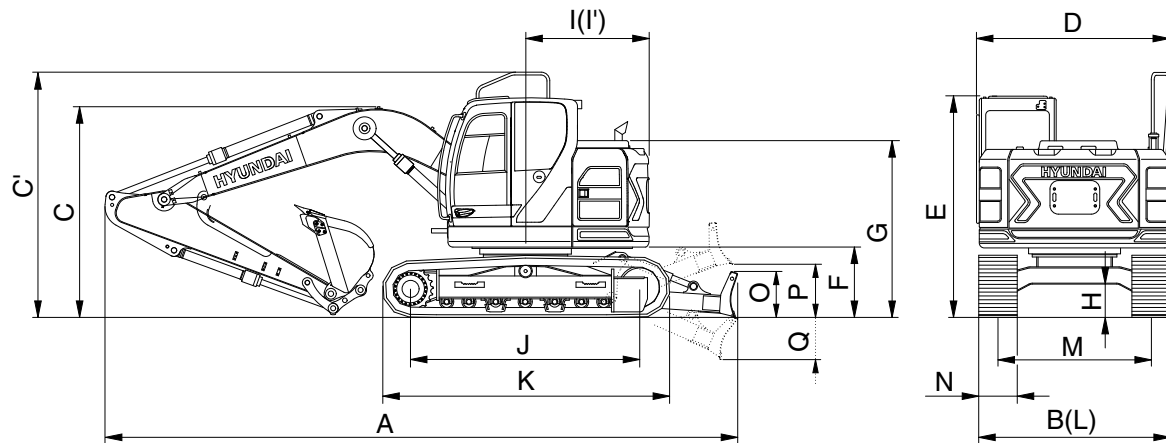
(3) 4.60 m (15' 1") boom and 1.9 m (6' 3"), 2.1 m (6' 11") arm with dozer



145ZF2SP03

Description		Unit	Specification	
			1.9 m (6' 3") arm	2.1 m (6' 11") arm
Operating weight		kg (lb)	16260 (35850)	16300 (35940)
Bucket capacity (SAE heaped), standard		m ³ (yd ³)	0.52 (0.68)	←
Overall length	A	mm (ft-in)	7840 (25' 9")	7860 (25' 9")
Overall width, with 600 mm shoe	B		2600 (8' 6")	←
Overall height	C		2630 (8' 8")	2710 (8' 11")
Overall height of handrail	C'		3215 (10' 7")	←
Superstructure width	D		2500 (8' 2")	←
Overall height of cab	E		2900 (9' 6")	←
Ground clearance of counterweight	F		930 (3' 1")	←
Engine cover height	G		2320 (7' 7")	←
Minimum ground clearance	H		440 (1' 5")	←
Rear-end distance	I		1500 (4' 11")	←
Rear-end swing radius	I'		1500 (4' 11")	←
Distance between tumbler	J		3090 (10' 2")	←
Undercarriage length	K		3798 (12' 6")	←
Undercarriage width	L		2600 (8' 6")	←
Track gauge	M		2000 (6' 7")	←
Track shoe width, standard	N		600 (24")	←
Height of blade	O		575 (1' 11")	←
Ground clearance of blade up	P		420 (1' 5")	←
Depth of blade down	Q		430 (1' 5")	←
Travel speed (low/high)		km/hr (mph)	3.3/5.5 (2.1/3.4)	←
Swing speed		rpm	11.2	←
Gradeability		Degree (%)	35 (70)	←
Ground pressure (600 mm shoe)		kgf/cm ² (psi)	0.41 (5.78)	0.41 (5.79)
Max traction force		kg (lb)	12000 (26455)	←

(4) 4.60 m (15' 1") boom and 2.50 m (8' 2"), 3.0 m (9' 10") arm with dozer

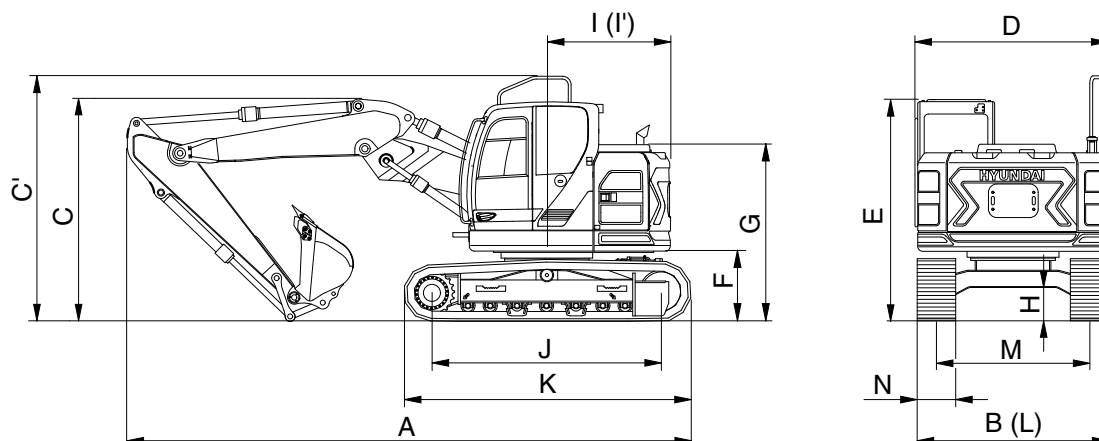


145ZF2SP03

Description		Unit	Specification	
			2.50 m (8' 2") arm	3.0 m (9' 10") arm
Operating weight		kg (lb)	16360 (36070)	16400 (36160)
Bucket capacity (SAE heaped), standard		m ³ (yd ³)	0.52 (0.68)	←
Overall length	A	mm (ft-in)	7820 (25' 8")	7760 (25' 6")
Overall width, with 600 mm shoe	B		2600 (8' 6")	←
Overall height	C		2860 (9' 5")	3210 (10' 6")
Overall height of handrail	C'		3215 (10' 7")	←
Superstructure width	D		2500 (8' 2")	←
Overall height of cab	E		2900 (9' 6")	←
Ground clearance of counterweight	F		930 (3' 1")	←
Engine cover height	G		2320 (7' 7")	←
Minimum ground clearance	H		440 (1' 5")	←
Rear-end distance	I		1500 (4' 11")	←
Rear-end swing radius	I'		1500 (4' 11")	←
Distance between tumblers	J		3090 (10' 2")	←
Undercarriage length	K		3798 (12' 6")	←
Undercarriage width	L		2600 (8' 6")	←
Track gauge	M		2000 (6' 7")	←
Track shoe width, standard	N		600 (24")	←
Height of blade	O		575 (1' 11")	←
Ground clearance of blade up	P		420 (1' 5")	←
Depth of blade down	Q		430 (1' 5")	←
Travel speed (low/high)		km/hr (mph)	3.3/5.5 (2.1/3.4)	←
Swing speed		rpm	11.2	←
Gradeability		Degree (%)	35 (70)	←
Ground pressure (600 mm shoe)		kgf/cm ² (psi)	0.41 (5.82)	0.41 (5.83)
Max traction force		kg (lb)	12000 (26455)	←

3) HX145 LCR 2-PIECE BOOM

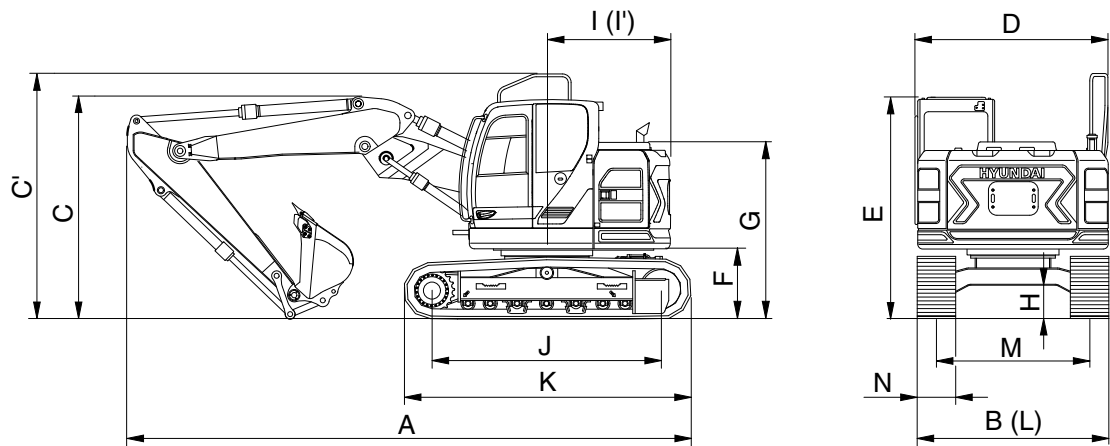
(1) 4.939 m (16' 2") 2-piece boom and 1.9 m (6' 3"), 2.1 m (6' 11") arm



