



ROBEX 290LC-7A

### Standard Equipment

#### ISO standard cab

- All-weather steel cab with all-around visibility
- Safety glass windows
- Rise-up type windshield wiper
- Sliding fold-in front window
- Sliding side window
- Lockable door
- Hot & cool box
- Accessory box & Ash-tray

#### Computer Aided Power Optimization (New CAPO) system

- 2-power mode, 3-work mode, 2-user mode
- Auto deceleration & one touch deceleration system
- Auto warm up system
- Auto overheat prevention system

#### Heater(7,500 kcal/hr, 30,000BTU/hr) & Defroster Self diagnostic system

#### Centralized monitoring

- LCD display
  - Engine speed
  - Clock & Error code
- Gauges
  - Fuel level gauge
  - Engine coolant temperature gauge
  - Hyd. oil temperature gauge
- Warning
  - Fuel level
  - Check Engine & CPU
  - Engine oil pressure
  - Engine coolant temperature
  - Hyd. oil temperature
  - Low battery
  - Air cleaner clogging
- Indicator
  - Power boost
  - Engine warming-up
  - Auto(One touch) decel
  - Preheat(Air grille heater)

#### Removable clean out screen for oil cooler

#### Door and cab locks, one key

#### Two outside rearview mirrors

#### Fully adjustable suspension seat with seat belt

#### Slidable joystick, pilot-operated

#### Automatic swing brake

#### Removable reservoir tank

#### Water separator & Fuel pre-filter, fuel line

#### Boom holding system

#### Arm holding system

#### Counterweight (5200kg, 11460lb)

#### mono boom (6.25m, 20' 6")

#### Arm (3.05m, 10' 0")

#### Track shoes (600mm, 23.6")

#### Track rail guard

#### Am/Fm radio and cassette

#### Radio remote switch

#### Console box tilting system (LH.)

#### Three front working light

#### Electric horn

#### Batteries (2 x 12V x 160AH)

#### Battery master switch

#### Starting Aid(air grille heater) cold weather

#### Fuel warmer

### Optional Equipment

#### Air-conditioner (5,000 kcal/hr, 20,000 BTU/hr)

#### FATC(Full Automatic Temperature Control)

#### Sun visor for cabin inside

#### Fuel filler pump (35 ℓ /min, 9.5 USgpm)

#### Beacon lamp

#### Safety lock valve for boom cylinder with overload warning device

#### Safety lock valve for arm cylinder

#### Single acting piping kit (breaker, etc)

#### Double acting piping kit (cramshell, etc)

#### Quick Coupler

#### Accumulator, work equipment lowering

#### 12 volt power supply (DC-DC converter)

#### Electric. transducer

#### Travel alarm

#### CD Player

#### Various optional Arms

- Super short arm (2.10 m, 6' 11")
- Short arm (2.50 m, 8' 2")
- Long arm (3.75 m, 12' 4")

#### Various optional Buckets (SAE heaped)

- Standard bucket (1.27 m<sup>3</sup>, 1.66 yd<sup>3</sup>)
- Narrow bucket (0.79 m<sup>3</sup>, 1.03 yd<sup>3</sup>)
- Narrow bucket (1.03 m<sup>3</sup>, 1.35 yd<sup>3</sup>)
- Light duty bucket (1.50 m<sup>3</sup>, 1.96 yd<sup>3</sup>)
- Light duty bucket (1.73 m<sup>3</sup>, 2.26 yd<sup>3</sup>)
- Light duty bucket (1.85 m<sup>3</sup>, 2.42 yd<sup>3</sup>)
- Heavy duty bucket (1.07 m<sup>3</sup>, 1.40 yd<sup>3</sup>)
- Heavy duty bucket (1.27 m<sup>3</sup>, 1.66 yd<sup>3</sup>)
- Heavy duty bucket (1.46 m<sup>3</sup>, 1.91 yd<sup>3</sup>)
- Rock bucket (1.16 m<sup>3</sup>, 1.52 yd<sup>3</sup>)
- Rock bucket (1.49 m<sup>3</sup>, 1.95 yd<sup>3</sup>)

#### Cabin lights

#### Cabin FOPS/FOG(ISO/DIS 10262)

#### Cabin Roof-cover Transparent

#### Track shoes

- Triple grousers shoe (700 mm, 28")
- Triple grousers shoe (800 mm, 32")
- Triple grousers shoe (900 mm, 36")

#### Lower frame under cover

#### Pre heating system

#### Tool kit

#### Operator suit

#### Tropical Kit

- Fan drive ratio(1.1:1)

- Louver side cover(R/H) side

#### Seat

#### Adjustable air suspension seat



## Robex NEW 7A SERIES

# 290LC-7A

CRAWLER EXCAVATOR Applied **Tier III** Engine  
 CUMMINS QSB6.7 Engine : 227 HP(169 kW) / 1,900 rpm  
 Operating Weight : 29,300 ~ 33,310 kg (64,600 ~ 73,440 lb)  
 Bucket Capacity, SAE : 0.79 ~ 1.85 m<sup>3</sup>(1.03 ~ 2.42 yd<sup>3</sup>)

Standard and optional equipment may vary. Contact your Hyundai dealer for more information. The machine shown may vary according to International standards. All US measurement rounded off to nearest pounds or inches.



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Photo may include optional equipment



The **Freelancer** on the all ground - **Robex 290LC-7A**

# Built for Maximum Power, Performance, Reliability.

A new chapter in construction equipment has now begun.  
Making the dream a reality.

*Robex* **290LC-7A**





## Operator's Comfort is Foremost. Wide Cab Exceeds Industry Standards.

### Technology in Cab Design



#### Visibility

- Even more visibility than before, for safer, more efficient operating.



#### Excellent Ventilation

- Ventilation has been improved by the addition of the larger fresh air intake system, and by providing additional air flow throughout the cab.
- Sliding front and side windows provide improved ventilation.
- A large sunroof offers upward visibility and additional ventilation.



#### Comfortable Operator Environment

- The control levers and seat can be adjusted to provide maximum operator comfort.
- The seat is fully adjustable for optimum operating position, reducing operator fatigue.
- Console boxes slide forward and backward for improved accessibility.
- The proportional pressure controls reduce unnecessary exertion while ensuring precise operation.
- Large windows allow excellent visibility in all directions.



#### Low noise design

- The Robex 7series was designed with low operation noise in mind.
- Hyundai engineering helps to keep interior and exterior noise levels to a minimum.
- The cab's noise levels have been additionally reduced by improving the door seals for the cab and engine compartments.
- An insulated diesel engine compartment with sound-damping material also reduces noise.



