



Robex 110-7A

Standard Equipment

ISO standard cabin

- · 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
- · Auto warm up system
- · Auto overheat prevention system

Heater & Defroster Self diagnostic system Starting Aid, cold weather

Starting Aid, cold weath Centralized monitoring

· LCD display Engine speed

Clock & Error code

· Gauges Fuel level gauge

Engine coolant temperature gauge Hyd. oil temperature gauge

· Warning

Engine coolant & Fuel level Check Engine & CPU

Engine oil pressure Engine coolant temperature

Hyd. oil temperature

Low battery Air cleaner clogging

Air cleaner clogging Indicator

One touch decel

Power max.
Preheat & Engine warming-up

Door and cab locks, one key

Mechanical suspension seat with heater

(Europe / North America)

AM/FM radio and USB player

Radio remote switch
Two outside rearview mirrors

Fully adjustable suspension seat with seat belt Slidable joystick, pilot-operated

Console box tilting system(LH.)

Three front working lights

Track shoes (500 mm, 20") Track rail guard

Optional Equipment

Air-conditioner(5000 kcal/hr, 20000 BTU/hr)

Sun visor for cabin inside

Fuel filler pump(35 /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(clamshell, etc)

Accumulator, work equipment lowering 12 volt power supply(DC - DC converter)

Electric transducer
Travel alarm
Various optional Arms

· Short arm (1.96 m, 6' 5")

· Long arm (2.91 m, 9' 3")

Various optional Buckets(SAE heaped)

- · Standard bucket (0.45m³, 0.59 yd³)
- Narrow bucket (0.30 m³, 0.39 yd³)
 Narrow bucket (0.40 m³, 0.52 yd³)
- Light duty bucket (0.50 m³, 0.65 yd³)
- · Heavy duty bucket (0.59 m³, 0.77 yd³)

Cabin lights Cabin FOPS/FOG (IOS 10262) Cabin Roof - Cover Transparent Level 2

Track shoes

- · Triple grousers shoe (600mm, 24")
- Triple grousers shoe (700mm, 28")
- · Single grousers shoe (960mm, 38")

Counterweight (1700kg, 3750lb)
Lower frame under cover
Tool kit
Rotating piping kit
Operator suit
Special cowling
· Air vent type side door

Seat

- · Adjustable air suspension seat
- Adjustable air suspension seat with heater
- · Mechanical suspension seat

Electric horn Batteries (2 x 12 V x 80 AH) Battery master switch Automatic swing brake Removable reservoir tank Fuel prefilter with fuel warmer Boom holding system

Boom holding system
Arm holding system
Counterweight (1450 kg, 3200 lb)
Mono boom (4.3 m, 14' 1")
Arm (2.26m, 7' 5")

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.



CONSTRUCTION EQUIPMENT

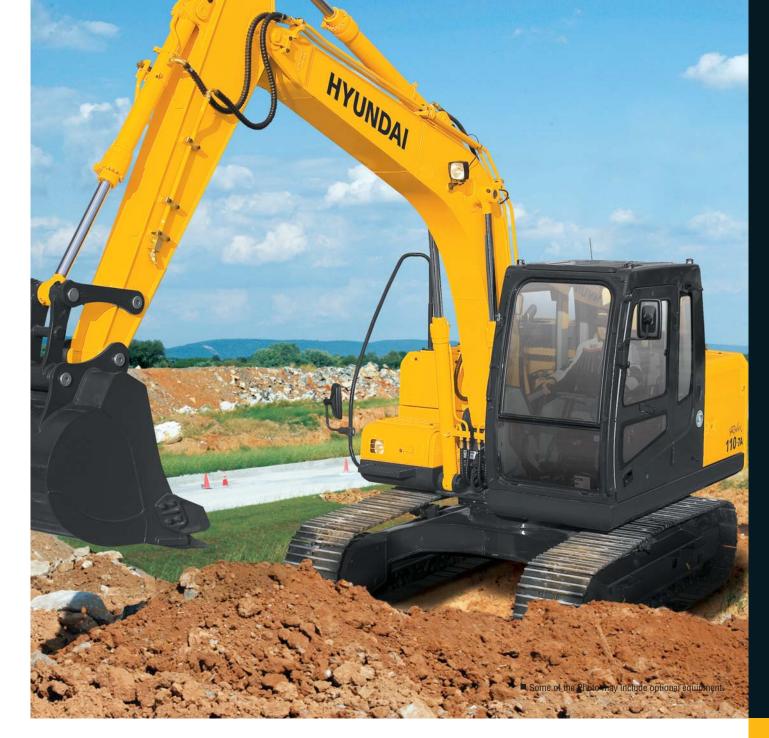
Head Office

1000 BANGEOJINSUNHWAN-DORO, DONG-GU, ULSAN, 682-792, KOREA TEL:(82)52-202-7722, 9807 FAX:(82)52-202-7720

PLEASE CONTACT

www.hyundai-ce.com

2012. 02 Rev 1.





110-7A / 110D-7A





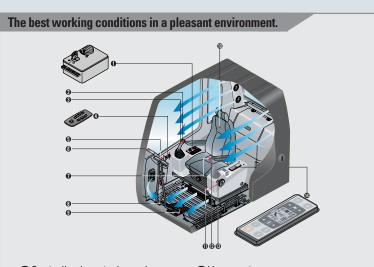
Operator's Comfort is Foremost. Wide Cab Exceeds Industry Standards.