145ZF2SP06

Description		Unit	Specification	
			1.9 m (6' 3") arm	2.1 m (6' 11") arm
Operating weight		kg (lb)	15770 (34770)	15800 (34830)
Bucket capacity (SAE heaped), standard		m ³ (yd ³)	0.52 (0.68)	←
Overall length	A	mm (ft-in)	7650 (25' 1")	7720 (25' 4")
Overall width, with 600 mm shoe	B		2600 (8' 6")	←
Overall height	C		2865 (9' 5")	2870 (9' 5")
Overall height of handrail	C'		3215 (10' 7")	←
Superstructure width	D		2500 (8' 2")	←
Overall height of cab	E		2900 (9' 6")	←
Ground clearance of counterweight	F		930 (3' 1")	←
Engine cover height	G		2320 (7' 7")	←
Minimum ground clearance	H		440 (1' 5")	←
Rear-end distance	I		1500 (4' 11")	←
Rear-end swing radius	I'		1500 (4' 11")	←
Distance between tumblers	J		3090 (10' 2")	←
Undercarriage length	K		3798 (12' 6")	←
Undercarriage width	L		2600 (8' 6")	←
Track gauge	M		2000 (6' 7")	←
Track shoe width, standard	N		600 (24")	←
Travel speed (low/high)		km/hr (mph)	3.3/5.5 (2.1/3.4)	←
Swing speed		rpm	11.2	←
Gradeability		Degree (%)	35 (70)	←
Ground pressure (600 mm shoe)		kgf/cm ² (psi)	0.39 (5.61)	0.39 (5.62)
Max traction force		kg (lb)	12000 (26455)	←

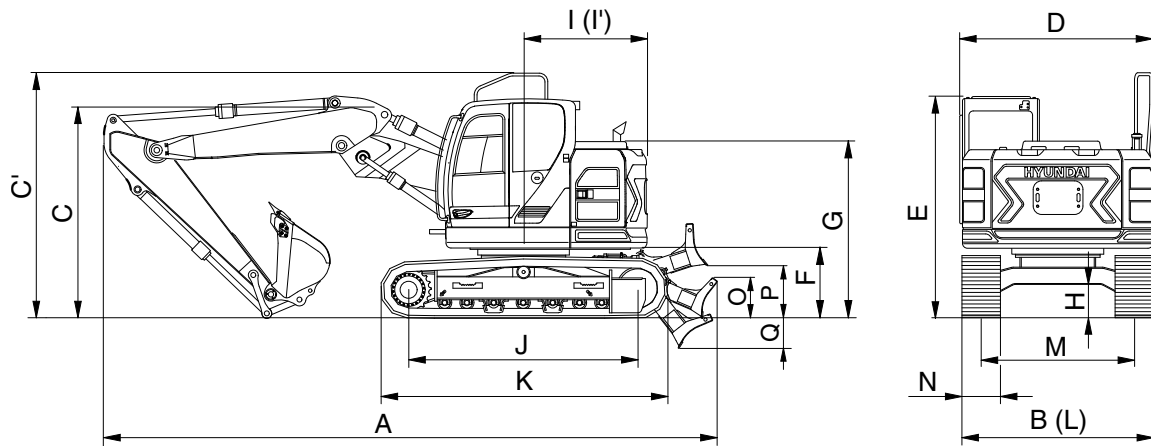
(2) 4.939 m (16' 2") 2-piece boom and 2.50 m (8' 2") arm



145ZF2SP06

Description		Unit	Specification
Operating weight		kg (lb)	15860 (34970)
Bucket capacity (SAE heaped), standard		m ³ (yd ³)	0.52 (0.68)
Overall length	A	mm (ft-in)	7690 (25' 3")
Overall width, with 600 mm shoe	B		2600 (8' 6")
Overall height	C		2900 (9' 6")
Overall height of handrail	C'		3215 (10' 7")
Superstructure width	D		2500 (8' 2")
Overall height of cab	E		2900 (9' 6")
Ground clearance of counterweight	F		930 (3' 1")
Engine cover height	G		2320 (7' 7")
Minimum ground clearance	H		440 (1' 5")
Rear-end distance	I		1500 (4' 11")
Rear-end swing radius	I'		1500 (4' 11")
Distance between tumblers	J		3090 (10' 2")
Undercarriage length	K		3798 (12' 6")
Undercarriage width	L		2600 (8' 6")
Track gauge	M		2000 (6' 7")
Track shoe width, standard	N		600 (24")
Travel speed (low/high)		km/hr (mph)	3.3/5.5 (2.1/3.4)
Swing speed		rpm	11.2
Gradeability		Degree (%)	35 (70)
Ground pressure (600 mm shoe)		kgf/cm ² (psi)	0.40 (5.64)
Max traction force		kg (lb)	12000 (26455)

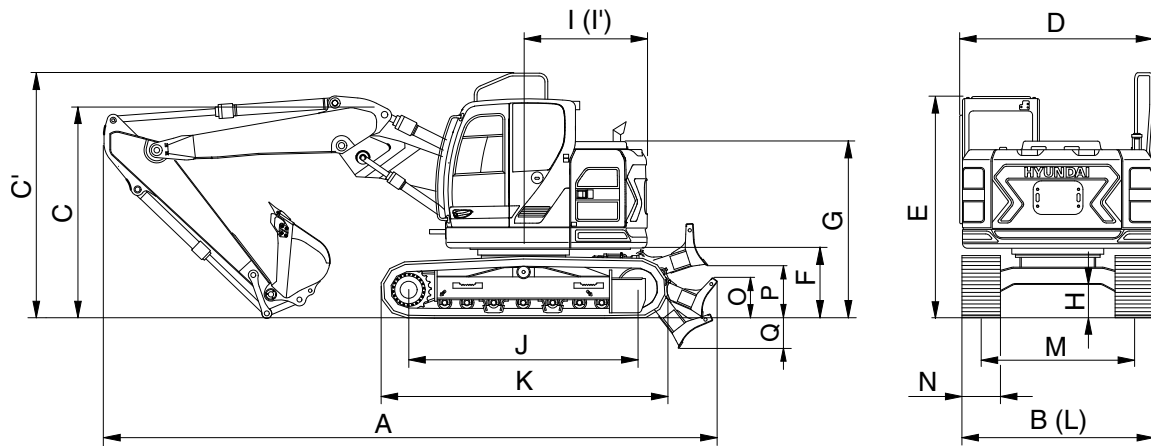
(3) 4.939 m (16' 2") 2-piece boom and 1.9 m (6' 3"), 2.1m (6' 11") arm with dozer