- 1 Wide, Comfortable Operating Space
- 2 Steel Cover Sunroof
- 3 Dial Type Engine Speed Switch and / Key Switch

#### Remote Radio Control and Deluxe Cassette

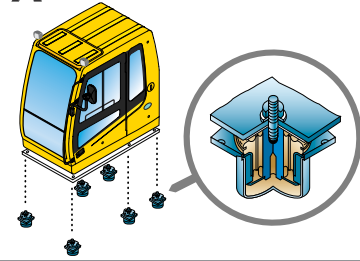




The **Freelancer** on the all ground - *Rabox* **290LC-7A**



**Improved Intelligent Display**  
Instrument Panel is installed in front of RH console box. It is easy to check all critical systems with easy-to-read indicators.



**Minimization of Shock and Vibration through Cab Mounting System**  
The application of Viscous Mounting to the cabin support provides the operator with a much improved ride. The operator work efficiency will increase as the shock and noise level in the cabin decreases.



# Operating Environment

# Maximum Protection



**▲ Storage box and Cup Holder**  
An Additional storage box and cup holder are located behind operator's seat, and it keeps food and beverages cool or hot.

**◀ Wide Cab with Excellent Visibility**  
The cab is roomy and ergonomically designed with low noise level and good visibility. A full view front window and large rear and side windows provide excellent visibility in all directions.



**Highly Sensitive Joystick and Easy Entrance**  
New joystick grips for precise control have been equipped with double switches.

- Left Power boost
- One touch deceleration
- Right Horn/Optional



**Easy-to-Reach Control Panels**  
Switches and other essential controls are located near the operator. This helps keep operator movement to a minimum, enhancing control with less operator fatigue.



**Rear Emergency Exit Window**  
Rear Exit Window is designed with easy exit for operator's safety.



**Raise-up Wiper and Cabin Lights**  
Raise-up wiper has enhanced for the better front view. Cabin Lights enhances safety by brightly lighting the surroundings during night work(optional)



**Wide, Comfortable Operating Space**  
All the controls are designed and positioned according to the latest ergonomic research. Reinforced pillars have also been added for greater cab rigidity.

**Smooth Travel Pedal and Foot Rests**



The best working conditions in a pleasant environment.

- ① Centralized control panel
- ② Horn button
- ③ Option button
- ④ Remote Radio control
- ⑤ Travel lever
- ⑥ Cluster
- ⑦ One touch decel button
- ⑧ Hour meter
- ⑨ Travel pedal
- ⑩ Fully adjustable suspension seat
- ⑪ Safety lever
- ⑫ Power boost button
- ⑬ Joystick control lever
- ⑭ Air Conditioner and Heater controller





### Automatic Engine Overheat Prevention

If the engine coolant temperature gets too high, the CPU controller lowers the engine speed and cools the engine.



### Anti Restart System

The new system protects the starter from re-starting during engine operation, even if the operator accidentally turns the start key again.



### Power boost control System

When the power boost system is activated, digging power increases about 10%. It is especially useful when extra power is temporarily needed, for instance, when digging hard earth and rock, or if the bucket teeth are stopped by a stubborn tree root.

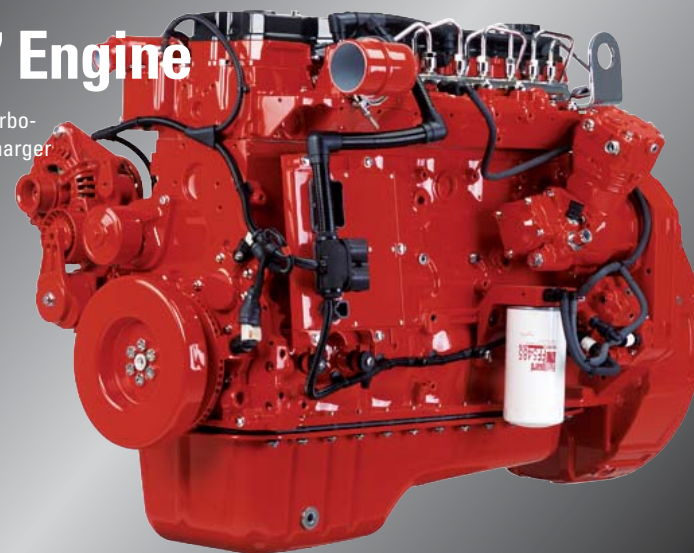


### Automatic Warming-up System

After the engine is started, if the engine coolant temperature is low, the CPU controller increases the engine speed and automatically increases the pump flow rate to warm up the engine more effectively.

## CUMMINS QSB6.7 Engine

The six cylinders, turbo-charged, 4 cycle, Charger air cooled engine is built for power, reliability, economy and low emissions. This engine meets TierIII emissions regulations.

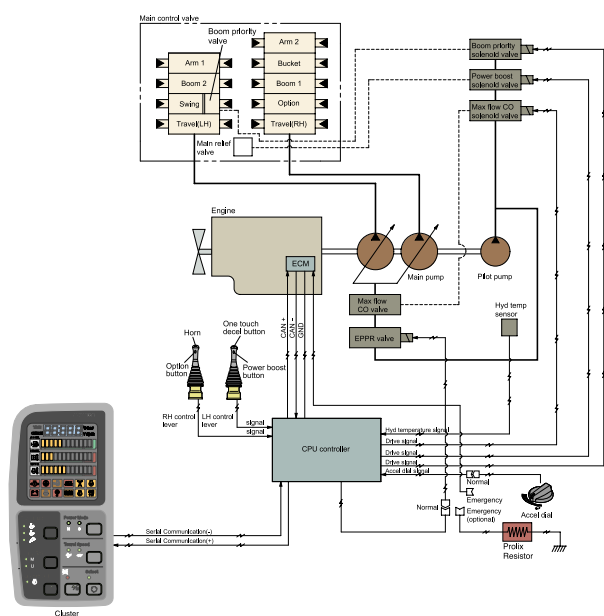


### The Definition of Progress

The Quantum System B Series 6.7-liter engine combines full-authority electronic controls with the reliable performance. The electronics in the QSB6.7 have been proven in our high-horsepower products-working in the harshest, most demanding environments-like dusty, non-stop mining operations-while meeting emissions regulations worldwide. The QSB6.7 features 24 valve design with centered injectors and symmetrical piston bowl. The combination of improved airflow and evenly dispersed fuel results in increased power, improved transient reponse and reduced fuel consumption.

## Advanced Hydraulic System

### ADVANCED CAPO SYSTEM



The advanced CAPO(Computer Aided Power Optimization) system maintains engine and mutual pump power at optimum levels. Mode selections are designed for various work loads and maintaining high performance while reducing fuel consumption. Features such as auto deceleration and power boost are included in the system. The system monitors engine speed, coolant temperature, and hydraulic oil temperature. Contained within the system are self diagnostic capabilities which are displayed by error codes on the cluster.

### Self Diagnosis System

The CPU controller diagnoses problems in the CAPO system caused by electric and hydraulic malfunctions and displays them on the LCD monitor of the cluster through error codes. This controller has the capacity to identify 48 distinct types of errors. As the information from this device, such as engine rpm, main pump delivery pressure, battery voltage, hyd. temperature, and the state of all types of electric switches, provides the operator with a much more exact state of machine operating condition. This makes the machine easier to troubleshoot when anything does go wrong.