Technology in Cab Design



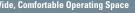
Wide Cab with Excellent Visibility

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.



- Centralized control panel
- 2Horn button
- Option button
- ♠ Remote Radio control
- Travel lever
- **6**Cluster
- One touch decel button
- A Hour meter
- Travel pedal
- **©**Fully adjustable suspension seat
- Safety lever
- Power boost button
- Air Conditioner and Heater controller











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.



Highly Sensitive Joystick and Easy Entrance

New joystick grips for precise control have been equipped with controls are located near the

Power boost Left One touch deceleration

Right Horn/Optional/Dummy



Easy-to-Reach Control Panels

Switches and other essential operator. This helps keep operator move-ment to a minimum, enhancing control with less operator fatigue.



Wide, Comfortable **Operating Space**

All the controls are designed and positioned according to the latest ergonomic research. Reinforced greater cab rigidity.



Raise-up Wiper and Cabin Lights

Raise-up wiper has enhanced for the better front view.

Cabin Lights enhances safety by pillars have also been added for brightly lighting the surroundings during night work(optional)



Automatic Engine Overheat

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

NEW MODE CONTROL SYSTEM

S mode: Standard power L mode: Light power



Anti Restart System

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



Power boost control System When the power boost system is

activated, digging power increases about 10%

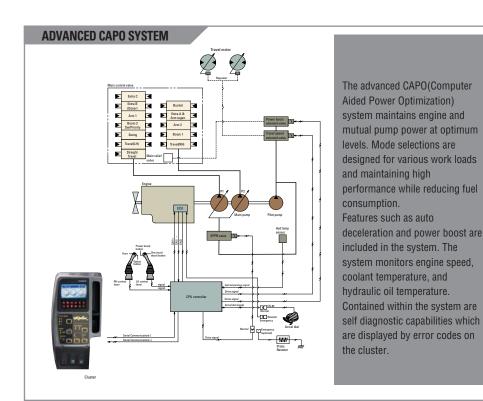
It is especially useful when extra power is temporarily needed, for instance, when digging hard earth and rock, or if the bucket teeth are stopped by a stubborn tree root.



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

Advanced Hydraulic System



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 by error codes. This controller has the capacity to identify 26 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.

Arm Flow Regeneration System

Arm flow regeneration valve provides smooth armin operation without cavitations.

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.

One Touch Deceleration

When the one touch deceleration button on top of LH joystick is pushed once, the engine rpm will be immediately down to low idle rpm. Engine speed will be recovered to its preselected rpm in case the button is pushed once more.

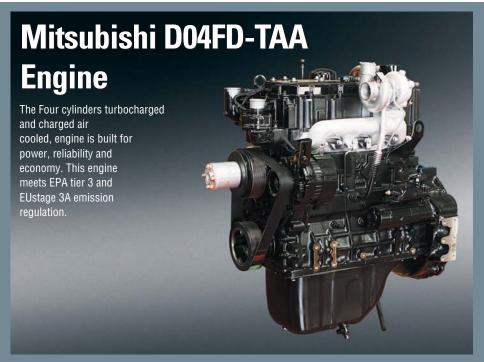
Pump Flow Control System

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.

Hydraulic Damper in Travel Pedal

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



Reliability You Can Depend On

When you have a tough job to do you need the power precision and flexibility of Mitsubishi D04FD-TAA engines.

It features major enhancements to make every piece of equipment work harder, smarter, quieter

higher torque and better throttle response at every rpm without compromising fuel economy.

The Mitsubishi D04FD-TAA engine is based on the highly successful Mitsubishi SK series engines. These engines combine proven full authority electronic controls with reliable performance you expect from one of the most successful and

Increased Higher Performance

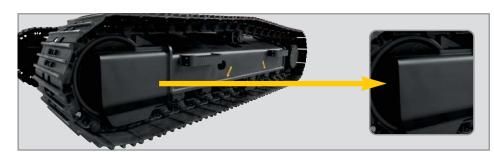


Strong and Stable Lower Frame

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.

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.



Powerful and Preciser Swing Control

Improved shock absorbing characteristics make stopping a precise and smooth action



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

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



Highly efficient Hydraulic PumpPump output capacity has been increased.



Large tool box for extra storage



Specifications



🗾 Engine

| Model | | | Mitsubishi D04FD-TAA | |
|---------------------|-------|---------------|---|--|
| Туре | | | Water cooled, 4 cycle Diesel. 4 Cylinders in line, direct injection turbocharged and charged air cooled low emission | |
| D | SAE | J1995(gross) | 97HP (72kW) at 1,800rpm | |
| Rated horse | SAE | J1349(net) | 92HP (68kW) at 1,800rpm | |
| power | DIN | 6271/1(gross) | 98PS (72kW) at 1,800rpm | |
| power | DIIN | 6271/1(net) | 93PS (68kW) at 1,800rpm | |
| Max. tor | que | | 42.8kgf·m (310lbf·ft) at 1,400rpm | |
| Bore X s | troke | | 102 x 130mm (4.0" x 5.1") | |
| Piston displacement | | | 4,249cc (259 cu in) | |
| Batteries | | | 2 x 12V x 80AH | |
| Starter motor | | | 24V-5.0kW | |
| Alternato | or | | 24V- 50 Amp | |