145ZF2SP07

Description		Unit	Specification	
			1.9 m (6' 3") arm	2.1 m (6' 11") arm
Operating weight		kg (lb)	16580 (36550)	16620 (36640)
Bucket capacity (SAE heaped), standard		m ³ (yd ³)	0.52 (0.68)	←
Overall length	A	mm (ft-in)	8110 (26' 7")	8180 (26' 10")
Overall width, with 600 mm shoe	B		2600 (8' 6")	←
Overall height	C		2865 (9' 5")	2870 (9' 5")
Overall height of handrail	C'		3215 (10' 7")	←
Superstructure width	D		2500 (8' 2")	←
Overall height of cab	E		2900 (9' 6")	←
Ground clearance of counterweight	F		930 (3' 1")	←
Engine cover height	G		2320 (7' 7")	←
Minimum ground clearance	H		440 (1' 5")	←
Rear-end distance	I		1500 (4' 11")	←
Rear-end swing radius	I'		1500 (4' 11")	←
Distance between tumblers	J		3090 (10' 2")	←
Undercarriage length	K		3798 (12' 6")	←
Undercarriage width	L		2600 (8' 6")	←
Track gauge	M		2000 (6' 7")	←
Track shoe width, standard	N		600 (24")	←
Height of blade	O		575 (1' 11")	←
Ground clearance of blade up	P		410 (1' 4")	←
Depth of blade down	Q		450 (1' 6")	←
Travel speed (low/high)		km/hr (mph)	3.3/5.5 (2.1/3.4)	←
Swing speed		rpm	11.2	←
Gradeability		Degree (%)	35 (70)	←
Ground pressure (600 mm shoe)		kgf/cm ² (psi)	0.41 (5.89)	0.42 (5.91)
Max traction force		kg (lb)	12000 (26455)	←

(4) 4.939 m (16' 2") 2-piece boom and 2.50 m (8' 2") arm with dozer

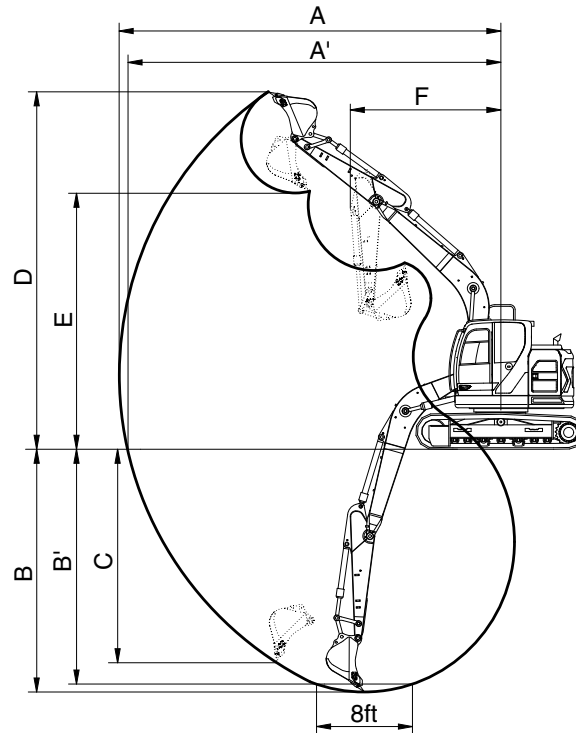


145ZF2SP07

Description		Unit	Specification
Operating weight		kg (lb)	16680 (36770)
Bucket capacity (SAE heaped), standard		m ³ (yd ³)	0.52 (0.68)
Overall length	A	mm (ft-in)	8150 (26' 9")
Overall width, with 600 mm shoe	B		2600 (8' 6")
Overall height	C		2900 (9' 6")
Overall height of handrail	C'		3215 (10' 7")
Superstructure width	D		2500 (8' 2")
Overall height of cab	E		2900 (9' 6")
Ground clearance of counterweight	F		930 (3' 1")
Engine cover height	G		2320 (7' 7")
Minimum ground clearance	H		440 (1' 5")
Rear-end distance	I		1500 (4' 11")
Rear-end swing radius	I'		1500 (4' 11")
Distance between tumblers	J		3090 (10' 2")
Undercarriage length	K		3798 (12' 6")
Undercarriage width	L		2600 (8' 6")
Track gauge	M		2000 (6' 7")
Track shoe width, standard	N		600 (24")
Height of blade	O		575 (1' 11")
Ground clearance of blade up	P		410 (1' 4")
Depth of blade down	Q		450 (1' 6")
Travel speed (low/high)		km/hr (mph)	3.3/5.5 (2.1/3.4)
Swing speed		rpm	11.2
Gradeability		Degree (%)	35 (70)
Ground pressure (600 mm shoe)		kgf/cm ² (psi)	0.42 (5.93)
Max traction force		kg (lb)	12000 (26455)

3. WORKING RANGE

1) 4.60 m (15' 1") MONO BOOM



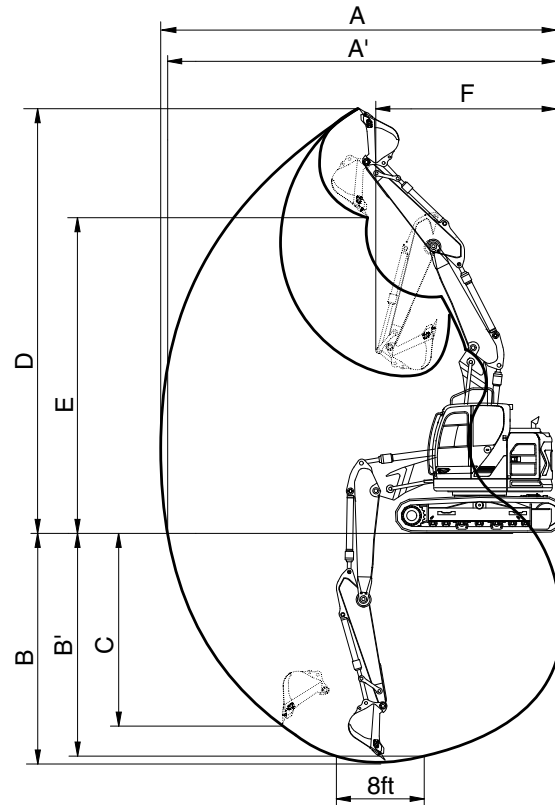
145ZF2SP04

Description		1.90 m (6' 3") Arm	2.10 m (6' 11") Arm	※2.50 m (8' 2") Arm	3.00 m (9' 10") Arm
Max digging reach	A	7730 mm (25' 4")	7900 mm (25' 11")	8310 mm (27' 3")	8770 mm (28' 9")
Max digging reach on ground	A'	7580 mm (24' 10")	7750 mm (25' 0")	8170 mm (26' 10")	8630 mm (28' 4")
Max digging depth	B	4890 mm (16' 1")	5100 mm (16' 9")	5500 mm (18' 1")	5990 mm (19' 8")
Max digging depth (8ft level)	B'	4640 mm (15' 3")	4870 mm (16' 0")	5290 mm (17' 4")	5810 mm (19' 1")
Max vertical wall digging depth	C	4400 mm (14' 5")	4600 mm (15' 1")	5000 mm (16' 5")	5400 mm (17' 9")
Max digging height	D	8840 mm (29' 0")	8970 mm (29' 5")	9350 mm (30' 8")	9730 mm (31' 11")
Max dumping height	E	6350 mm (20' 10")	6470 mm (21' 3")	6850 mm (22' 6")	7230 mm (23' 9")
Min swing radius	F	1860 mm (6' 1")	2030 mm (6' 8")	1980 mm (6' 6")	2260 mm (7' 5")
Bucket digging force	SAE	87.3 [94.8] kN	87.3 [94.8] kN	87.3 [94.8] kN	87.3 [94.8] kN
		8900 [9660] kgf	8900 [9660] kgf	8900 [9660] kgf	8900 [9660] kgf
		19620 [21300] lbf	19620 [21300] lbf	19620 [21300] lbf	19620 [21300] lbf
	ISO	102 [110.8] kN	102 [110.8] kN	102 [110.8] kN	102 [110.8] kN
		10400 [11290] kgf	10400 [11290] kgf	10400 [11290] kgf	10400 [11290] kgf
		22930 [24890] lbf	22930 [24890] lbf	22930 [24890] lbf	22930 [24890] lbf
Arm crowd force	SAE	76.5 [83.1] kN	73.6 [79.9] kN	62.8 [68.2] kN	55.9 [60.7] kN
		7800 [8470] kgf	7500 [8140] kgf	6400 [6950] kgf	5700 [6190] kgf
		17200 [18670] lbf	16530 [17950] lbf	14110 [15320] lbf	12570 [13640] lbf
	ISO	80.4 [87.3] kN	77.5 [84.1] kN	65.7 [71.4] kN	57.9 [62.8] kN
		8200 [8900] kgf	7900 [8580] kgf	6700 [7270] kgf	5900 [6410] kgf
		18080 [19630] lbf	17420 [18910] lbf	14770 [16040] lbf	13010 [14120] lbf