### One Touch Decel System

When the one touch decel switch is pressed, CPU controller controls the accel actuator to reduce engine speed to 800 rpm. And then the one touch decel switch is pressed again, the engine speed recovers.

### Pump Flow Control System

In neutral position: Pump flow is reduced to a minimum to eliminate power loss. In operation: Maximum pump flow is delivered to the actuator to increase the speed. With movement of the control lever, pump flow is automatically adjusted and the actuator speed can be proportionally controlled.

### Boom & Arm Holding System

The Holding valves in the main control valve prevents the boom & arm from dropping over an extended period in neutral position.

### Arm Flow Regeneration System

Arm flow regeneration valve provides smooth arm-in operation without cavitation.

### Hydraulic Damper in Travel Pedal

Improved travel controllability & feeling by shock reducing when starting and stopping.

## Increased Higher Performance



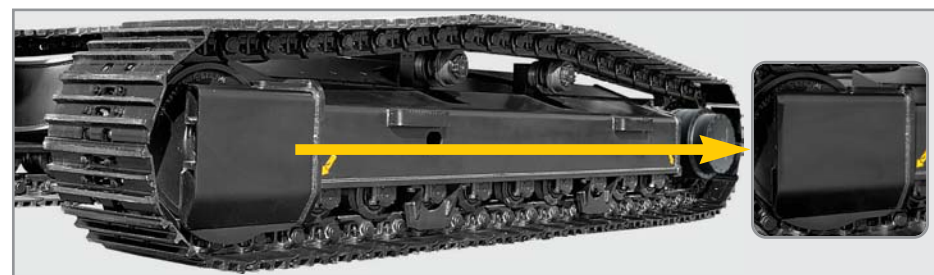
### Reinforced Bucket and Bucket Linkage

Sealed and adjustable bucket linkage provides less wear of pins and bushes as well as silent operation. The design includes bucket link durability and anti wear characteristics. Additional reinforcement plates on cutting edge section. Reinforced bucket is made with thicker steel and additional lateral plate.



### Strong and Stable Lower Frame

Reinforced box-section frame is all welded, low-stress, high-strength steel. It guarantees safety and resistance against external impact when driving on rough ground and working on wet sites through high tensile strength steel panels, with highly durable upper and lower rollers and track guards. Long undercarriage incorporates heavy duty excavator style components. X-leg type center frame is integrally welded for maximum strength and durability.

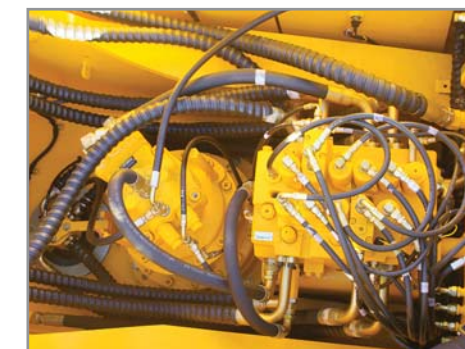


### Track Rail Guide & Adjusters

Durable track rail guides keep track links in place. Track adjustment is made easy with standard grease cylinder track adjusters and shock absorbing springs. (Full Track Guide : Option)

### Powerful and Preciser Swing Control

Improved shock absorbing characteristics make stopping a precise and smooth action



### NEW MODE CONTROL SYSTEM



- POWER MODE**  
H mode: High power    S mode: Standard power
- WORK MODE**  
Heavy duty work    General work    Breaker
- USER MODE**  
M mode: Maximum Power  
U mode : Memorizing Operator's Preferable Power Setting

### Auto Deceleration System



When remote-control valves are in neutral position more than 4 seconds, CPU controller instructs the accel actuator to reduce engine speed to 1050rpm. This decreases fuel consumption and reduces cab noise levels.

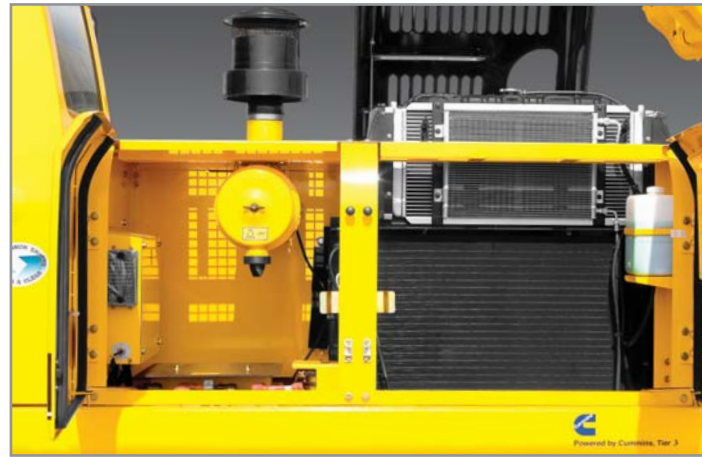
### Max. Flow Cut-off System

For precise control and finishing work, the Max. Flow Cut-off System reduces pump flow, thus allowing smooth operation.



Full open doors and master key system provide easy access for servicing.

## Reliability & Serviceability



### Side Cover with Left & Right Swing Open Type

Easy access to vital components gives unrestricted view of component allows easy maintenance and repair.



### Easy to maintain engine components

The cooling and preheating system are provided for optimum and immediate operation, guaranteeing longer life for the engine and hydraulic components. Servicing of the engine and hydraulics is considerably simplified due to total accessibility.



### Centralized Electric Control Box and Easy Change Air Cleaner Assembly

Electric control box and Air cleaner are centralized in one or the same compartment for easy service.

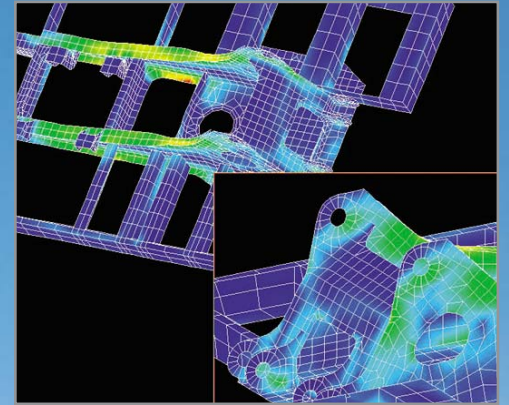


### Highly efficient Hydraulic Pump

Pump output capacity has been increased.



### Large tool box for extra storage



Durability of structure proven through FEM (Finite Element Method) analysis and long term durability test.





