

We build a better future

Robex

145LCR-9

Equipped with Tier 3 Engine



*Photo may include optional equipment.



Specifications

ENGINE

MODEL		MITSUBISHI D04FD-TAA	
Type		Water cooled, 4 cycle Diesel, 4-Cylinders in line, direct injection, turbocharged, charged air cooled and low emission	
Rated flywheel horse power	SAE	J1995 (gross)	119 HP (89 kW) / 2,000 rpm
		J1349 (net)	113 HP (85 kW) / 2,000 rpm
	DIN	6271/1 (gross)	121 PS (89 kW) / 2,000 rpm
		6271/1 (net)	115 PS (85 kW) / 2,000 rpm
Max. torque		45.4 kgf.m (328 lbf.ft) / 1,700 rpm	
Bore x stroke		102 x 130 mm (4.0" x 5.1")	
Piston displacement		4,250cc (260 in ³)	
Batteries		2 X 12V X 80AH	
Starting motor		24V - 5.0 kW	
Alternator		24V - 50 Amp	

HYDRAULIC SYSTEM

MAIN PUMP	
Type	Two variable displacement piston pumps
Max. flow	2 X 130 l/min (34.3 US gpm / 28.6 UK gpm)
Sub-pump for pilot circuit	Gear pump
Cross-sensing and fuel saving pump system	

HYDRAULIC MOTORS

Travel	Two speed axial piston motor with brake valve and parking brake
Swing	Axial piston motor with automatic brake

RELIEF VALVE SETTING

Implement circuits	350 kgf/cm ² (4,980 psi)
Travel	350 kgf/cm ² (4,980 psi)
Power boost (boom, arm, bucket)	380 kgf/cm ² (5,410 psi)
Swing circuit	285 kgf/cm ² (4,050 psi)
Pilot circuit	40 kgf/cm ² (570 psi)
Service valve	Installed

HYDRAULIC CYLINDERS

No. of cylinder-bore x stroke	Boom : 105 X 1,105 mm (4.1" X 43.5")
	Arm : 115 X 1,138 mm (4.5" X 44.8")
	Bucket : 100 X 840 mm (3.9" X 33.1")
	Blade : 100 X 260 mm (3.9" X 10.2")

DRIVES & BRAKES

Drive method	Fully hydrostatic type
Drive motor	Axial piston motor, in-shoe design
Reduction system	Planetary reduction gear
Max. drawbar pull	13,300 kgf (29,321 lbf)
Max. travel speed (high) / (low)	5.5 km/hr (3.4 mph) / 3.2 km/hr (2.0 mph)
Gradeability	30° (58 %)
Parking brake	Multi wet disc

CONTROL

Pilot pressure operated joysticks and pedals with detachable lever provide almost effortless and fatigueless operation.

Pilot control	Two joysticks with one safety lever (LH): Swing and arm, (RH): Boom and bucket (ISO)
Traveling and steering	Two levers with pedals
Engine throttle	Electric, Dial type

SWING SYSTEM

Swing motor	Axial piston motor
Swing reduction	Planetary gear reduction
Swing circuit lubrication	Grease-bathed
Swing brake	Multi wet disc
Swing speed	12 rpm

COOLANT & LUBRICANT CAPACITY

Refilling	liter	US gal	UK gal
Fuel tank	232	61.3	51.0
Engine coolant	14.5	3.8	3.2
Engine oil	17.5	4.6	3.8
Swing device - gear oil	2.5	0.7	0.5
Final drive (each) - gear oil	3.6	1.0	0.8
Hydraulic system (including tank)	180	47.6	39.6
Hydraulic tank	96	25.4	21.1

UNDERCARRIAGE

The X-leg type center frame is integrally welded with reinforced box-section track frames. The undercarriage includes lubricated rollers, idlers, track adjusters with shock absorbing springs and sprockets, and a track chain with double or triple grouser shoes.

Center frame	X - leg type	
Track frame	Pentagonal box type	
No. of shoes on each side	R145LCR-9	47EA
No. of carrier rollers on each side		2 EA
No. of track rollers on each side		7 EA
No. of rail guards on each side		2 EA

OPERATING WEIGHT (APPROXIMATE)

Operating weight, including 4,600 mm (15' 1") boom; 2,500 mm (8' 2") arm; SAE heaped 0.52m³ (0.68 yd³) bucket, lubricant, coolant, full fuel tank, full hydraulic tank, and all standard equipments.