※ : STD

[] : Power boost

2) 4.939 M (16' 2") 2-PIECE BOOM



145ZF2SP08

Description		1.90 m (6' 3") Arm	2.10 m (6' 11") Arm	2.50 m (8' 2") Arm
Max digging reach	A	8000 mm (26' 3")	8270 mm (27' 2")	8675 mm (28' 6")
Max digging reach on ground	A'	7850 mm (25' 9")	8130 mm (26' 8")	8540 mm (28' 0")
Max digging depth	B	4985 mm (16' 4")	5175 mm (17' 0")	5580 mm (18' 4")
Max digging depth (8ft level)	B'	4870 mm (16' 0")	5060 mm (16' 7")	5470 mm (17' 11")
Max vertical wall digging depth	C	4030 mm (13' 3")	4555 mm (14' 11")	5015 mm (16' 5")
Max digging height	D	9000 mm (29' 6")	9340 mm (30' 8")	9715 mm (31' 10")
Max dumping height	E	6555 mm (21' 6")	6850 mm (22' 6")	7230 mm (23' 9")
Min swing radius	F	2220 mm (7' 3")	2300 mm (7' 7")	2250 mm (7' 5")
Bucket digging force	SAE	87.3 [94.8] kN	87.3 [94.8] kN	87.3 [94.8] kN
		8900 [9660] kgf	8900 [9660] kgf	8900 [9660] kgf
		19620 [21300] lbf	19620 [21300] lbf	19620 [21300] lbf
	ISO	102 [110.8] kN	102 [110.8] kN	102 [110.8] kN
		10400 [11290] kgf	10400 [11290] kgf	10400 [11290] kgf
		22930 [24890] lbf	22930 [24890] lbf	22930 [24890] lbf
Arm crowd force	SAE	76.5 [83.1] kN	73.6 [79.9] kN	62.8 [68.2] kN
		7800 [8470] kgf	7500 [8140] kgf	6400 [6950] kgf
		17200 [18670] lbf	16530 [17950] lbf	14110 [15320] lbf
	ISO	80.4 [87.3] kN	77.5 [84.1] kN	65.7 [71.4] kN
		8200 [8900] kgf	7900 [8580] kgf	6700 [7270] kgf
		18080 [19630] lbf	17420 [18910] lbf	14770 [16040] lbf

[] : Power boost

4. WEIGHT

Item	HX145LCR		HX145 LCRD	
	kg	lb	kg	lb
Upper structure assembly				
· Main frame weld assembly	1300	2870	1266	2791
· Engine assembly	558	1230	←	←
· Main pump assembly	90	200	←	←
· Main control valve assembly	140	310	←	←
· Swing motor assembly	120	260	←	←
· Hydraulic oil tank assembly	150	330	←	←
· Fuel tank assembly	120	260	←	←
· Counterweight	2800	6170	←	←
· Cab assembly	450	990	←	←
Lower chassis assembly				
· Track frame weld assembly	1640	3620	1713★ ¹ 1771★ ²	3777★ ¹ 3904★ ²
· Swing bearing	228	503	←	←
· Travel motor assembly	240	530	←	←
· Turning joint	50	110	←	←
· Track recoil spring	93	206	←	←
· Idler	105	231	←	←
· Carrier roller	20	45	←	←
· Track roller	35	80	←	←
· Sprocket	40	88	←	←
· Track-chain assembly (600 mm standard triple grouser shoe)	1804	3977	←	←
· Dozer blade assembly	-	-	519	1144
Front attachment assembly				
· 4.6 m boom assembly	830	1830	←	←
· 2-piece boom assembly	1018	2244	←	←
· 2.5 m arm assembly	435	960	←	←
· 0.52 m³ SAE heaped bucket	460	1010	←	←
· Boom cylinder assembly	130	290	←	←
· Arm cylinder assembly	160	350	←	←
· Bucket cylinder assembly	100	220	←	←
· Bucket control rod assembly	90	200	←	←
· Dozer blade cylinder assembly	-	-	44	97

★¹ HX145CRD ★² HX145LCRD

※ This information is different with operating and transportation weight because it is not including harness, pipe, oil, fuel so on.

※ Refer to Transportation for actual weight information and Specifications for operating weight.

5. LIFTING CAPACITIES

1) HX145LCR MONO BOOM

Unit : mm

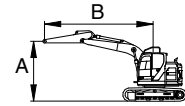
Model	Boom	Boom	Arm	Counterweight	Shoe	Dozer		Outrigger	
	Type	Length	Length	Weight (kg)	Width	Front	Rear	Front	Rear
HX145LCR	Mono	4600	1900	2800	600	-	-	-	-



: Rating over-front



: Rating over-side or 360 degree



Lift-point height (A)		Lift-point radius (B)								At max. reach		
		1.5 m (4.9 ft)		3.0 m (9.8 ft)		4.5 m (14.8 ft)		6.0 m (19.7 ft)		Capacity		Reach
												m (ft)
7.5m	kg									*5160	*5160	2.27
24.6ft	lb									*11380	*11380	(7.5)
6.0m	kg			*5270	*5270	*4160	3760			*3510	*3510	4.63
19.7ft	lb			*11620	*11620	*9170	8290			*7740	*7740	(15.2)
4.5m	kg			*6050	*6050	*4910	3730			*3160	2500	5.73
14.8ft	lb			*13340	*13340	*10820	8220			*6970	5510	(18.8)
3.0m	kg					*5560	3540	3760	2280	*3130	2100	6.30
9.8ft	lb					*12260	7800	8290	5030	*6900	4630	(20.7)
1.5m	kg					5710	3310	3670	2200	3270	1960	6.47
4.9ft	lb					12590	7300	8090	4850	7210	4320	(21.2)
0.0m	kg			*5830	5770	5560	3180	3610	2140	3380	2010	6.29
0.0ft	lb			*12850	12720	12260	7010	7960	4720	7450	4430	(20.6)
-1.5m	kg			*7860	5810	5530	3160			3890	2300	5.71
-4.9ft	lb			*17330	12810	12190	6970			8580	5070	(18.7)
-3.0m	kg			*5420	*5420	*3560	3280			*3380	3200	4.58
-9.8ft	lb			*11950	*11950	*7850	7230			*7450	7050	(15.0)

※ Note

- Lifting capacity are based on SAE J1097 and ISO 10567.
- Lifting capacity of the ROBEX series does not exceed 75% of tipping load with the machine on firm, level ground or 87% of full hydraulic capacity.
- The lift-point is bucket pivot mounting pin on the arm (without bucket mass).
- *indicates load limited by hydraulic capacity.

※ Lifting capacities are based upon a standard machine conditions.

Lifting capacities will vary with different work tools, ground conditions and attachments.

The difference between the weight of a work tool attachment must be subtracted.

Consult your HD Hyundai Construction Equipment dealer regarding the lifting capacities for specific work tools and attachments.

▲ Failure to comply to the rated load can cause possible personal injury or property damage.

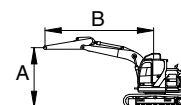
Make adjustments to the rated load as necessary for non-standard configurations.