## Engine

Model		Cummins QSB6.7	
Type		Watercooled, 4 cycle Diesel, 6-Cylinders in line, direct injection, Turbo charged, charger air cooled and low emission	
Rated flywheel horse power	SAE	J1995 (gross)	227 HP (169 kW) at 1,900 rpm
		J1349 (net)	197 HP (147 kW) at 1,900 rpm
	DIN	6271/1 (gross)	230 PS (169 kW) at 1,900 rpm
		6271/1 (net)	200 PS (147 kW) at 1,900 rpm
Max. torque		96.8 kgf-m(700 lbf-ft) at 1,400 rpm	
Bore x stroke		104 x 132 mm (4.1" x 5.2")	
Piston displacement		6,700 cc (409 cu in)	
Batteries		2 x 12 V x 160 AH	
Starting motor		24 V, 4.5kW	
Alternator		24 V, 50 Amp	

## Hydraulic system

Main pump	
Type	Two variable displacement piston pumps
Max. flow	2x260 ℓ/min (68.7 US gpm / 57.2 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	330 kgf/cm <sup>2</sup> (4690 psi)
Travel	330 kgf/cm <sup>2</sup> (4690 psi)
Power boost (boom, arm, bucket)	360 kgf/cm <sup>2</sup> (5120 psi)
Swing circuit	265 kgf/cm <sup>2</sup> (3770 psi)
Pilot circuit	35 kgf/cm <sup>2</sup> (498 psi)
Service valve	Installed
Hydraulic cylinders	
No. of cylinder-bore x rod x stroke	Boom: 2-140×100×1465 mm (5.5"×3.9"×57.7")
	Arm: 1-150×110×1765 mm (5.9"×4.3"×69.5")
	Bucket: 1-140×95×1185 mm (5.5"×3.7"×46.7")

## Drives & Brakes

Drive method	Fully hydrostatic type
Drive motor	Axial piston motor, in-shoe design
Reduction system	Planetary reduction gear
Max. drawbar pull	27,300 kgf (60,200 lbf)
Max. travel speed(high) / (low)	5.2 km/hr (3.2 mph) / 3.1 km/hr (1.9 mph)
Gradeability	35° (70 %)
Parking brake	multi wet disc

## Control

Pilot pressure operated joysticks and pedals with detachable lever provide almost effortless and fatiguesless 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
External Lights	Two lights mounted on the boom one under the battery box

## Swing system

Swing motor	Axial piston motor
Swing reduction	Planetary gear reduction
Swing bearing lubrication	Grease-bathed
Swing brake	multi wet disc
Swing speed	10.6 rpm

## Coolant & Lubricant capacity

(refilling)	liter	US gal	UK gal
Fuel tank	480	126.8	105.6
Engine coolant	50.0	13.2	11.0
Engine oil	24	6.3	5.3
Swing device	11.0	1.8	1.5
Final drive(each)	5.5	2.9	2.4
Hydraulic system(including tank)	320.0	84.5	70.4
Hydraulic tank	210.0	55.5	46.2

## Undercarriage

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 spring and sprocket, assembled trak chain with triple grouser shoes.

Center frame	X - leg type
Track frame	Pentagonal box type
No. of shoes on each side	48
No. of carrier roller on each side	2
No. of track roller on each side	9
No. of rail guides on each side	2

## Operating weight (approximate)

Operating weight, including 6.25 m (20' 6") boom, 3.05 m (10' 0") arm, SAE heaped 1.27 m<sup>3</sup> (1.66 yd<sup>3</sup>) backhoe bucket, lubricant, coolant, full fuel tank, hydraulic tank and the standard equipment.

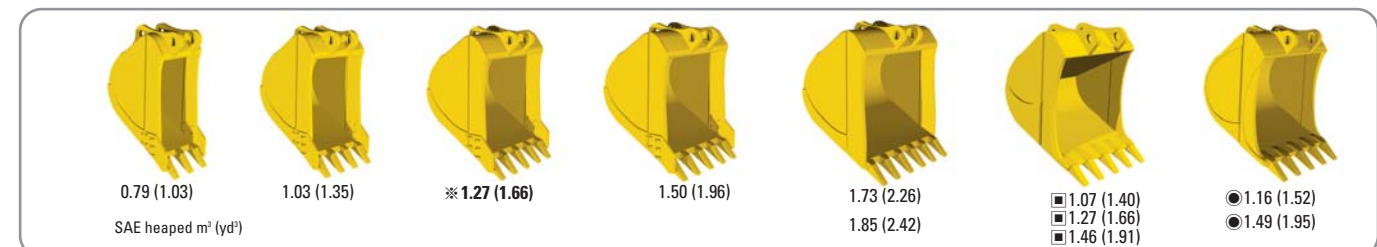
Major component weight	
Upperstructure	7,040 kg (15,520 lb)
Counterweight	5,200 kg (11,460 lb)
Boom (with arm cylinder)	2,670 kg (5,900 lb)

## Operating weight

Type	Shoes		Operating weight		Ground pressure kgf / cm <sup>2</sup> (psi)
	Width mm (in)		kg (lb)		
Triple grouser	※ 600 (24)	R290LC-7A	29,300 (64,600)	0.56 (7.97)	0.55 (7.82) 0.62 (8.82)
		R290NLC-7A	29,100 (64,150)		
		R290LC-7AH/C	32,140 (70,860)		
Triple grouser	700 (28)	R290LC-7A	29,880 (65,870)	0.49 (6.97)	0.54 (7.68) 0.44 (6.26) 0.48 (6.83)
		R290LC-7AH/C	32,720 (72,140)		
		R290LC-7A	30,460 (67,150)		
Triple grouser	800 (32)	R290LC-7A	33,300 (73,410)	0.48 (6.83)	0.38 (5.40) 0.54 (7.68)
		R290LC-7AH/C	33,300 (73,410)		
		R290LC-7A	31,040 (68,430)		
Double grouser	900 (36)	R290LC-7A	31,040 (68,430)	0.38 (5.40)	0.54 (7.68)
		R290LC-7AH/C	33,310 (73,440)		