2

Mydraulic system

| Main pump | | | | | |
|---------------------------|---|--|--|--|--|
| Type | | Two variable displacement piston pumps | | | |
| Max. flow | | 2 x 107 ! /min (29.6US gpm / 24.6UK gpm) | | | |
| Sub-pump for pilot circ | cuit | Gear pump | | | |
| Cross-sensing and fuel sa | aving pump system | | | | |
| | Hydrauli | c motors | | | |
| Travel | | Two speed axial piston motor | | | |
| IIdvei | | with brake valve and parking brake | | | |
| Swing | | Axial piston motor with automatic brake | | | |
| Relief valve setting | | | | | |
| Implement circuits | 330 kgf/cm²(4,690psi) | | | | |
| Travel | | 330 kgf/cm² (4,690 psi) | | | |
| Power boost (boom, ar | rm, bucket) | 360 kgf/cm²(5,120psi) | | | |
| Swing circuit | | 240 kgf/cm²(3,410psi) | | | |
| Pilot circuit | | 35 kgf/cm²(498psi) | | | |
| Service valve | | Installed | | | |
| Hydraulic cylinders | | | | | |
| | Boom: 2 - 95 x 70 x 1015mm (3.7" x 2.7" x 40.0") | | | | |
| No. of cylinder- | Arm: 1 - 110 x 75 x 1070mm (4.3" x 3.0" x 42.1") | | | | |
| bore x rod x stroke | Bucket: 1 - 95 x 65 x 855mm (3.7" x 2.6" x 33.7") | | | | |
| | Blade: 2-100 x 70 x240mm (3.9" x 2.7" x 9.4") | | | | |



Drives & Brakes

| Drive method | Fully hydrostatic type |
|---------------------------------|---|
| Drive motor | Axial piston motor, in-shoe design |
| Reduction system | Planetary reduction gear |
| Max. drawbar pull | 11,000 kgf (24,250 lbf) |
| Max. travel speed(high) / (low) | 5.2 km/hr (3.2mph) / 3.2 km/hr (2.1mph) |
| Gradeability | 35° (70%) |
| Parking brake | Multi wet disc |



L 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 and 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 | 12.0 rpm |



Coolant & Lubricant capacity

| (Refilling) | liter | US gal | UK gal |
|----------------------------------|-------|--------|--------|
| Fuel tank | 250 | 66.0 | 55.0 |
| Engine coolant | 22 | 6.3 | 5.3 |
| Engine oil | 17.5 | 4.6 | 3.8 |
| Swing device | 2.5 | 0.7 | 0.5 |
| Final drive(each) | 2.5 | 0.7 | 0.5 |
| Hydraulic system(including tank) | 180 | 47.6 | 39.6 |
| Hydraulic tank | 100 | 26.4 | 22.0 |



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 sprockets, and track chain with double or triple grouser shoes

| Center frame | X - leg type |
|------------------------------------|---------------------|
| Track frame | Pentagonal box type |
| No. of shoes on each side | 41 |
| No. of carrier roller on each side | 1 |
| No. of track roller on each side | 6 |
| No. of rail guard on each side | 1 |



Operating weight (approximate)

Operating weight, including 4,300mm (14' 1") boom, 2,260m (7' 5") arm, SAE heaped 0.45m³ (0.59yd³) backhoe bucket, lubricant, coolant, full fuel tank, hydraulic tank and the standard equipment.

Major component weight

| Upperstructure | 3,300kg (7,280lb) |
|--------------------------|-------------------|
| Counterweight | 1,450kg (3,200lb) |
| Boom (with Arm cylinder) | 950kg (2,090lb) |

Operating weight

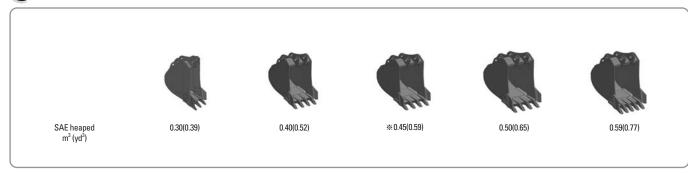
| - | | | | |
|----------------|-------------------|----------|-----------------|-----------------|
| Shoes | | Oper | ating weight | Ground pressure |
| Type | Width mm(in) | | kg(lb) | kgf/cm²(psi) |
| | * 500(20") | R110-7A | 11,200(24,690) | 0.39(5.55) |
| | % 300(Z0 <i>)</i> | R110D-7A | 11,900 (26,230) | 0.42(5.97) |
| Triple | 600(24") | R110-7A | 11,500(25,350) | 0.34(4.84) |
| grouser | 000(24) | R110D-7A | 12,200(26,900) | 0.36(5.12) |
| | 700(28") | R110-7A | 11,800(26,010) | 0.30(4.27) |
| | 700(20) | R110D-7A | 12,500(27,560) | 0.31(4.41) |
| Single grouser | 960(38") | R110-7A | 14,300(31,530) | 0.26(3.70) |

