

We build a better future

Robex
27z-9

Equipped with Tier 3a engine



*Photo may include optional equipment.

Pleasure works

An operator, who takes pleasure in his work, does a better job. That is why we at Hyundai Heavy Industries do everything we can to make that happen. We merged operator preference, fast precision and lasting performance into a quality product. Hyundai's 9 series earthmoving equipment simply makes time fly, makes pleasure work!



*Photo may include optional equipment.

Machine Walk-Around

Robust Upper and Lower Frame

The structure of the upper frame is designed to absorb high stress and to resist inherent external influences. An X-type center frame and a reinforced box section track frame provide exceptional strength and longer service life to withstand tough working conditions.

Engine Technology

Powerful and reliable, Tier 3a certified, fuel efficient Mitsubishi S3L2 engine.
Electronically controlled, clean and efficient combustion.
Low noise / anti-restart function.

Control System

Control devices are well located for increased operator's comfort and a higher productivity. The operator can easily control the machine in any working condition.

Advanced Hydraulic System

Our new R27Z-9 is equipped with arm flow summation system, boom holding system and swing parking brake for smooth and fine control. Other integrated features are hydraulic damper in travel pedal, swing reducer lubrication by hydraulic oil and leak-free grease chamber of swing bearing.

Comfortable and High-Strength Cabin

The spacious cabin is ergonomically designed, with low noise level and high visibility. Canopy & cabin frame are complying with international standard TOPS, ROPS & FOPS, for maximum protection of the operator.

Operators' Convenience

R27Z-9 cabin equipped with suspension seat, foldable pedals and various storage space for advanced operator comfort. The monitoring system displays warning indicators, water temperature gauge, fuel gauge and hour meter to check the full status of the machine at a single glance.

Easy to Maintain

With open access of doors, covers and engine hoods, air cleaner and centralized grease fittings the machine is a pleasure to maintain.

Extended Life of Components

Long-life hydraulic filters, long-life hydraulic oil, long-lasting shims and long-lasting bushes are reducing operation costs.

Preference

An operator, who sets his machine to his needs, takes pleasure in his work. 9 Series respects operator preference with regards to comfort, ease-of-use and controllability.

Operators can fully customize their work environment and operating preferences to fit their individual needs.



*Photo may include optional equipment.



Dashboard

The dashboard of the R27Z-9 indicates the status of the machine like warnings of engine oil pressure, battery charge, engine coolant temperature and fuel gauges.

Comfortable Operating Cabin

In a 9 series cabin, you can adjust the seat, console and armrests to suit your preferred comfort level.

1. The pedals (travel - boom offset - attachment) are installed in a convenient position and can be folded in to gain extra foot space.
2. Different sizes of cup holders.
3. Operator's belongings can be stored in a lockable storage box under the seat.
4. Armrests to increase operator's comfort.
5. Slidable front window can be opened easily and is kept safely in open position (cabin Type)



Stressless

Work is stressful enough; your working environment should be stressless. Hyundai's 9 Series provides improved cabin interior, additional storage space and an advanced audio mobile phone feature to minimize the stress of the operator.

Operator Comfort

The left and right joysticks are ergonomically placed for convenient operation. The joysticks have enough space to install additional option switches. A safety lever is installed to prevent unexpected activation of the hydraulic attachments. When the safety lever is positioned upright, hydraulic functions are disengaged.



A tiltable left-side console make the operator easier to enter and exit the cab.



Precision

An operator, who feels his machine respond smoothly, takes pleasure in his work. 9 Series delivers fast precision by combining smoother hydraulics with wider view and less stress. Innovative hydraulic system technologies make the R27Z-9 excavator fast, smooth and easy to control.



*Photo may include optional equipment.



Offset Boom

With an offset function of the boom from 75° to the left side and 50° to the right side, the zero-tail machine is even more flexible to use on narrow jobsites.

Hydraulic System Improvements

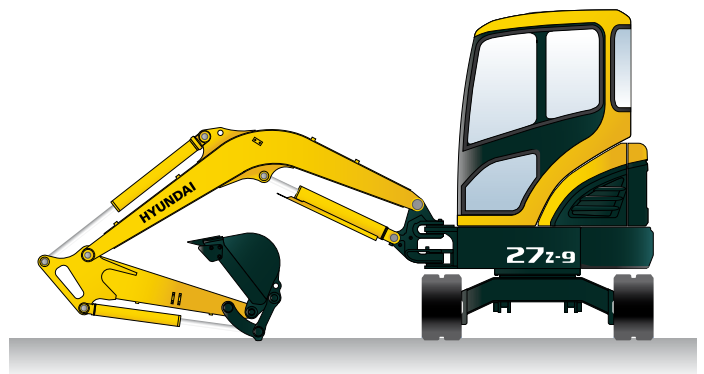
To achieve optimum precision, Hyundai redesigned the hydraulic system to provide the operator with super fine touch and top level controllability.

Newly improved features include arm flow summation system and boom holding system, in order to save energy, prevent against cavitation, increase speed and to avoid the drop of attachments in neutral condition.



Structural Strength

The 9 Series cabin structure is designed with slimmer but stronger tubing for more safety and better visibility. Low-stress and high strength steel is welded to form a strong and stable lower frame. Structural durability is analyzed and tested by FEM-analysis (Finite Elements Method) and long-term durability tests.



Zero-tail Swing

R27Z-9's short tail swing radius allows the operator work in confined areas like close to buildings on roadways, and in urban areas. This compact radius design provides easy and efficient operation in any limited space work environment.

Mitsubishi S3L2

Tier 3a certified, Mitsubishi S3L2 engine provides maximum power, reduced emissions, reliability and optimum fuel efficiency.