Unit : mm

Model	Boom	Boom	Arm	Counterweight	Shoe	Dozer		Outrigger	
	Type	Length	Length	Weight (kg)	Width	Front	Rear	Front	Rear
HX145LCR	Mono	4600	2100	2800	600	-	-	-	-

·  : Rating over-front

·  : Rating over-side or 360 degree



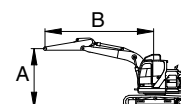
Lift-point height (A)		Lift-point radius (B)								At max. reach		
		1.5 m (4.9 ft)		3.0 m (9.8 ft)		4.5 m (14.8 ft)		6.0 m (19.7 ft)		Capacity		Reach
												m (ft)
7.5m 24.6ft	kg lb									*4600 *10140	*4600 *10140	2.74 (9.0)
6.0m 19.7ft	kg lb			*4950 *10910	*4950 *10910	*4460 *9830	3800 8380			*3360 *7410	3310 7300	4.87 (16.0)
4.5m 14.8ft	kg lb			*5330 *11750	*5330 *11750	*4730 *10430	3750 8270			*3070 *6770	2370 5220	5.93 (19.4)
3.0m 9.8ft	kg lb			*7860 *17330	6620 14590	*5400 *11900	3550 7830	3760 8290	2280 5030	*3050 *6720	2010 4430	6.48 (21.2)
1.5m 4.9ft	kg lb					5720 12610	3310 7300	3660 8070	2190 4830	3140 6920	1880 4140	6.65 (21.8)
0.0m 0.0ft	kg lb			*6280 *13850	5730 12630	5540 12210	3160 6970	3590 7910	2120 4670	3220 7100	1920 4230	6.47 (21.2)
-1.5m -4.9ft	kg lb	*5280 *11640	*5280 *11640	*8140 *17950	5750 12680	5500 12130	3120 6880			3680 8110	2170 4780	5.90 (19.4)
-3.0m -9.8ft	kg lb			*5850 *12900	*5850 *12900	*4010 *8840	3210 7080			*3450 *7610	2940 6480	4.83 (15.8)

Unit : mm

Model	Boom	Boom	Arm	Counterweight	Shoe	Dozer		Outrigger	
	Type	Length	Length	Weight (kg)	Width	Front	Rear	Front	Rear
HX145LCR	Mono	4600	2500	2800	600	-	-	-	-

·  : Rating over-front

·  : Rating over-side or 360 degree



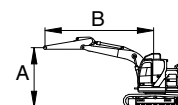
Lift-point height (A)		Lift-point radius (B)								At max. reach		
		1.5 m (4.9 ft)		3.0 m (9.8 ft)		4.5 m (14.8 ft)		6.0 m (19.7 ft)		Capacity		Reach
												m (ft)
7.5m 24.6ft	kg lb			*4060 *8950	*4060 *8950					*2910 *6420	*2910 *6420	3.63 (11.9)
6.0m 19.7ft	kg lb					*3820 *8420	*3820 *8420			*2260 *4980	*2260 *4980	5.42 (17.8)
4.5m 14.8ft	kg lb			*3950 *8710	*3950 *8710	*4310 *9500	3810 8400	*3330 *7340	2360 5200	*2070 *4560	*2070 *4560	6.38 (20.9)
3.0m 9.8ft	kg lb			*7130 *15720	6800 14990	*5090 *11220	3590 7910	3780 8330	2290 5050	*2040 *4500	1810 3990	6.90 (22.6)
1.5m 4.9ft	kg lb			*8100 *17860	6020 13270	5740 12650	3320 7320	3660 8070	2180 4810	*2130 *4700	1700 3750	7.06 (23.1)
0.0m 0.0ft	kg lb			*6750 *14880	5690 12540	5530 12190	3140 6920	3570 7870	2100 4630	*2350 *5180	1730 3810	6.89 (22.6)
-1.5m -4.9ft	kg lb	*4740 *10450	*4740 *10450	*8620 *19000	5660 12480	5450 12020	3070 6770	3540 7800	2070 4560	*2830 *6240	1920 4230	6.36 (20.9)
-3.0m -9.8ft	kg lb	*8830 *19470	*8830 *19470	*6640 *14640	5780 12740	*4620 *10190	3130 6900			*3350 *7390	2470 5450	5.38 (17.6)

Unit : mm

Model	Boom	Boom	Arm	Counterweight	Shoe	Dozer		Outrigger	
	Type	Length	Length	Weight (kg)	Width	Front	Rear	Front	Rear
HX145LCR	Mono	4600	3000	2800	600	-	-	-	-

·  : Rating over-front

·  : Rating over-side or 360 degree



Lift-point height (A)		Lift-point radius (B)										At max. reach		
		1.5 m (4.9 ft)		3.0 m (9.8 ft)		4.5 m (14.8 ft)		6.0 m (19.7 ft)		7.5 m (24.6 ft)		Capacity		Reach
														m (ft)
7.5m 24.6ft	kg lb											*2300 *5070	*2300 *5070	4.48 (14.7)
6.0m 19.7ft	kg lb					*3280 *7230	*3280 *7230	*1920 *4230	*1920 *4230			*1900 *4190	*1900 *4190	6.01 (19.7)
4.5m 14.8ft	kg lb					*3450 *7610	*3450 *7610	*3230 *7120	2410 5310			*1760 *3880	*1760 *3880	6.89 (22.6)
3.0m 9.8ft	kg lb			*5250 *11570	*5250 *11570	*4630 *10210	3660 8070	3820 8420	2320 5110			*1750 *3860	1630 3590	7.37 (24.2)
1.5m 4.9ft	kg lb			*8650 *19070	6220 13710	*5600 *12350	3380 7450	3680 8110	2200 4850	*1910 *4210	1540 3400	*1820 *4010	1530 3370	7.52 (24.7)
0.0m 0.0ft	kg lb			*7520 *16580	5740 12650	5550 12240	3160 6970	3560 7850	2090 4610			*2000 *4410	1550 3420	7.36 (24.1)
-1.5m -4.9ft	kg lb	*4280 *9440	*4280 *9440	*9100 *20060	5620 12390	5430 11970	3050 6720	3500 7720	2040 4500			*2360 *5200	1700 3750	6.87 (22.5)
-3.0m -9.8ft	kg lb	*7420 *16360	*7420 *16360	*7510 *16560	5680 12520	*5160 *11380	3060 6750					*3150 *6940	2090 4610	5.97 (19.6)
-4.5m -14.8ft	kg lb			*4370 *9630	*4370 *9630							*2550 *5620	*2550 *5620	4.42 (14.5)

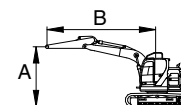
2) HX145LCR 2-PIECE BOOM

Unit : mm

Model	Boom	Boom	Arm	Counterweight	Shoe	Dozer		Outrigger	
	Type	Length	Length	Weight (kg)	Width	Front	Rear	Front	Rear
HX145LCR	2PCS	4939	1900	2800	600	-	-	-	-

·  : Rating over-front

·  : Rating over-side or 360 degree



Lift-point height (A)		Lift-point radius (B)						At max. reach		
		3.0 m (9.8 ft)		4.5 m (14.8 ft)		6.0 m (19.7 ft)		Capacity	Reach	
										m (ft)
7.5m	kg	*6340	*6340					*5810	*5810	3.21
24.6ft	lb	*13980	*13980					*12810	*12810	(10.5)
6.0m	kg	*5610	*5610	*5140	3830			*4390	3030	5.14
19.7ft	lb	*12370	*12370	*11330	8440			*9680	6680	(16.9)
4.5m	kg	*6910	*6910	*5450	3730	3860	2350	3690	2240	6.15
14.8ft	lb	*15230	*15230	*12020	8220	8510	5180	8140	4940	(20.2)
3.0m	kg			5970	3500	3790	2280	3190	1920	6.69
9.8ft	lb			13160	7720	8360	5030	7030	4230	(21.9)
1.5m	kg			5700	3270	3680	2190	3020	1800	6.85
4.9ft	lb			12570	7210	8110	4830	6660	3970	(22.5)
0.0m	kg			5550	3140	3610	2120	3100	1840	6.68
0.0ft	lb			12240	6920	7960	4670	6830	4060	(21.9)
-1.5m	kg	*9370	5770	5520	3120	3610	2120	3500	2070	6.13
-4.9ft	lb	*20660	12720	12170	6880	7960	4670	7720	4560	(20.1)

※ Note

1. Lifting capacity are based on SAE J1097 and ISO 10567.
2. Lifting capacity of the ROBEX series does not exceed 75% of tipping load with the machine on firm, level ground or 87% of full hydraulic capacity.
3. The lift-point is bucket pivot mounting pin on the arm (without bucket mass).
4. *indicates load limited by hydraulic capacity.

※ Lifting capacities are based upon a standard machine conditions.

Lifting capacities will vary with different work tools, ground conditions and attachments.

The difference between the weight of a work tool attachment must be subtracted.