※ Standard equipment

## Buckets



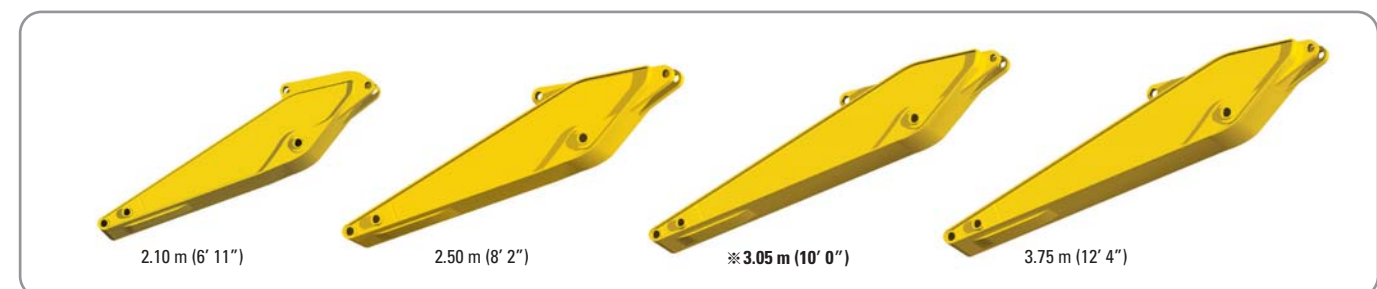
Capacity m <sup>3</sup> (yd <sup>3</sup> )		Width mm (in)		Weight kg(lb)	Recommendation mm(ft.in)			
SAE heaped	CECE heaped	Without side cutters	With side cutters		Boom Arm	2100 (6' 11")	2500 (8' 2")	3050 (10' 0")
0.79 (1.03)	0.70 (0.92)	890 (35.0)	1010 (39.8)	790(1740)	●	●	●	●
1.03 (1.35)	0.90 (1.18)	1090 (42.9)	1210 (47.6)	890(1960)	●	●	●	■
※1.27 (1.66)	1.10 (1.44)	1290 (50.8)	1410 (55.5)	1010(2230)	●	●	■	▲
1.50 (1.96)	1.30 (1.70)	1490 (58.7)	1610 (63.4)	1080(2380)	●	■	▲	-
1.73 (2.26)	1.50 (1.96)	1700 (66.9)	1820 (71.7)	1170(2580)	▲	▲	-	-
1.85 (2.42)	1.60 (2.09)	1800 (70.9)	1920 (75.6)	1230(2710)	▲	-	-	-
■1.07 (1.40)	0.95 (1.24)	1150 (45.3)	-	1120(2470)	●	●	●	■
■1.27 (1.66)	1.10 (1.44)	1210 (47.6)	-	1160(2560)	●	●	■	▲
■1.46 (1.91)	1.28 (1.67)	1460 (57.5)	-	1290(2840)	●	■	▲	-
●1.16 (1.52)	1.00 (1.31)	1340 (52.8)	-	1280(2820)	●	●	■	-
●1.49 (1.95)	1.28 (1.67)	1620 (63.8)	-	1440(3170)	●	■	▲	-

※: Standard backhoe bucket  
 ■: Heavy-duty  
 ●: Rock bucket-Heavy

●: Applicable for materials with density of 2,000 kg / m<sup>3</sup> (3,370 lb/ yd<sup>3</sup>) or less  
 ■: Applicable for materials with density of 1,600 kg / m<sup>3</sup> (2,700 lb/ yd<sup>3</sup>) or less  
 ▲: Applicable for materials with density of 1,100 kg / m<sup>3</sup> (1,850 lb/ yd<sup>3</sup>) or less

## Arms

Boom and arms are of all-welded, low-stress, full-box section design. 6.25m(20' 6") boom and 2.10m(6' 11"), 2.50m(8' 2"), 3.05m(10' 0"), 3.75m(12' 4") arms are available. Buckets are all-welded, high-strength steel implements.



## Digging force

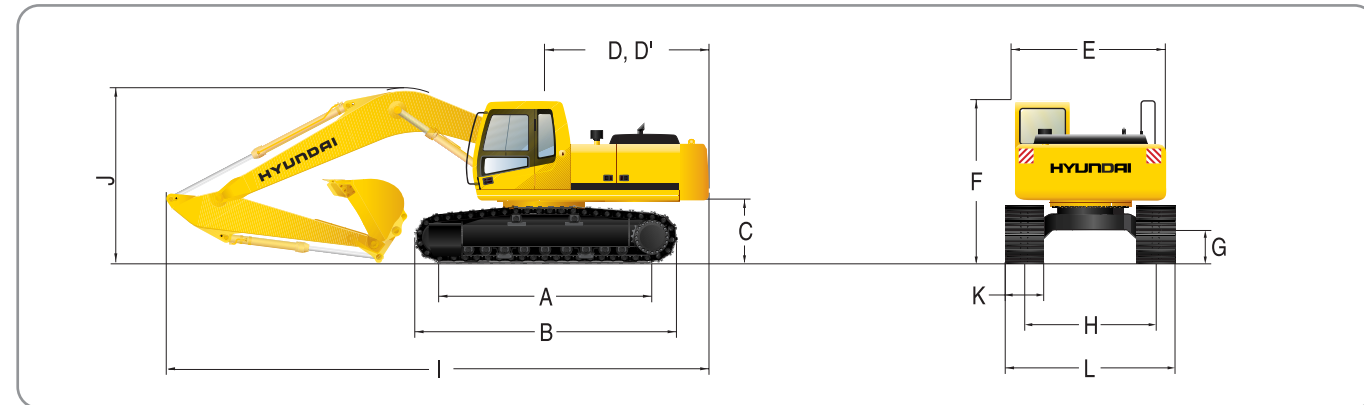
Arm	Length	mm(ft.in)	2100 (6' 11")	2500 (8' 2")	※3050 (10' 0")	3750 (12' 4")	Remark
			Weight	kg(lb)	1410 (3110)	1390 (3060)	
Bucket digging force	SAE	kN	168.7 [184]	168.7 [184]	168.7 [184]	168.7 [184]	[ ]: Power Boost
		kgf lbf	17200 [18760] 37920 [41370]	17200 [18760] 37920 [41370]	17200 [18760] 37920 [41370]	17200 [18760] 37920 [41370]	
	ISO	kN	192.2 [209.7]	192.2 [209.7]	192.2 [209.7]	192.2 [209.7]	
		kgf lbf	19600 [21380] 43210 [47140]	19600 [21380] 43210 [47140]	19600 [21380] 43210 [47140]	19600 [21380] 43210 [47140]	
Arm crowd force	SAE	kN	169.7 [185.1]	147.1 [160.5]	123.6 [134.8]	108.9 [118.8]	
		kgf lbf	17300 [18870] 38140 [41610]	15000 [16360] 33070 [36080]	12600 [13750] 27780 [30310]	11100 [12110] 24470 [26690]	
	ISO	kN	177.5 [193.6]	154.0 [168.0]	128.5 [140.2]	111.8 [122.0]	
		kgf lbf	18100 [19750] 39900 [43530]	15700 [17130] 34610 [37760]	13100 [14290] 28880 [31510]	11400 [12440] 25130 [27410]	