★ Standard equipment

Backhoe attachment



Buckets



| Capacity | | Width | | | | Recommendation mm(ft.in) | | | |
|---------------------|----------------|----------------------|-------------------|-------------|--------------------------|----------------------------|------------------------|---------------|--|
| m³ (yd³) | | mm (in) | | Weight | Mono Boom | ono Boom #4,300 (14' 1") | | | |
| SAE heaped | CECE heaped | Without side cutters | With side cutters | kg(lb) | Arm 1,960 (6' 5") | | * 2,260 (7' 5") | 2,810 (9′ 3″) | |
| 0.30 (0.39) | 0.27 (0.35) | 610 (24.0) | 720 (28.3) | 360 (790) | • | | • | • | |
| 0.40 (0.52) | 0.36 (0.47) | 760 (29.9) | 870 (34.3) | 410 (900) | • | | • | • | |
| *0.45 (0.59) | 0.40 (0.52) | 830 (32.7) | 940 (37.0) | 430 (950) | • | | • | • | |
| 0.50 (0.65) | 0.45 (0.59) | 900 (35.4) | 1,010 (39.8) | 450 (990) | • | | • | A | |
| 0.59 (0.77) | 0.52 (0.68) | 1,020 (40.2) | 1,130 (44.5) | 490 (1,080) | | | A | - | |

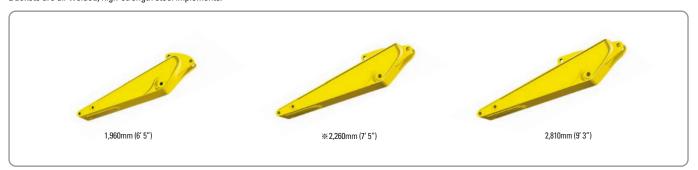
※ : Standard backhoe bucket

- \bullet Applicable for materials with density of 2,000 kg / m^{a} (3,370 lb / yd a) or less
- Applicable for materials with density of 1,600 kg / m³ (2,700 lb / yd³) or less
- ▲ Applicable for materials with density of 1,100 kg / m³ (1,850 lb / yd³) or less



Backhoe attachment

Boom and arms are of all-welded, low-stress, full-box section design. 4,300mm(14' 4") mono boom and 1,960m(6' 5"), 2,260m (7' 5"), 2,810mm (9' 3") arm are available. Buckets are all-welded, high-strength steel implements.





Digging force

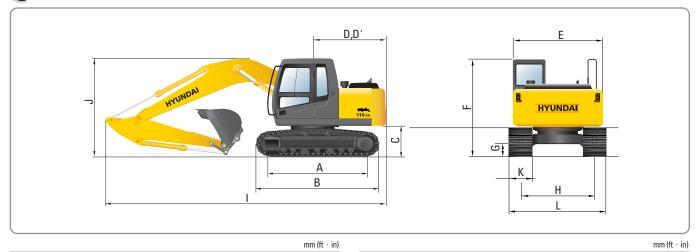
| Arm | Length | mm(ft-in) | 1,960mm (6'5") | ※ 2,260mm (7' 5") | 2,810mm (9'3") | Remark |
|------------------|--------|-----------|----------------|--------------------------|----------------|-------------|
| AIIII | Weight | kg(lb) | 320(710) | 340(750) | 400(880) | nelliark |
| | | kN | 78.5[85.6] | 78.5[85.6] | 78.5[85.6] | |
| Bucket | SAE | kgf | 8,000[8,730] | 8,000[8,730] | 8,000[8,730] | |
| | | lbf | 17,640[19,240] | 17,640[19,240] | 17,640[19,240] | |
| digging force | | kN | 90.2[98.4] | 90.2[98.4] | 90.2[98.4] | |
| 10106 | ISO | kgf | 9,200[10,040] | 9,200[10,040] | 9,200[10,040] | |
| | | lbf | 20,280[22,120] | 20,280[22,120] | 20,280[22,120] | []: |
| | SAE | kN | 60.2[65.7] | 55.7[60.8] | 48.1[52.4] | Power Boost |
| A rm | | kgf | 6,140[6,700] | 5,680[6,200] | 4,900[5,350] | |
| Arm | | lbf | 13,540[14,770] | 12,520[13,660] | 10,800[11,780] | |
| crowd force | ISO | kN | 62.9[68.6] | 58.1[63.3] | 49.7[54.2] | |
| TOICE | | kgf | 6,410[6,990] | 5,920[6,460] | 5,070[5,530] | |
| | | lbf | 14,130[15,410] | 13,050[14,240] | 11,180[12,200] | |

※ Standard equipment

HYUNDAI CONSTRUCTION EQUIPMENT 10/11

Dimensions & Working ranged

Dimensions R110-7A



| | Description | R110-7A |
|----|-----------------------------------|----------------|
| Α | Tumbler distance | 2,610 (8'7") |
| В | Overall length of crawler | 3,340 (10'11") |
| C | Ground clearance of counterweight | 900 (2′11″) |
| D | Tail swing radius | 2,130 (7′0″) |
| D' | Rear-end length | 2,110 (6′11″) |
| E | Overall width of upperstructure | 2,475 (8'1") |

2,800 (9'2")

440 (1'5")

1,990 (6'6")

| | | | | mm (π · in) |
|---|------------------------|-----------------|-------------------------|-----------------|
| | Boom length | ※4,3 | 00 (14' 1'') Mono | boom |
| | Arm length | 1,960 (6' 5'') | ※ 2,260 (7' 5'') | 2,810 (9' 3") |
| 1 | Overall length | 7,240 (23' 9'') | 7,270 (23' 10'') | 7,230 (23' 9'') |
| J | Overall height of boom | 2,550 (8' 4'') | 2,720 (8' 11'') | 3,060 (10' 0'') |
| K | Track shoe width | 500 (20") | 600 (24") | 700 (28") |
| L | Overall width | 2,490 (8' 2'') | 2,590 (8' 6'') | 2,690 (8' 10'') |