Consult your HD Hyundai Construction Equipment dealer regarding the lifting capacities for specific work tools and attachments.

▲ Failure to comply to the rated load can cause possible personal injury or property damage.

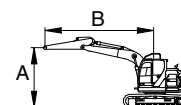
Make adjustments to the rated load as necessary for non-standard configurations.

Unit : mm

Model	Boom	Boom	Arm	Counterweight	Shoe	Dozer		Outrigger	
	Type	Length	Length	Weight (kg)	Width	Front	Rear	Front	Rear
HX145LCR	2PCS	4939	2100	2800	600	-	-	-	-

·  : Rating over-front

·  : Rating over-side or 360 degree



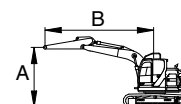
Lift-point height (A)		Lift-point radius (B)						At max. reach		
		3.0 m (9.8 ft)		4.5 m (14.8 ft)		6.0 m (19.7 ft)		Capacity		Reach
										m (ft)
7.5m 24.6ft	kg lb	*5810 *12810	*5810 *12810					*5300 *11680	*5300 *11680	3.58 (11.7)
6.0m 19.7ft	kg lb			*4900 *10800	3850 8490			*4170 *9190	2830 6240	5.38 (17.6)
4.5m 14.8ft	kg lb	*6190 *13650	*6190 *13650	*5260 *11600	3750 8270	3870 8530	2360 5200	3510 7740	2130 4700	6.35 (20.8)
3.0m 9.8ft	kg lb			5980 13180	3510 7740	3790 8360	2280 5030	3050 6720	1830 4030	6.87 (22.5)
1.5m 4.9ft	kg lb			5700 12570	3260 7190	3670 8090	2180 4810	2890 6370	1720 3790	7.03 (23.1)
0.0m 0.0ft	kg lb			5530 12190	3120 6880	3590 7910	2100 4630	2960 6530	1750 3860	6.86 (22.5)
-1.5m -4.9ft	kg lb	*9130 *20130	5710 12590	5490 12100	3080 6790	3570 7870	2090 4610	3320 7320	1950 4300	6.33 (20.8)
-3.0m -9.8ft	kg lb			5570 12280	3150 6940					

Unit : mm

Model	Boom	Boom	Arm	Counterweight	Shoe	Dozer		Outrigger	
	Type	Length	Length	Weight (kg)	Width	Front	Rear	Front	Rear
HX145LCR	2PCS	4939	2500	2800	600	-	-	-	-

·  : Rating over-front

·  : Rating over-side or 360 degree

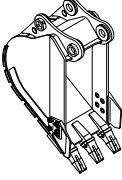
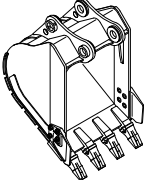
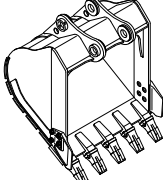


Lift-point height (A)		Lift-point radius (B)								At max. reach	
		3.0 m (9.8 ft)		4.5 m (14.8 ft)		6.0 m (19.7 ft)		7.5 m (24.6 ft)		Capacity	
											
7.5m 24.6ft	kg lb									*3570 *7870	*3570 *7870
6.0m 19.7ft	kg lb			*4450 *9810	3920 8640					*2910 *6420	2440 5380
4.5m 14.8ft	kg lb	*4440 *9790	*4440 *9790	*4860 *10710	3800 8380	3900 8600	2380 5250			*2690 *5930	1900 4190
3.0m 9.8ft	kg lb	*8480 *18700	6640 14640	*5820 *12830	3550 7830	3800 8380	2290 5050			*2640 *5820	1660 3660
1.5m 4.9ft	kg lb			5720 12610	3280 7230	3670 8090	2170 4780			2640 5820	1560 3440
0.0m 0.0ft	kg lb	*4590 *10120	*4590 *10120	5510 12150	3100 6830	3560 7850	2080 4590			2700 5950	1580 3480
-1.5m -4.9ft	kg lb	*8330 *18360	5600 12350	5430 11970	3030 6680	3520 7760	2040 4500			2980 6570	1740 3840
-3.0m -9.8ft	kg lb	*8520 *18780	5720 12610	5480 12080	3080 6790						

6. BUCKET SELECTION GUIDE

1) HX145 LCR

(1) General bucket

		
0.23 m³ SAE heaped bucket	0.40, 0.46 m³ SAE heaped bucket	0.52, ※0.58, 0.65, 0.71 m³ SAE heaped bucket

Capacity		Width		Weight	Recommendation					
					4.6 m (15' 1") Mono boom				4.9 m (16' 1") Adjust boom	
SAE heaped	CECE heaped	Without side cutter	With side cutter		1.9 m arm (6' 3")	2.1 m arm (6' 11")	2.5 m arm (8' 2")	3.0 m arm (9' 10")	2.1 m arm (6' 11")	2.5 m arm (8' 2")
0.23 m³ (0.30 yd³)	0.20 m³ (0.26 yd³)	520 mm (20.5")	620 mm (24.4")	335 kg (740 lb)	●	●	●	◉	●	●
0.40 m³ (0.52 yd³)	0.35 m³ (0.46 yd³)	750 mm (29.5")	850 mm (33.5")	410 kg (900 lb)	●	●	●	◉	●	●
0.46 m³ (0.60 yd³)	0.40 m³ (0.52 yd³)	840 mm (33.1")	940 mm (37.0")	435 kg (960 lb)	●	●	●	○	●	◉
0.52 m³ (0.68 yd³)	0.45 m³ (0.59 yd³)	915 mm (36.0")	1015 mm (40.0")	460 kg (1010 lb)	●	●	●	X	◉	◉
※0.58 m³ (0.76 yd³)	0.50 m³ (0.65 yd³)	1000 mm (39.4")	1100 mm (43.3")	480 kg (1060 lb)	●	●	◉	X	◉	○
0.65 m³ (0.85 yd³)	0.55 m³ (0.72 yd³)	1105 mm (43.5")	1205 mm (47.4")	500 kg (1100 lb)	◉	◉	○	X	○	X
0.71 m³ (0.93 yd³)	0.60 m³ (0.78 yd³)	1190 mm (46.9")	1290 mm (50.8")	540 kg (1190 lb)	○	○	X	X	X	X

※ : Standard bucket



Applicable for materials with density of 2000 kg/m³ (3370 lb/yd³) or less



Applicable for materials with density of 1600 kg/m³ (2700 lb/yd³) or less



Applicable for materials with density of 1100 kg/m³ (1850 lb/yd³) or less



Not recommended

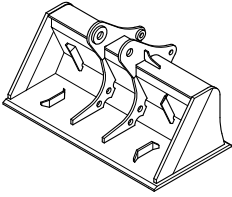
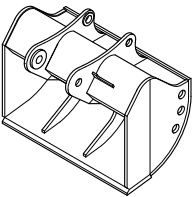
※ These recommendations are for general conditions and average use.

Work tools and ground conditions have effects on machine performance.

Select an optimum combination according to the working conditions and the type of work that is being done.

Consult your HD Hyundai Construction Equipment dealer for information on selecting the correct boom-arm-bucket combination.