Note : Arm weight including bucket cylinder and linkage. ※ Standard arm



# Dimensions & Working ranges

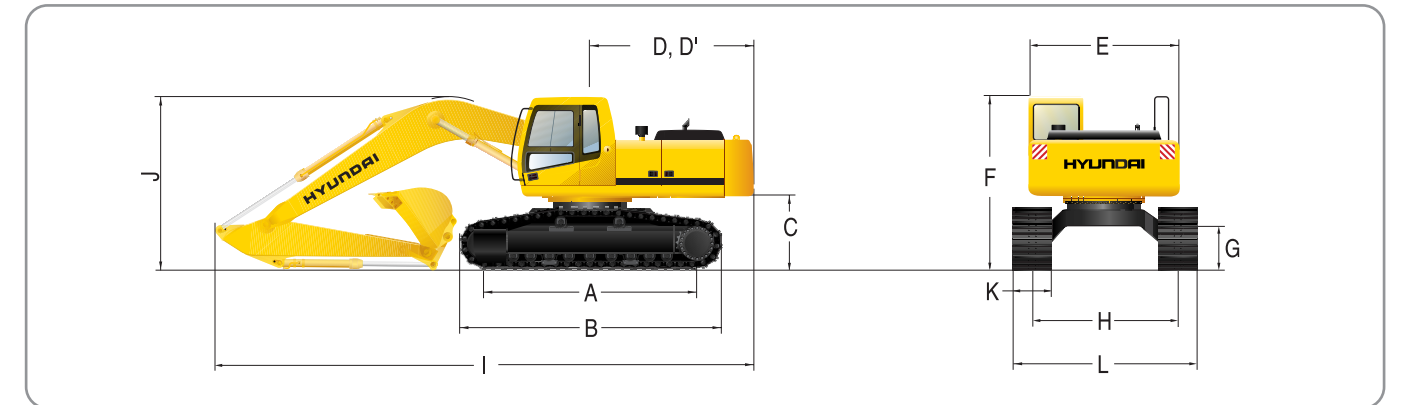
## Dimensions - R290LC-7A, R290NLC-7A



		mm (ft · in)	
A	Tumbler distance	R290LC-7A R290NLC-7A	4030 (13' 3") 4030 (13' 3")
B	Overall length of crawler		4940 (16' 2")
C	Ground clearance of counterweight		1190 (3' 11")
D	Tail swing radius		3200 (10' 6")
D'	Rear-end length		3120 (10' 3")
E	Overall width of upperstructure		2980 (9' 9")
F	Overall height of cab		3010 (9' 11")
G	Min. ground clearance		500 (1' 8")
H	Track gauge	R290LC-7A R290NLC-7A	2600 (8' 6") 2390 (7' 10")

		mm (ft · in)			
Boom length		※ 6250 (20' 6")			
Arm length		2100 (6' 11")	2500 (8' 2")	※ 3050 (10' 0")	3750 (12' 4")
I	Overall length	10700 (35' 1")	10650 (34' 11")	10560 (34' 8")	10630 (34' 11")
J	Overall height of boom	3590 (11' 9")	3470 (11' 5")	3290 (10' 10")	3500 (11' 6")
K	Track shoe width	※ 600 (24")	700 (28")	800 (32")	900 (36")
L	Overall width	R290LC-7A	3200 (10' 6")	3300 (10' 10")	3400 (11' 2")
		R290NLC-7A	2990 (9' 10")	-	-

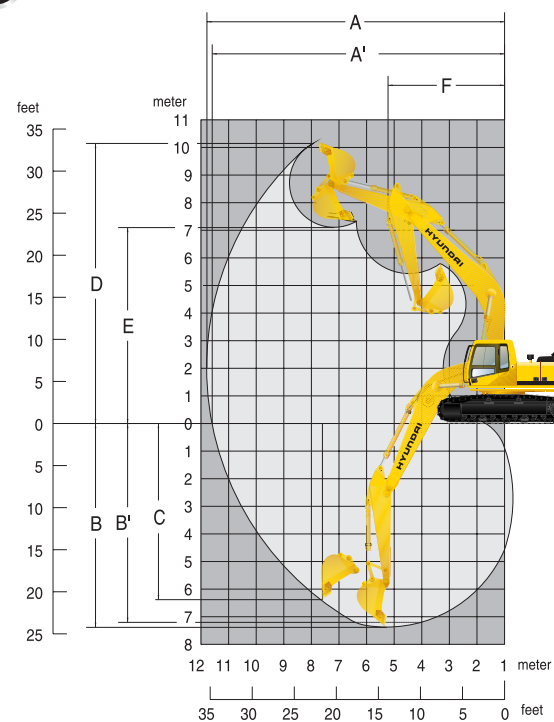
## Dimensions - R290LC-7A High Chassis



		mm (ft · in)	
A	Tumbler distance	4030 (13' 3")	
B	Overall length of crawler	4950 (16' 3")	
C	Ground clearance of counterweight	1500 (4' 11")	
D	Tail swing radius	3200 (10' 6")	
D'	Rear-end length	3120 (10' 3")	
E	Overall width of upperstructure	2980 (9' 9")	
F	Overall height of cab	3380 (11' 1")	
G	Min. ground clearance	765 (2' 6")	
H	Track gauge	2870 (9' 5")	

		mm (ft · in)			
Boom length		※ 6250 (20' 6")			
Arm length		2100 (6' 11")	2500 (8' 2")	※ 3050 (10' 0")	3750 (12' 4")
I	Overall length	10690 (35' 1")	10610 (34' 10")	10430 (34' 3")	10530 (34' 7")
J	Overall height of boom	3740 (12' 3")	3590 (11' 9")	3350 (11' 0")	3510 (11' 6")
K	Track shoe	Type	Triple grouser	Triple grouser	Triple grouser
		Width	※ 600 (24")	700 (28")	800 (32")
L	Overall width	3470 (11' 5")	3570 (11' 9")	3670 (12' 0")	3580 (11' 9")

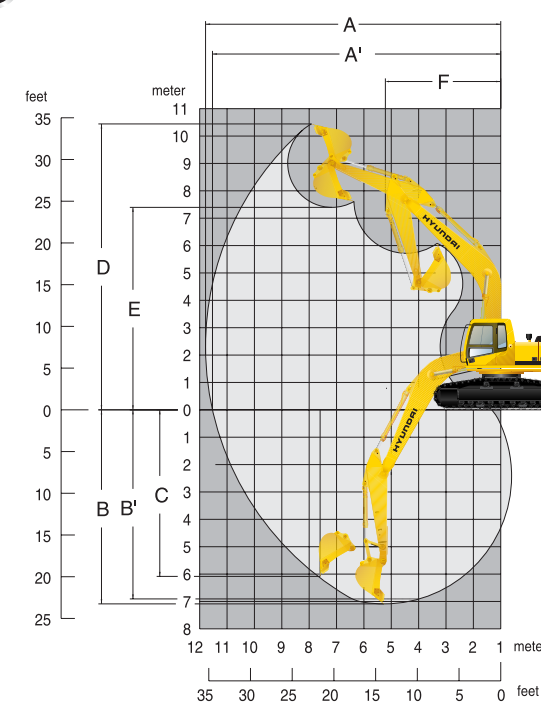
## Working ranges - R290LC-7A, R290NLC-7A