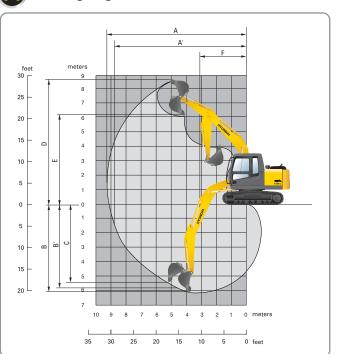
※ Standard equipment

F Overall height of cabin

G Min. ground clearance

Track gauge

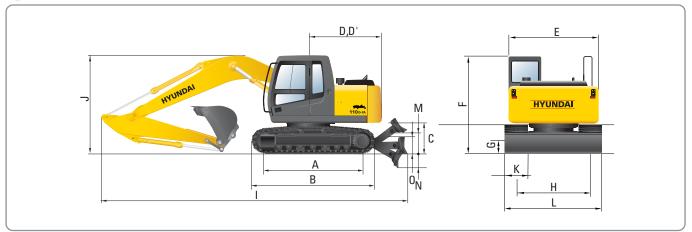
Working ranges R110-7A



| | Description | | R110-7A | |
|----|----------------------------------|---------------------|------------------------|--------------------|
| | Boom length | ※4,3 | 300 (14' 1'') mono l | oom |
| | Arm length | 1,960 (6'5") | ※2,260 (7′ 5′′) | 2,810 (9' 3") |
| Α | Max. digging reach | 7,460 (24' 6'') | 7,740 (25'5") | 8,270 (27' 2'') |
| A' | Max. digging reach on ground | 7,320 (24' 0'') | 7,610 (25' 0") | 8,140 (26' 8'') |
| В | Max. digging depth | 4,770 (15' 8'') | 5,090 (16' 8'') | 5,620 (18' 5'') |
| B' | Max. digging depth (8' level) | 4,510 (14' 10'') | 4,870 (16' 0") | 5,410 (17' 9'') |
| С | Max. vertical digging depth | 4,070 (13' 4'') | 4,430 (14' 6'') | 4,940 (16' 2'') |
| D | Max. digging height | 7,900 (25' 11'') | 8,070 (26' 6'') | 8,460 (27' 9'') |
| Е | Max. dumping height | 5,540 (18' 2'') | 5,710 (18' 9'') | 6,100 (20' 0'') |
| F | Min. swing radius | 2,340 (7' 8'') | 2,380 (7' 10'') | 2,510 (8' 3'') |

※ Standard equipment

Dimensions R110D-7A

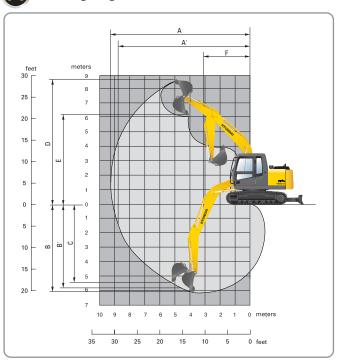


| | | mm (ft · in) |
|----|-----------------------------------|----------------|
| | Description | R110D-7A |
| Α | Tumbler distance | 2,610 (8'7") |
| В | Overall length of crawler | 3,340 (10′11″) |
| C | Ground clearance of counterweight | 900 (2′11″) |
| D | Tail swing radius | 2,130 (7′0″) |
| D' | Rear-end length | 2,110 (6′11″) |
| Ε | Overall width of upperstructure | 2,475 (8'1") |
| F | Overall height of cabin | 2,800 (9'2") |
| G | Min. ground clearance | 440 (1'5") |
| Н | Track gauge | 1,990 (6'6") |
| M | Ground Clearance of blade up | 500 (1' 8'') |
| N | Depth of blade down | 520 (1' 8'') |

| | | | | mm (π · in |
|---|------------------------|-----------------|-------------------------|-----------------|
| 0 | Height of blade | | 550 (1' 10'') | |
| | Width of blade | | 2,500 (8' 2'') | |
| | Boom length | %4,3 | 00 (14' 1'') Mono | boom |
| | Arm length | 1,960 (6' 5'') | ※ 2,260 (7' 5'') | 2,810 (9' 3") |
| 1 | Overall length | 7,620 (25' 0'') | 7,650 (25' 1'') | 7,610 (25' 0'') |
| J | Overall height of boom | 2,550 (8' 4'') | 2,720 (8' 11'') | 3,060 (10' 0'') |
| K | Track shoe width | 500 (20") | 600 (24") | 700 (28") |
| L | Overall width | 2,490 (8' 2'') | 2,590 (8' 6'') | 2,690 (8' 10'') |
| | 1 1 1 1 | • | • | • |