MAJOR COMPONENT WEIGHT

Upperstructure	6,950 kg (15,320 lb)
Counterweight	2,800 kg (6,170 lb)
4.6 m (15' 1") mono boom (with arm cylinder)	1,030 kg (2,270 lb)

OPERATING WEIGHT

Shoes		Operating weight	Ground pressure
Type	Width mm (in)	kg (lb)	kgf/cm ² (psi)
Triple grouser	500 (20")	R145LCR-9	14,785 (32,600) 0.47 (6.68)
		R145LCR-9 (Dozer type)	15,585 (34,360) 0.49 (6.97)
	600 (24")	R145LCR-9	14,980 (33,020) 0.40 (5.69)
		R145LCR-9 (Dozer type)	15,800 (34,830) 0.42 (5.97)
	700 (28")	R145LCR-9	15,215 (33,540) 0.34 (4.83)
		R145LCR-9 (Dozer type)	16,035 (35,350) 0.36 (5.12)



ATTACHMENT

Booms and arms are welded, a low-stress, full-box section design. 4.60 m (15' 1") boom and 1.90 m (6' 3"); 2.10 m (6' 11"); 2.50 m (8' 2"); 3.00 m (9' 10") arms are available.

DIGGING FORCE

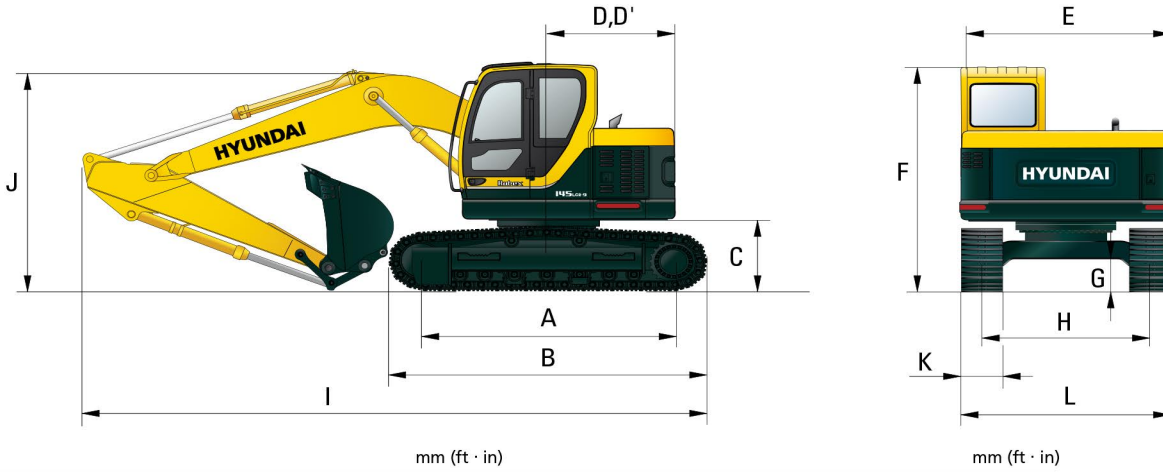
Boom	Length	mm (ft.in)	4,600 (15' 1")
	Weight	kg (lb)	1,030 (2,270)
Arm	Length	mm (ft.in)	2,500 (8' 2")
	Weight	kg (lb)	610 (1,340)
Bucket digging force	SAE	kN	87.3 [94.8]
		kgf	8,900 [9,660]
		lbf	19,620 [21,300]
	ISO	kN	102 [110.8]
		kgf	10,400 [11,290]
		lbf	22,930 [24,890]
Arm crowd force	SAE	kN	62.8 [68.2]
		kgf	6,400 [6,950]
		lbf	14,110 [15,320]
	ISO	kN	65.7 [71.4]
		kgf	6,700 [7,270]
		lbf	14,770 [16,040]

Note: Boom weight includes arm cylinder, piping, and pin

Arm weight includes bucket cylinder, linkage, and pin

Dimensions & Working Ranges

DIMENSIONS R145LCR-9



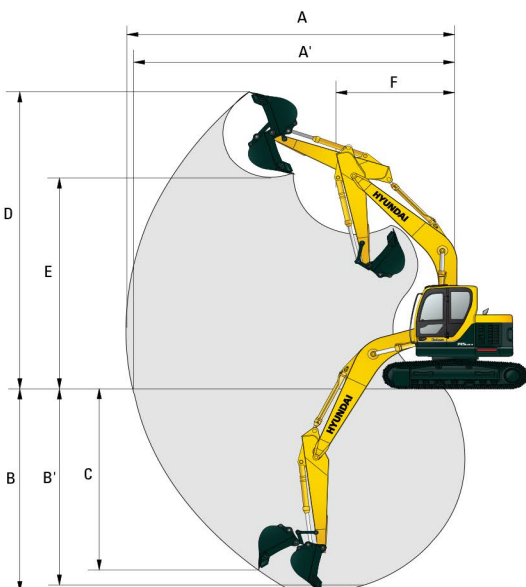
mm (ft · in)

mm (ft · in)

A Tumbler distance	3,090 (10' 2")	Boom length	4,600 (15' 1")
B Overall length of crawler	3,820 (12' 6")	Arm length	2,500 (8' 2")
C Ground clearance of counterweight	930 (3' 1")	I Overall length	7,360 (24' 2")
D Tail swing radius	1,480 (4' 10")	J Overall height of boom	2,860 (9' 5")
D' Rear-end length	1,480 (4' 10")	K Track shoe width	600 (24")
E Overall width of upperstructure	2,500 (8' 2")	L Overall width	2,600 (8' 6")
F Overall height of cab	2,900 (9' 6")		
G Min. ground clearance	440 (1' 5")		
H Track gauge	2,000 (6' 7")		