(2) Special bucket

Slope finishing bucket 	Ditch cleaning bucket 
◎ 0.55 m³ SAE heaped bucket	★ 0.45 m³ SAE heaped bucket

Capacity		Width		Weight	Recommendation				
					4.6 m (15' 1") Mono boom			4.9 m (16' 9") Adjust boom	
SAE heaped	CECE heaped	Without side cutter	With side cutter		1.9 m arm (6' 3")	2.1 m arm (6' 11")	2.5 m arm (8' 2")	2.1 m arm (6' 11")	2.5 m arm (8' 2")
◎ 0.55 m ³ (0.72 yd ³)	0.45 m ³ (0.59 yd ³)	1800 mm (70.9")	-	585 kg (1290 lb)	◎	○	○	◎	○
★ 0.45 m ³ (0.59 yd ³)	0.40 m ³ (0.52 yd ³)	1520 mm (59.8")	-	410 kg (900 lb)	●	●	◎	●	◎

◎ : Slope finishing bucket

★ : Ditch cleaning bucket

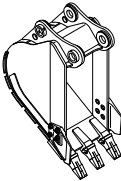
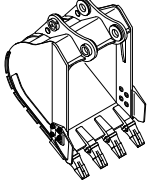
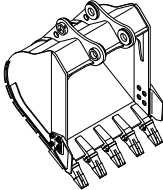
● Applicable for materials with density of 2000 kg/m³ (3370 lb/yd³) or less

◎ Applicable for materials with density of 1600 kg/m³ (2700 lb/yd³) or less

○ Applicable for materials with density of 1100 kg/m³ (1850 lb/yd³) or less

2) HX140 LCR 2-PIECE BOOM

(1) General bucket

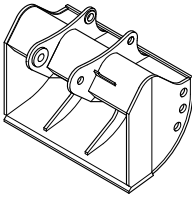
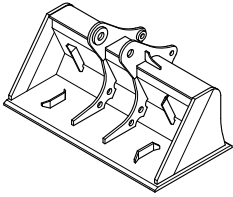
		
0.23 m³ SAE heaped bucket	0.40, 0.46 m³ SAE heaped bucket	0.52, ※0.58, 0.65, 0.71 m³ SAE heaped bucket

Capacity		Width		Weight	Recommendation		
					4.9 m (16' 1") adjust boom		
SAE heaped	CECE heaped	Without side cutter	With side cutter		1.9 m arm (6' 3")	2.1 m arm (6' 11")	2.5 m arm (8' 2")
0.23 m³ (0.30 yd³)	0.20 m³ (0.26 yd³)	520 mm (20.5")	620 mm (24.4")	335 kg (740 lb)	●	●	●
0.40 m³ (0.52 yd³)	0.35 m³ (0.46 yd³)	750 mm (29.5")	850 mm (33.5")	410 kg (900 lb)	●	●	⊙
0.46 m³ (0.60 yd³)	0.40 m³ (0.52 yd³)	840 mm (33.1")	940 mm (37.0")	435 kg (960 lb)	⊙	⊙	■
0.52 m³ (0.68 yd³)	0.45 m³ (0.59 yd³)	915 mm (36.0")	1015 mm (40.0")	460 kg (1010 lb)	■	■	▲
※0.58 m³ (0.76 yd³)	0.50 m³ (0.65 yd³)	1000 mm (39.4")	1110 mm (43.7")	480 kg (1060 lb)	■	▲	▲
0.65 m³ (0.85 yd³)	0.55 m³ (0.72 yd³)	1105 mm (43.5")	1205 mm (47.4")	500 kg (1100 lb)	▲	▲	X
0.71 m³ (0.93 yd³)	0.60 m³ (0.78 yd³)	1190 mm (46.9")	1290 mm (50.8")	540 kg (1190 lb)	▲	X	X

※ : Standard bucket

●	Applicable for materials with density of 2100 kg/m³ (3500 lb/yd³) or less
⊙	Applicable for materials with density of 1800 kg/m³ (3000 lb/yd³) or less
■	Applicable for materials with density of 1500 kg/m³ (2500 lb/yd³) or less
▲	Applicable for materials with density of 1200 kg/m³ (2000 lb/yd³) or less
X	Not recommended

(2) Special bucket

Ditch cleaning bucket 	Slope finishing bucket 
★0.45 m³ SAE heaped bucket	◆0.55 m³ SAE heaped bucket

Capacity		Width		Weight	Recommendation		
					4.9 m (16' 1") boom		
SAE heaped	CECE heaped	Without side cutter	With side cutter		1.9 m arm (6' 3")	2.1 m arm (6' 11")	2.5 m arm (8' 2")
★ 0.45 m ³ (0.59 yd ³)	0.40 m ³ (0.52 yd ³)	1520 mm (59.8")	-	410 kg (900 lb)	●	⊙	■
◆ 0.55 m ³ (0.72 yd ³)	0.45 m ³ (0.59 yd ³)	1800 mm (70.9")	-	585 kg (1290 lb)	■	▲	▲

★ : Ditch cleaning bucket

◆ : Slope finishing bucket

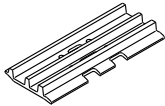
●	Applicable for materials with density of 2100 kg/m ³ (3500 lb/yd ³) or less
⊙	Applicable for materials with density of 1800 kg/m ³ (3000 lb/yd ³) or less
■	Applicable for materials with density of 1500 kg/m ³ (2500 lb/yd ³) or less
▲	Applicable for materials with density of 1200 kg/m ³ (2000 lb/yd ³) or less
X	Not recommended

7. UNDERCARRIAGE

1) TRACKS

X-leg type center frame is integrally welded with reinforced box-section track frames. The design includes dry tracks, lubricated rollers, idlers, sprockets, hydraulic track adjusters with shock absorbing springs and assembled track-type tractor shoes with triple grousers.

2) TYPES OF SHOES

Model	Shapes		Triple grouser		
					
HX145CR	Shoe width	mm (in)	500 (20)	600 (24)	700 (28)
	Operating weight	kg (lb)	15050 (33180)	15270 (33660)	15480 (34130)
	Ground pressure	kgf/cm ² (psi)	0.48 (6.79)	0.4 (5.74)	0.35 (4.99)
	Overall width	mm (ft-in)	2500 (8' 2")	2600 (8' 6")	2700 (8' 10")
HX145CR (with dozer)	Shoe width	mm (in)	500 (20)	600 (24)	700 (28)
	Operating weight	kg (lb)	15880 (35010)	16110 (35520)	16330 (36000)
	Ground pressure	kgf/cm ² (psi)	0.50 (7.16)	0.43 (6.06)	0.37 (5.26)
	Overall width	mm (ft-in)	2500 (8' 2")	2600 (8' 6")	2700 (8' 10")
HX145LCR	Shoe width	mm (in)	500 (20)	600 (24)	700 (28)
	Operating weight	kg (lb)	15310 (33750)	15540 (34260)	15750 (34720)
	Ground pressure	kgf/cm ² (psi)	0.46 (6.53)	0.39 (5.52)	0.34 (4.8)
	Overall width	mm (ft-in)	2500 (8' 2")	2600 (8' 6")	2700 (8' 10")
HX145LCR (with dozer)	Shoe width	mm (in)	500 (20)	600 (24)	700 (28)
	Operating weight	kg (lb)	16120 (35540)	16360 (36070)	16580 (36550)
	Ground pressure	kgf/cm ² (psi)	0.48 (6.88)	0.41 (5.82)	0.36 (5.05)
	Overall width	mm (ft-in)	2500 (8' 2")	2600 (8' 6")	2700 (8' 10")
HX145LCR 2-pcs boom	Shoe width	mm (in)	500 (20)	600 (24)	700 (28)
	Operating weight	kg (lb)	15630 (34460)	15860 (34970)	16080 (35450)
	Ground pressure	kgf/cm ² (psi)	0.47 (6.67)	0.4 (5.64)	0.34 (4.90)
	Overall width	mm (ft-in)	2500 (8' 2")	2600 (8' 6")	2700 (8' 10")

3) NUMBER OF ROLLERS AND SHOES ON EACH SIDE

Item	Quantity	
	HX145CR	HX145LCR
Carrier rollers	2 EA	2 EA
Track rollers	7 EA	7 EA
Track shoes	45 EA	47 EA

4) SELECTION OF TRACK SHOE

Suitable track shoes should be selected according to operating conditions.

Method of selecting shoes

Confirm the category from the list of applications in **table 2**, then use **table 1** to select the shoe. Wide shoes (Categories B and C) have limitations on applications. Before using wide shoes, check the precautions, then investigate and study the operating conditions to confirm if these shoes are suitable.

Select the narrowest shoe possible to meet the required flotation and ground pressure. Application of wider shoes than recommendations will cause unexpected problem such as bending of shoes, crack of link, breakage of pin, loosening of shoe bolts and the other various problems.