* Standard equipment

Working ranges R110D-7A



| | | | | mm (ft · in) |
|----|----------------------------------|---------------------|------------------------|--------------------|
| | Description | | R110D-7A | |
| | Boom length | ※ 4,3 | 800 (14' 1'') mono b | oom |
| | Arm length | 1,960 (6'5") | ※2,260 (7' 5'') | 2,810 (9' 3") |
| Α | Max. digging reach | 7,460 (24' 6'') | 7,740 (25'5") | 8,270 (27' 2'') |
| A' | Max. digging reach on ground | 7,320 (24' 0'') | 7,610 (25' 0") | 8,140 (26' 8'') |
| В | Max. digging depth | 4,770 (15' 8'') | 5,090 (16' 8'') | 5,620 (18' 5'') |
| B' | Max. digging depth (8' level) | 4,510 (14' 10'') | 4,870 (16' 0") | 5,410 (17' 9'') |
| С | Max. vertical digging depth | 4,070 (13' 4'') | 4,430 (14' 6'') | 4,940 (16' 2'') |
| D | Max. digging height | 7,900 (25' 11'') | 8,070 (26' 6'') | 8,460 (27' 9'') |
| Е | Max. dumping height | 5,540 (18' 2'') | 5,710 (18' 9'') | 6,100 (20' 0'') |
| F | Min. swing radius | 2,340 (7' 8'') | 2,380 (7' 10'') | 2,510 (8' 3'') |

፠ Standard equipment

Lifting Capacities



Rating over-front

Rating over-side or 360 degree

• Boom: 4.3 m (14′ 1″) • Arm: 2.26 m (7′ 5″) • Bucket: 0.45 m³ (0.59yd³) SAE heaped • Shoe : 500mm(20″) triple grouser

| | | | | | Load | radius | | | | | At max. reach | 1 |
|--------------------------|-----------------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-----------------------|-------------------------|-----------------------|-------------------------|
| Load Po heigh | | 1.5m | (5.0ft) | 3.0m | 10.0ft) | 4.5m | (15.0ft) | 6.0m | (20.0ft) | Cap | acity | Reach |
| m(ft) | | | | | | | | | | | | m (ft) |
| 6.0m 20.0ft | kg Ib | | | | | *1,750 *3,860 | *1,750 *3,860 | | | *1,750 *3,860 | 1,560 3,440 | 5.99 (19.7) |
| 4.5m 15.0ft | kg Ib | | | | | *1,790 *3,950 | *1,790 *3,950 | *1,530 *3,370 | 1,490 3,280 | 1,520 3,350 | 1,130 2,490 | 6.92 (22.7) |
| 3.0m 10.0ft | kg Ib | | | *2,820 *6,220 | *2,820 *6,220 | *2,270 *5,000 | *2,270 *5,000 | 1,940 4,280 | 1,450 3,200 | 1,300 2,870 | 940 2,070 | 7.38 (24.2) |
| 1.5m 5.0ft | kg Ib | | | *4,700 *10,360 | 4,370 9,630 | *2,970 *6,550 | 2,250 4,960 | 1,840 4,060 | 1,360 3,000 | 1,240 2,730 | 880 1,940 | 7.46 (24.5) |
| Ground Line | kg Ib | | | 5,660 12,480 | 3,950 8,710 | 2,830 6,240 | 2,060 4,540 | 1,760 3,880 | 1,280 2,820 | 1,300 2,870 | 930 2,050 | 7.18 (23.6) |
| -1.5m -5.0ft | kg Ib | *5,580 *12,300 | *5,580 *12,300 | 5,550 12,240 | 3,850 8,490 | 2,740 6,040 | 1,980 4,370 | 1,720 3,790 | 1,240 2,730 | 1,560 3,440 | 1,130 2,490 | 6.49 (21.3) |
| -3.0m - 10.0ft | kg Ib | *8,530 *18,810 | *8,530 *18,810 | *5,440 *11,990 | 3,930 8,660 | 2,770 6,110 | 2,010 4,430 | | | *2,270 *5,000 | 1,730 3,810 | 5.17 (17.0) |

• Boom: 4.3 m (14′ 1″) • Arm: 1.96 m (6′ 5″) • Bucket: 0.45 m³ (0.59yd³) SAE heaped • Shoe : 500mm(20″) triple grouser

| | | | | | Load | radius | | | | | At max. reach | 1 |
|-------------------------------|-----------------|--------------------------|---------------------------|--------------------------|-------------------------|-------------------------|-------------------------|-----------------------|-----------------------|-------------------------|-----------------------|-------------------------|
| Load Point height m(ft) | 1.5m | (5.0ft) | Oft) 3.0m (10.0ft) | | 4.5m | 4.5m (15.0ft) | | (20.0ft) | Capacity | | Reach | |
| | | | | | | | | | | | | m (ft) |
| 6.0m 20.0ft | kg Ib | | | | | *1,770 *3,900 | *1,770 *3,900 | | | *1,820 *4,010 | 1,710 3,770 | 5.62 (18.4) |
| 4.5m 15.0ft | kg Ib | | | | | *1,950 *4,300 | *1,950 *4,300 | | | 1,610 3,550 | 1,180 2,600 | 6.62 (21.7) |
| 3.0m 10.0ft | kg Ib | | | *3,160 *6,970 | *3,160 *6,970 | *2,410 *5,310 | 2,390 5,270 | 1,870 4,120 | 1,380 3,040 | 1,350 2,980 | 970 2,140 | 7.10 (23.3) |
| 1.5m 5.0ft | kg Ib | | | *4,940 *10,890 | 4,150 9,150 | 2,930 6,460 | 2,150 4,740 | 1,780 3,920 | 1,290 2,840 | 1,280 2,820 | 910 2,010 | 7.18 (23.6) |
| Ground Line | kg Ib | | | 5,490 12,100 | 3,800 8,380 | 2,740 6,040 | 1,980 4,370 | 1,700 3,750 | 1,220 2,690 | 1,360 3,000 | 960 2,120 | 6.89 (22.6) |
| -1.5m - 5.0ft | kg Ib | *6,090 *13,430 | *6,090 * 13,430 | 5,440 11,990 | 3,750 8,270 | 2,670 5,890 | 1,910 4,210 | | | 1,670 3,680 | 1,200 2,650 | 6.15 (20.2) |
| -3.0m - 10.0ft | kg Ib | *9,180 *20,240 | *9,180 *20,240 | *5,080 *11,200 | 3,880 8,550 | 2,750 6,060 | 1,980 4,370 | | | | | |