		mm (ft · in)			
Boom length		※ 6250 (20' 6")			
Arm length		2100 (6' 11")	2500 (8' 2")	※ 3050 (10' 0")	3750 (12' 4")
A	Max. digging reach	10020 (32' 10")	10280 (33' 7")	10820 (35' 6")	11400 (37' 5")
A'	Max. digging reach on ground	9820 (32' 3")	10080 (33' 1")	10620 (34' 10")	11220 (36' 10")
B	Max. digging depth	6440 (21' 1")	6840 (22' 5")	7500 (24' 7")	8090 (26' 7")
B'	Max. digging depth (8' level)	6240 (20' 6")	6630 (21' 9")	7300 (23' 11")	7920 (25' 12")
C	Max. vertical wall digging depth	6000 (19' 8")	5850 (19' 2")	6410 (21' 0")	7080 (23' 3")
D	Max. digging height	10070 (33' 0")	10110 (33' 2")	10160 (33' 4")	10360 (33' 12")
E	Max. dumping height	6940 (22' 9")	7030 (23' 1")	7110 (23' 4")	7310 (23' 12")
F	Min. swing radius	4380 (14' 4")	4260 (13' 12")	4230 (13' 11")	4140 (13' 7")

※ Standard Equipment

## Working ranges - R290LC-7A High Chassis



		mm (ft · in)			
Boom length		※ 6250 (20' 6")			
Arm length		2100 (6' 11")	2500 (8' 2")	※ 3050 (10' 0")	3750 (12' 4")
A	Max. digging reach	10020 (32' 10")	10280 (33' 7")	10790 (35' 5")	11400 (37' 5")
A'	Max. digging reach on ground	9750 (32' 0")	10020 (32' 10")	10530 (34' 7")	11160 (36' 7")
B	Max. digging depth	6140 (20' 2")	6540 (21' 5")	7090 (23' 3")	7790 (25' 7")
B'	Max. digging depth (8' level)	5930 (19' 5")	6330 (20' 9")	6910 (22' 8")	7630 (25' 0")
C	Max. vertical wall digging depth	5700 (18' 8")	5560 (18' 3")	6090 (20' 0")	6790 (22' 3")
D	Max. digging height	10370 (34' 0")	10220 (33' 6")	10440 (34' 3")	10660 (35' 0")
E	Max. dumping height	7240 (23' 9")	7170 (23' 6")	7400 (24' 3")	7610 (25' 0")
F	Min. swing radius	4380 (14' 4")	4260 (14' 0")	4230 (13' 11")	4140 (13' 7")

※ Standard Equipment



# Lifting Capacities



## Lifting capacities - R290LC-7A



Rating over-front



Rating over-side or 360 degree

• Boom: 6.25 m (20' 6") • Arm: 2.50 m (8' 2") • Bucket: 1.27 m<sup>3</sup> SAE heaped • Shoe : 600mm(24") triple grouser with 5.2ton(11,460 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)		7.5 m (25.0 ft)		Capacity	Reach						
7.5 m 25.0 ft	kg lb										*4880 *10760	4330 9550	8.34 (27.4)					
6.0 m 20.0 ft	kg lb							*5470 *12060	5060 11160	*5020 *11070	3510 7740		9.19 (30.2)					
4.5 m 15.0 ft	kg lb							*6610 *14570	*6610 *14570	*5880 *12960	4900 10800	5070 11180	3080 6790	9.69 (31.2)				
3.0 m 10.0 ft	kg lb							*7890 *24050	10440 23020	*6530 *17390	4660 14770	4790 10560	2870 6330	9.90 (32.5)				
1.5 m 5.0 ft	kg lb							*13040 *28750	9630 21230	*9080 *20020	6270 13820	4430 9770	4770 10520	2840 6260	9.84 (32.3)			
Ground Line	kg lb							*13950 *30750	9310 20530	*9870 *21760	6000 13230	7180 15830	4270 9410	2980 6570	9.51 (31.2)			
-1.5 m -5.0 ft	kg lb							*14370 *31680	*14370 *31680	*13930 *30710	9260 20410	*10120 *22310	5900 13010	4210 9280	5610 12370	3360 7410	8.87 (29.1)	
-3.0 m -10.0 ft	kg lb							*16270 *35870	*16270 *35870	*18700 *41230	*18700 *41230	*13110 *28900	9390 20700	*9690 *21360	5950 13120	*6310 *13910	4210 9280	7.82 (25.7)
-4.5 m -15.0 ft	kg lb							*15620 *34440	*15620 *34440	*11170 *24630	9720 21430							

• Boom: 6.25 m (20' 6") • Arm: 3.05 m (10' 0") • Bucket: 1.27 m<sup>3</sup> SAE heaped • Shoe : 600mm(24") triple grouser with 5.2ton(11,460 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)		7.5 m (25.0 ft)		9.0 m (30.0 ft)		Capacity	Reach								
7.5 m 25.0 ft	kg lb												*4460 *9830	3830 8440	8.94 (29.3)							
6.0 m 20.0 ft	kg lb									*4910 *10820	*4910 *10820	*4600 *10140	3160 6970	9.24 (30.2)								
4.5 m 15.0 ft	kg lb									*5960 *13140	*5960 *13140	*5390 *11880	4950 10910	4640 10230	2790 6150	10.20 (33.5)						
3.0 m 10.0 ft	kg lb									*9910 *21850	*9910 *21850	*9820 *21650	*9820 *21650	*16050 14950	14950	*13430 10340	*9130 7450	3380 7450	4400 9700	2610 5750	10.40 (34.1)	
1.5 m 5.0 ft	kg lb									*12250 *27010	9780 21560	*8590 *18940	6310 13910	*6830 *15060	4430 9770	*4900 *10800	3240 7140	4360 9610	2560 5640	10.35 (34.0)		
Ground Line	kg lb									*9590 *21140	*9590 *21140	*13580 *29940	9290 20480	*9550 *21050	5980 13180	7150 15760	4230 9330	*4310 *9500	3140 6920	4550 10030	2670 5890	10.04 (32.9)
-1.5 m -5.0 ft	kg lb									*10390 *22910	*10390 *22910	*13470 *29700	*13470 *29700	*13920 *30690	9140 20150	*10000 *22050	5820 12830	7030 15500	4130 9110	5020 11070	2970 6550	9.44 (31.0)
-3.0 m -10.0 ft	kg lb									*14060 *31000	*14060 *31000	*18180 *40080	*18180 *40080	*13440 *29630	9200 20280	*9830 *21670	5810 12810	7050 15540	4150 9150	*5980 *13180	3610 7960	8.48 (27.8)
-4.5 m -15.0 ft	kg lb									*18380 *40520	*18380 *40520	*17190 *37900	*17190 *37900	*11970 *26390	9450 20830	*8750 *19290	5990 13210		*5960 *13140	5120 11290	6.97 (22.9)	