※ **Table 1**

Track shoe	Specification	Category
500 mm triple grouser	Standard	A
600 mm triple grouser	Option	A
700 mm triple grouser	Option	B

※ **Table 2**

Category	Applications	Applications
A	Rocky ground, river beds, normal soil	· Travel at low speed on rough ground with large obstacles such as boulders or fallen trees
B	Normal soil, soft ground	· These shoes cannot be used on rough ground with large obstacles such as boulders or fallen trees · Travel at high speed only on flat ground · Travel slowly at low speed if it is impossible to avoid going over obstacles

8. SPECIFICATIONS FOR MAJOR COMPONENTS

1) ENGINE

Item	Specification
Model	Perkins 1204F
Type	4-cycle turbocharged charge air cooled diesel engine
Cooling method	Water cooling
Number of cylinders and arrangement	4 cylinders, in-line
Firing order	1-3-4-2
Combustion chamber type	Direct injection type
Cylinder bore × stroke	105 × 127 mm (4.1" × 5.0")
Piston displacement	4400 cc (269 cu in)
Compression ratio	16.5 : 1
Rated net horse power (SAE J1349)	116 Hp (87 kW) at 1950 rpm
Rated gross horse power (SAE J1995)	124 Hp (92.6 kW) at 1950 rpm
Maximum torque	54 kgf · m (391 lbf · ft) at 1400 rpm
Engine oil quantity	10.5 ℓ (2.8 U.S. gal)
Dry weight	558 kg (1230 lb)
High idling speed	2000 ± 50 rpm
Low idling speed	1000 ± 100 rpm
Rated fuel consumption	165 g/Hp · hr at 1950 rpm
Starting motor	24 V-4.5 kW
Alternator	24 V-100 A
Battery	2 × 12 V × 100 Ah

2) MAIN PUMP

Item	Specification
Type	Variable displacement tandem axis piston pumps
Capacity	2 × 65 cc/rev
Maximum pressure	350 kgf/cm ² (4980 psi) [380 kgf/cm ² (5400 psi)]
Rated oil flow	2 × 126.8 ℓ /min (33.5 U.S. gpm / 28.0 U.K. gpm)
Rated speed	1950 rpm

[]: Power boost

3) GEAR PUMP

Item	Specification
Type	Fixed displacement gear pump single stage
Capacity	15cc/rev
Maximum pressure	40 kgf/cm ² (570 psi)
Rated oil flow	29.2 ℓ /min (7.7 U.S. gpm / 6.4 U.K. gpm)

4) MAIN CONTROL VALVE

Item	Specification
Type	11 spools
Operating method	Hydraulic pilot system
Main relief valve pressure	350 kgf/cm ² (4980 psi) [380 kgf/cm ² (5400 psi)]
Overload relief valve pressure	400 kgf/cm ² (5690 psi)

[]: Power boost

5) SWING MOTOR

Item	Type 1	Type 2
Type	Fixed displacement axial piston motor	
Capacity	71 cc/rev	72 cc/rev
Relief pressure	285 kgf/cm ² (4050 psi)	
Braking system	Automatic, spring applied hydraulic released	
Braking torque	31.3 kgf · m (226 lbf · ft)	30 kgf · m (217 lbf · ft)
Brake release pressure	33.8 kgf/cm ² (481 psi)	15~50 kgf/cm ² (213~711 psi)
Reduction gear type	2 - stage planetary	

6) TRAVEL MOTOR

Item	Type 1	Type 2	Type 3
Type	Variable displacement axial piston motor		
Relief pressure	350 kgf/cm ² (4970 psi)		
Capacity (max / min)	77/45 cc/rev	77/45 cc/rev	77/45 cc/rev
Reduction gear type	2-stage planetary		
Braking system	Automatic, spring applied hydraulic released		
Brake release pressure	9.5 kgf/cm ² (135 psi)	10.7 kgf/cm ² (135 psi)	14.3 kgf/cm ² (203 psi)
Braking torque	19.7 kgf · m (143 lbf · ft)	19.7 kgf · m (143 lbf · ft)	33 kgf/cm ² (239 psi)

7) CYLINDER

Item		Specification
Boom cylinder	Bore dia × Stroke	Ø 105 × 1105 mm
	Cushion	Extend only
Arm cylinder	Bore dia × Stroke	Ø 115 × 1138 mm
	Cushion	Extend and retract
Bucket cylinder	Bore dia × Stroke	Ø 100 × 850 mm
	Cushion	Extend only
Dozer cylinder (option)	Bore dia × Stroke	Ø 100 × 250 mm
	Cushion	-
Adjust cylinder (opt)	Bore dia × Stroke	Ø 145 × 613 mm
	Cushion	-
Adjust boom cylinder (opt)	Bore dia × Stroke	Ø 105 × 975 mm
	Cushion	Extend only

※ Discoloration of cylinder rod can occur when the friction reduction additive of lubrication oil spreads on the rod surface.

※ Discoloration does not cause any harmful effect on the cylinder performance.

8) SHOE

Item		Width	Ground pressure	Link quantity	Overall width
HX145LCR	Standard	500 mm (20")	0.45 kgf/cm ² (6.40 psi)	47	2500 mm (8' 2")
	Option	600 mm (24")	0.38 kgf/cm ² (5.40 psi)	47	2600 mm (8' 6")
		700 mm (28")	0.33 kgf/cm ² (4.69 psi)	47	2700 mm (8' 10")

9. RECOMMENDED OILS

HD Hyundai Construction Equipment genuine lubricating oils have been developed to offer the best performance and service life for your equipment. These oils have been tested according to the specifications of HD Hyundai Construction Equipment and, therefore, will meet the highest safety and quality requirements. We recommend that you use only HD Hyundai Construction Equipment genuine lubricating oils and grease officially approved by HD Hyundai Construction Equipment.

Service point	Kind of fluid	Capacity ℓ (U.S. gal)	Ambient temperature °C (°F)									
			-50 (-58)	-30 (-22)	-20 (-4)	-10 (14)	0 (32)	10 (50)	20 (68)	30 (86)	40 (104)	
Engine oil pan	Engine oil	10.5 (2.8)	★SAE 5W-40									
								SAE 30				
				SAE 10W								
				SAE 10W-30								
				SAE 15W-40								
DEF/ AdBlue® tank	Mixture of urea and deionized water	19.0 (5.0)	ISO 22241, High-purity urea + deionized water (32.5:67.5)									
Swing drive	Gear oil	TYPE 1 : 3.5 (0.9)	★SAE 75W-90									
		TYPE 2 : 2.5 (0.7)										
Final drive		2.3×2 (0.6×2)	SAE 80W-90									
Hydraulic tank	Hydraulic oil	Tank : 96 (25.4)	★ISO VG 15									
			ISO VG 32									
		System : 180 (47.6)	ISO VG 46, HBHO VG 46★ ³									
			ISO VG 68									
Fuel tank	Diesel fuel★ ¹	265 (70.0)	★ASTM D975 NO.1									
				ASTM D975 NO.2								
Fitting (grease nipple)	Grease	As required	★NLGI NO.1									
				NLGI NO.2								
Radiator (reservoir tank)	Mixture of antifreeze and soft water★ ²	14.5 (3.8)	Ethylene glycol base permanent type (50 : 50)									
			★Ethylene glycol base permanent type (60 : 40)									

SAE : Society of Automotive Engineers

API : American Petroleum Institute

ISO : International Organization for Standardization

NLGI : National Lubricating Grease Institute

ASTM : American Society of Testing and Material

DEF : Diesel Exhaust Fluid, DEF compatible with AdBlue®

★ : Cold region (Russia, CIS, Mongolia)

★¹ : Ultra low sulfur diesel
- sulfur content ≤ 15 ppm

★² : Soft water
City water or distilled water

★³ : HD Hyundai Construction Equipment
Bio Hydraulic Oil

※ Using any lubricating oils other than HD Hyundai Construction Equipment genuine products may lead to a deterioration of performance and cause damage to major components.

※ Do not mix HD Hyundai Construction Equipment genuine oil with any other lubricating oil as it may result in damage to the systems of major components.

※ Do not use any engine oil other than that specified above, as it may clog the diesel particulate filter(DPF).

※ For HD Hyundai Construction Equipment genuine lubricating oils and grease for use in regions with extremely low temperatures, please contact HD Hyundai Construction Equipment dealers.