• Boom: 4.3 m (14′ 1″) • Arm: 2.81 m (9′ 3″) • Bucket: 0.45 m³ (0.59yd³) SAE heaped • Shoe: 500mm(20″) triple grouser

| | | | | | Load | radius | | | | | At max. reach | 1 |
|--------------------------|-------------------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-----------------------|-------------------------|-----------------------|-------------------------|
| Load Po heigh | | 1.5m | (5.0ft) | 3.0m (| (10.0ft) | 4.5m | (15.0ft) | 6.0m | (20.0ft) | Сар | acity | Reach |
| m(ft) | L | | | | | | | | | | | m (ft) |
| 6.0m 20.0ft | kg Ib | | | | | | | | | *1,570 *3,640 | 1,290 2,840 | 6.66 (21.9) |
| 4.5m 15.0ft | kg Ib | | | | | | | *1,640 *3,620 | 1,570 3,460 | 1,330 2,930 | 980 2,160 | 7.50 (24.6) |
| 3.0m 10.0ft | kg Ib | | | | | *1,920 *4,230 | *1,920 *4,230 | *1,830 *4,030 | 1,500 3,310 | 1,160 2,560 | 830 1,830 | 7.92 (23.3) |
| 1.5m 5.0ft | kg lb | | | *4,050 *8,930 | *4,050 *8,930 | *2,690 *5,930 | 2,340 5,160 | 1,890 4,710 | 1,410 3,110 | 1,100 2,430 | 780 1,720 | 7.99 (26.2) |
| Ground Line | kg Ib | *3,230 *7,120 | *3,230 *7,120 | *5,580 *12,300 | 4,110 9,060 | 2,900 6,390 | 2,130 4,700 | 1,790 3,950 | 1,310 2,890 | 1,150 2,540 | 820 1,810 | 7.74 (25.4) |
| -1.5m - 5.0ft | kg Ib | *4,960 *10,930 | *4,960 *10,930 | 5,620 12,390 | 3,920 8,640 | 2,770 6,110 | 2,010 4,430 | 1,730 3,810 | 1,250 2,760 | 1,330 2,930 | 960 2,120 | 7.11 (23.2) |
| -3.0m - 10.0ft | kg Ib | *7,230 *15,940 | *7,230 *15,940 | 5,630 12,410 | 3,930 8,660 | 2,760 6,080 | 2,000 4,410 | | | 1,830 4,030 | 1,350 2,980 | 5.96 (19.6) |
| -4.5m -15.0ft | kg Ib | | | *4,480 *9,880 | 4,100 9.040 | | | | | | | |

- 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.

Lifting capacities R110D-7A

Rating over-front

Rating over-side or 360 degree

• Boom: 4.3 m (14' 1") • Arm: 2.26 m (7' 5") • Bucket: 0.45 m³ (0.59yd³) SAE heaped • Shoe : 500mm(20") triple grouser

| | | | | | Load | radius | | | | | At max. reach | 1 |
|-------------------------|------------------|--------------------------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| Load Po heigh | | 1.5m | (5.0ft) | 3.0m | (10.0ft) | 4.5m | (15.0ft) | 6.0m | (20.0ft) | Сар | acity | Reach |
| m(ft) | | | | Ţ. | | | | | | | | m (ft) |
| 6.0m 20.0ft | kg Ib | | | | | *1,750 *3,860 | *1,750 *3,860 | | | *1,750 *3,860 | *1,750 *3,860 | 5.99 (19.7) |
| 4.5m 15.0ft | kg Ib | | | | | *1,790 *3,950 | *1,790 *3,950 | *1,530 *3,370 | *1,530 *3,370 | 1,650 3,640 | 1,340 2,950 | 6.92 (22.7) |
| 3.0m 10.0ft | kg Ib | | | *2,820 *6,220 | *2,820 *6,220 | *2,270 *5,000 | *2,270 *5,000 | *2,060 *4,540 | 1,710 3,770 | 1,420 3,130 | 1,140 2,510 | 7.38 (24.2) |
| 1.5m 5.0ft | kg I b | |] | *4,700 *10,360 | *4,700 *10,360 | *2,970 *6,550 | 2,650 5,840 | 2,000 4,410 | 1,620 3,570 | 1,360 3,000 | 1,080 2,380 | 7.46 (24.5) |
| Ground Line | kg Ib | | | *5,860 *12,920 | 4,750 10,470 | 3,060 6,750 | 2,460 5,420 | 1,910 4,210 | 1,540 3,400 | 1,430 3,150 | 1,140 2,510 | 7.18 (23.6) |
| -1.5m -5.0ft | kg Ib | *5,580 *12,300 | *5,580 *12,300 | 5,980 13,180 | 4,640 10,230 | 2,970 6,550 | 2,370 5,220 | 1,880 4,140 | 1,500 3,310 | 1,700 3,750 | 1,360 3,000 | 6.49 (21.3) |
| -3.0m -10.0ft | kg Ib | *8,530 *18,810 | *8,530 *18,810 | *5,440 *11,990 | 4,720 10,410 | 3,000 6,610 | 2,400 5,290 | | | *2,270 *5,000 | 2,050 4,520 | 5.17 (17.0) |