• Boom: 6.25 m (20' 6") • Arm: 3.75 m (12' 4") • Bucket: 1.27 m<sup>3</sup> SAE heaped • Shoe : 600mm(24") triple grouser with 5.2ton(11,460 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)		7.5 m (25.0 ft)		9.0 m (30.0 ft)		Capacity	Reach													
7.5 m 25.0 ft	kg lb												*3930 *8660	3310 7300	9.67 (31.7)												
6.0 m 20.0 ft	kg lb												*4160 *9170	*4160 *9170	*2370 *5220	*2370 *5220	*4090 *9020	2770 6110	10.40 (34.1)								
4.5 m 15.0 ft	kg lb												*4710 *10380	*4710 *10380	*3720 *8200	3550 7830	4160 9170	2460 5420	10.83 (35.5)								
3.0 m 10.0 ft	kg lb												*13490 *29740	*13490 *29740	*8320 *18340	*8320 *18340	*6410 *14130	*6410 *14130	*5470 *12060	4760 10490	*4740 *10450	3400 7500	3950 8710	2300 5070	11.02 (36.2)		
1.5 m 5.0 ft	kg lb												*9980 *22000	*9980 *22000	*11050 *24360	10090 22240	*7850 *17310	6420 14150	*6300 *13890	4470 9850	*5440 *11990	3240 7140	3920 8640	2260 4920	10.97 (36.0)		
Ground Line	kg lb												*6470 *14260	*6470 *14260	*10300 *22710	*10300 *22710	*12890 *28420	9400 20720	*9020 *19890	6010 13250	*7030 *15500	4220 9300	5300 11680	3100 6830	4050 8930	2330 5140	10.68 (35.0)
-1.5 m -5.0 ft	kg lb												*9310 *20530	*9310 *20530	*12760 *28130	*12760 *28130	*13720 *30250	9090 20340	*9730 *21450	5770 12720	6970 15370	4070 8970	5210 11490	3020 6660	4410 9720	2560 5640	10.12 (33.2)
-3.0 m -10.0 ft	kg lb												*12290 *27090	*12290 *27090	*16240 *35800	*16240 *35800	*13690 *30180	9040 19930	*9880 *21780	5700 12570	6920 15260	4020 8860		5140 11330	3030 6680	9.25 (30.3)	
-4.5 m -15.0 ft	kg lb												*15740 *34700	*15740 *34700	*18940 *41760	*18940 *41760	*12770 *28150	9190 20260	*9310 *20530	5780 12740			*5780 *12740	4030 8880	7.92 (26.0)		

NOTES  
 1. Lifting capacity is based on SAE J1097, 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 load point is a hook (standard equipment) located on the back of the bucket.  
 4. (\*) indicates load limited by hydraulic capacity.

• Boom: 6.25 m (20' 6") • Arm: 3.05 m (10' 0") • Bucket: 1.27 m<sup>3</sup> SAE heaped • Shoe : 800mm(32") triple grouser with 5.2ton(11,460 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)		7.5 m (25.0 ft)		9.0 m (30.0 ft)		Capacity	Reach												
7.5 m 25.0 ft	kg lb												*4460 *9830	4000 8820	8.94 (29.3)											
6.0 m 20.0 ft	kg lb												*4910 *10820	*4910 *10820	*4600 *10140	3310 7300	9.74 (32.0)									
4.5 m 15.0 ft	kg lb												*5960 *13140	*5960 *13140	*5390 *11880	5160 11380	*4780 *10540	2930 6460	10.20 (33.5)							
3.0 m 10.0 ft	kg lb												*9910 *21850	*9910 *21850	*9820 *21650	*9820 *21650	*7280 *16050	7050 15540	*6090 *13430	4890 10780	*4140 *9130	3540 7800	4610 10160	2740 6040	10.40 (34.1)	
1.5 m 5.0 ft	kg lb												*12250 *27010	10180 22440	*8590 *18940	6580 14510	*6830 *15060	4640 10230	*4900 *10800	3410 7520	*4580 *10100	2700 5950	10.35 (34.0)			
Ground Line	kg lb												*9590 *21140	*9590 *21140	*13580 *29940	9700 21380	*9550 *21050	6250 13780	*7420 *16360	4440 9790	*4310 *9500	3310 7300	4770 10520	2810 6190	10.04 (32.9)	
-1.5 m -5.0 ft	kg lb												*10390 *22910	*10390 *22910	*13470 *29700	*13470 *29700	*13920 *30690	9504 21030	*10000 *22050	6090 13430	7360 16230	4330 9550		5260 11600	3120 6880	9.44 (31.0)
-3.0 m -10.0 ft	kg lb												*14060 *31000	*14060 *31000	*18180 *40080	*18180 *40080	*13440 *29630	9600 21160	*9830 *21670	6080 13400	7380 16270	4350 9590		*5980 *13180	3780 8330	8.48 (27.8)
-4.5 m -15.0 ft	kg lb												*18380 *40520	*18380 *40520	*17190 *37900	*17190 *37900	*11970 *26390	9850 21720	*8750 *19290	6260 13800			*5960 *13140	5350 11790	6.97 (22.9)	



## Lifting capacities - R290NLC-7A



Rating over-front



Rating over-side or 360 degree

• Boom: 6.25 m (20' 6") • Arm: 2.10 m (6' 11") • Bucket: 1.27 m<sup>3</sup> SAE heaped • Shoe : 600mm(24") triple grouser with 5.2ton(11,460 lb) counterweight

Load point height m(ft)	Load radius						At max. reach												
	3.0 m (10.0 ft)		4.5 m (15.0 ft)		6.0 m (20.0 ft)		7.5 m (25.0 ft)		Capacity	Reach									
7.5 m 25.0 ft	kg lb								*5290 *11660	4140 9130	8.01 (26.3)								
6.0 m 20.0 ft	kg lb								*6090 *13430	*6090 *13430	4470 9850	*5380 *11860	3300 7280	8.90 (29.2)					
4.5 m 15.0 ft	kg lb								*8940 *19710	*8940 *19710	*7040 *15520	6390 14090	*6210 *13690	4350 9590	5250 6310	2860 6310	9.42 (30.9)		
3.0 m 10.0 ft	kg lb								*11660 *25710	9090 20040	*8270 *18230	5930 13070	*6800 *14990	4140 9130	4960 10930	2660 5860	9.64 (31.6)		
1.5 m 5.0 ft	kg lb								*13520 *29810	8420 18560	*9370 *20660	5550 12240	7290 16070	3940 8690	4950 10910	2640 5820	9.58 (31.4)		
Ground Line	kg lb								*14060 *31000	8220 18120	*10020 *22090	5330 11750	7140 15740	3800 8380	5230 6150	2790 6150	9.23 (30.3)		
-1.5 m -5.0 ft	kg lb								*13470 *29700	*13470 *29700	*13770 *30360	8240 18170	*10110 *22290	5270 11620	7110 15670	3780 8330	5930 13070	3210 7080	8.57 (28.1)
-3.0 m -10.0 ft	kg																		