WORKING RANGE R145LCR-9

mm (ft · in)



Boom length	4,600 (15' 1")
Arm length	2,500 (8' 2")
A Max. digging reach	8,310 (27' 3")
A' Max. digging reach on ground	8,170 (26' 10")
B Max. digging depth	5,500 (18' 1")
B' Max. digging depth (8' level)	5,290 (17' 4")
C Max. vertical wall digging depth	5,000 (16' 5")
D Max. digging height	9,350 (30' 8")
E Max. dumping height	6,850 (22' 6")
F Min. front swing radius	1,980 (6' 6")



Lifting Capacities

R145LCR-9

Rating over-front Rating over-side or 360 degrees

Boom : 4.6 m (15' 1") / Arm : 2.5 m (8' 2") / Bucket : 0.52 m³ (0.68 yd³) SAE heaped / Shoe : 500 mm (20") triple grouser with 2,800 kg (6,170 lb) counterweight

Load point height m (ft)		Load radius								At max. reach				
		1.5 m (5.0 ft)		3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		Capacity		Reach		
												m (ft)		
6.0 m (20.0 ft)	kg lb					*2960 *6530	*2960 *6530					*2910 *6420	1720 3790	6.50 (21.3)
4.5 m (15.0 ft)	kg lb					*3460 *7630	3350 7390	*2670 *5890	1960 4320	2360 5200	1300 2870	7.37 (24.2)		
3.0 m (10.0 ft)	kg lb			*6090 *13430	*6090 *13430	*4480 *9880	3130 6900	3320 7320	1880 4140	2080 4590	1110 2450	7.81 (25.6)		
1.5 m (5.0 ft)	kg lb			*8480 *18700	5450 12020	5180 11420	2850 6280	3190 7030	1760 3880	2000 4410	1050 2310	7.90 (25.9)		
Ground Line	kg lb			*9170 *20220	4990 11000	4930 10870	2630 5800	3070 6770	1650 3640	2070 4560	1080 2380	7.67 (25.2)		
-1.5 m (-5.0 ft)	kg lb	*5850 *12900	*5850 *12900	*8700 *19180	4890 10780	4810 10600	2530 5580	3020 6660	1600 3530	2370 5220	1260 2780	7.07 (23.2)		
-3.0 m (-10.0 ft)	kg lb	*8930 *19690	*8930 *19690	*7030 *15500	4970 10960	*4770 *10520	2550 5620			*2400 *5290	1730 3810	5.97 (19.6)		
-4.5 m (-15.0 ft)	kg lb			*3750 *8270	*3750 *8270									

1. Lifting capacity is based on SAE J1097, ISO 10567.
2. Lifting capacity of the Robex Series does not exceed 75% of the tipping load with the machine on firm, level ground or 87% of full hydraulic capacity.
3. The load point is a hook located on the back of the bucket.
4. (*) indicates the load limited by hydraulic capacity.



STANDARD EQUIPMENT

ISO Standard cabin

All-weather steel cab with 360° visibility
 Safety glass windows
 Rise-up type windshield wiper
 Sliding fold-in front window
 Sliding side window
 One key fits all lockable doors
 Hot & cool box
 Storage compartment & Ashtray
 Transparent cabin roof-cover
 Radio MP3 Player with AUX-input
 Handsfree mobile phone system with USB-charging device
 Sun visor

Computer aided power optimization (New CAPO) system

3-power modes, 3-work modes, User mode
 Auto & one-touch deceleration system
 Auto warm-up system
 Overheat prevention system

Automatic temperature control

Air conditioner & heater
 Defroster

Self-diagnostics system

Starting Aid (air grid heater) for cold weather

Centralized monitoring

LCD-display

Engine speed or Trip meter
 Clock
 Gauges
 - Fuel level gauge
 - Engine coolant temperature gauge
 - Hyd. oil temperature gauge
 Warning lamps
 - Engine warning
 - Communication error
 - Low battery
 - Air filter clogging
 Indicators
 - Max power
 - Fuel warmer
 - Auto deceleration

Door and cab locks, one key

Two outside rearview mirrors

Mechanical suspension seat with heater

Adjustable joysticks

Console box height adjust system

Four front working lights

Electric horn

Batteries (2 x 12 V x 80 AH)

Battery master switch

Removable clean-out screen for oil cooler

Automatic swing brake

Removable reservoir tank

Fuel pre-filter with fuel warmer

Boom holding system

Arm holding system

Counterweight (2,800 kg; 6,170 lb)

Track shoes (500 mm; 20")

Track rail guard

Accumulator for lowering work equipment

Electric transducer

Lower frame under cover

Standard and optional equipment may vary. Contact your Hyundai dealer for more information. The machine may vary according to International standards. All imperial measurements rounded off to the nearest pound or inch.

PLEASE CONTACT