• Boom: 4.3 m (14′ 1″) • Arm: 1.96 m (6′ 5″) • Bucket: 0.45 m³ (0.59yd³) SAE heaped • Shoe : 500mm(20″) triple grouser

| | | | | | Load | radius | | | | | At max. reach | ı |
|--------------------------|-----------------|--------------------------|----------------------------|--------------------------|--------------------------|-------------------------|-------------------------|-----------------------|-----------------------|-------------------------|-------------------------|-------------------------|
| Load Po | | 1.5m | 1.5m (5.0ft) 3.0m (10.0ft) | | | 4.5m | (15.0ft) | 6.0m | 6.0m (20.0ft) | | Capacity | |
| m(ft) | | | | | | | | | | m (ft) | | |
| 6.0m 20.0ft | kg Ib | | | | | *1,770 *3,900 | *1,770 *3,900 | | | *1,820 *4,010 | *1,820 *4,010 | 5.62 (18.4) |
| 4.5m 15.0ft | kg Ib | | | | | *1,950 *4,300 | *1,950 *4,300 | | | 1,750 3,860 | 1,420 3,130 | 6.62 (21.7) |
| 3.0m 10.0ft | kg Ib | | | *3,160 *6,970 | *3,160 *6,970 | *2,410 *5,310 | *2,410 *5,310 | 2,020 4,450 | 1,640 3,620 | 1,480 3,260 | 1,180 2,600 | 7.10 (23.3) |
| 1.5m 5.0ft | kg Ib | | | *4,940 *10,890 | *4,940 *10,890 | *3,060 *6,750 | 2,550 5,620 | 1,940 4,280 | 1,560 3,440 | 1,410 3,110 | 1,120 2,470 | 7.18 (23.6) |
| Ground Line | kg Ib | | | *5,870 *12,940 | 4,580 10,100 | 6,970 6,550 | 2,370 5,220 | 1,860 4,100 | 1,480 3,260 | 1,490 3,280 | 1,480 2,600 | 6.89 (22.6) |
| -1.5m -5.0ft | kg Ib | *6,090 *13,430 | *6,090 *13,430 | *5,860 *12,920 | 4,540 10,010 | 2,900 6,390 | 2,310 5,090 | | | 1,820 4,010 | 1,460 3,220 | 6.15 (20.2) |
| -3.0m - 10.0ft | kg Ib | *9,180 *20,240 | *9,180 *20,240 | *5,080 *11,200 | 4,670 10,300 | 2,980 6,570 | 2,380 5,250 | | | | | |

• Boom: 4.3 m (14′ 1″) • Arm: 2.81 m (9′ 3″) • Bucket: 0.45 m³ (0.59yd³) SAE heaped • Shoe : 500mm(20″) triple grouser

| Load Poir | | | | | Load | radius | | | | | At max. reach | 1 |
|--------------------------|-----------------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-----------------------|-------------------------|
| Load Point height | | 1.5m | (5.0ft) | 3.0m (10.0ft) | | 4.5m | (15.0ft) | 6.0m | (20.0ft) | Capacity | | Reach |
| m(ft) | L | Į. | | | | Į. | | | | | | m (ft) |
| 6.0m 20.0ft | kg Ib | | | | | | | | | *1,570 *3,640 | 1,520 3,350 | 6.66 (21.9) |
| 4.5m 15.0ft | kg Ib | | | | | | | *1,640 *3,620 | *1,640 *3,620 | 1,450 3,200 | 1,170 2,580 | 7.50 (24.6) |
| 3.0m 10.0ft | kg Ib | | | | | *1,920 *4,230 | *1,920 *4,230 | *1,830 *4,030 | 1,770 3,900 | 1,270 2,800 | 1,020 2,250 | 7.92 (23.3) |
| 1.5m 5.0ft | kg Ib | | | *4,050 *8,930 | *4,050 *8,930 | *2,690 *5,930 | *2,690 *5,930 | 2,050 4,520 | 1,670 3,680 | 1,210 2,670 | 960 2,120 | 7.99 (26.2) |
| Ground Line | kg Ib | *3,230 *7,120 | *3,230 *7,120 | *5,580 *12,300 | 4,910 10,820 | 3,130 6,900 | 2,530 5,580 | 1,950 4,300 | 1,570 3,460 | 1,260 2,780 | 1,000 2,200 | 7.74 (25.4) |
| -1.5m -5.0ft | kg Ib | *4,960 *10,930 | *4,960 *10,930 | 6,060 13,360 | 4,710 10,380 | 3,000 6,610 | 2,410 5,310 | 1,890 4,170 | 1,510 3,330 | 1,460 3,220 | 1,170 2,580 | 7.11 (23.2) |
| -3.0m - 10.0ft | kg Ib | *7,230 *15,940 | *7,230 *15,940 | *5,830 *12,850 | 4,720 10,410 | 2,980 6,570 | 2,390 5,270 | | | 1,990 4,390 | 1,610 3,550 | 5.96 (19.6) |
| -4.5m - 15.0ft | kg Ib | | | *4,480 *9,880 | *4,480 *9,880 | | i i | | | | | |

- 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.