Profitability

An owner, who knows his machine saves money, takes pleasure in owning it. 9 Series excavators contribute to your business as a time, fuel, spare-part and cost saving earthmoving solution.



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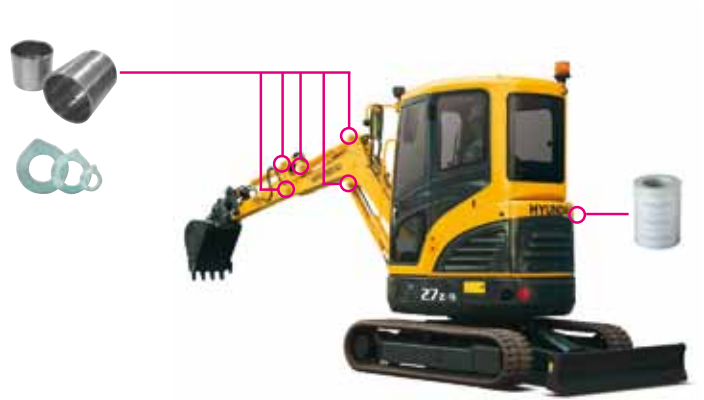
Easy Maintenance Access

The R27Z-9 was built with accessibility in mind. All doors, covers and hoods are designed for full open accessibility. The R27Z-9 offers plenty of space to complete regular maintenance.



Easy to Change Air Cleaner

The R27Z-9 is equipped with a durable plastic air cleaner, designed for easy maintenance.



Extended Life of Components

By adopting long-life hydraulic filters (1000 hrs) and long-life hydraulic oil (5000 hrs) operation costs are reduced. Oil change intervals are extended to 250 operating hours because self-lubricating bushes and resin shims are applied.



Centralized Grease Fittings

Centralized grease fittings for faster and easier maintenance.



Cylinder Covers

Cylinders of boom and dozer blade are provided with covers for extra protection.

Specifications

ENGINE

| | | | |
|----------------------------|--|---------------------------------|--|
| MODEL | MITSUBISHI S3L2 | | |
| Type | 4 Cycle Diesel engine, 3 cylinders in line, water cooled | | |
| Rated flywheel horse power | | | |
| SAE | J1995 (gross) | 24.7 HP (18.4 kW) at 2,300 rpm | |
| | J1349 (net) | 23.1 HP (17.2 kW) at 2,300 rpm | |
| DIN | 627 1/1 (gross) | 25.0 HP (18.4 kW) at 2,300 rpm | |
| | 627 1/1 (net) | 23.1 HP (17.2 kW) at 2,300 rpm | |
| Max. torque | 8.0 kgf.m (58 lbf.ft) at 1,800 rpm | | |
| Bore x stroke | 78 mm x 92 mm (3.07" x 3.62") | | |
| Piston displacement | 1,318 cc | | |
| Batteries | 12V - 80AH | | |
| Starting motor | 12V - 1.7kW | | |
| Alternator | 12V - 50A | | |

HYDRAULIC SYSTEM

| | |
|----------------------|---|
| Main pump | |
| Type | Two variable displacement piston pumps + gear pump |
| Rated flow | 2 x 27.6 + 19.6 lpm |
| Pilot pump | Gear pump 10.4 lpm |
| Hydraulic motors | |
| Travel | Two speed axial piston motor with counter balance valve and parking brake |
| Swing | Axial piston motor with automatic brake |
| Relief valve setting | |
| Implement circuits | 220 Kgf/cm ² (3,270 psi) |
| Travel circuit | 220 Kgf/cm ² (3,270 psi) |
| Swing circuit | 175 Kgf/cm ² (2,490 psi) |
| Pilot circuit | 30 Kgf/cm ² (430 psi) |
| Service valve | Installed |

HYDRAULIC CYLINDERS

| | |
|---------------------------------|-----------------|
| No. of cylinder - bore x stroke | |
| Boom | 1 - 75 x 565 mm |
| Arm | 1 - 65 x 500 mm |
| Bucket | 1 - 60 X 420 mm |
| Boom swing | 1 - 75 X 400 mm |
| Dozer blade | 1 - 85 X 140 mm |

OPERATOR'S CAB

| | |
|------------------------------|-------|
| Noise Levels (dynamic value) | |
| Outside cabin - LwA | 94 dB |
| Inside cabin - LpA | 75 dB |

COOLANT & LUBRICANT CAPACITY

| (refilling) | liter | US gal | UK gal |
|----------------|-------|--------|--------|
| Fuel tank | 42 | 11.1 | 9.2 |
| Engine coolant | 4 | 1.32 | 1.1 |
| Engine oil | 5.9 | 1.56 | 1.3 |
| Hydraulic tank | 46 | 12.2 | 10.1 |

TRAVEL LEVERS

Traveling and steering: Two levers with foldable pedals.

HYDRAULIC CONTROLS

| | |
|-----------------|--|
| Type | |
| Pilot control | Two joysticks with one safety lever (LH): Swing and arm, (RH): Boom and bucket with horn (ISO) |
| Engine throttle | Mechanical, cable 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 | 9 rpm |

DRIVES & BRAKES

| | |
|------------------------------|---------------------------------------|
| Max. travel speed (high/low) | 4.4 km / 2.4 km (2.8 mph) / (1.6 mph) |
| Maximum traction force | 2.4 ton |
| Maximum gradeability | 30° |
| Parking brake | Multi wet discs |

DIGGING FORCE (ISO)

| | |
|--------|-----------|
| Bucket | 2,050 kgf |
| | 20.1 kN |
| | 4,520 lbf |
| Arm | 1,400 kgf |
| | 13.7 kN |
| | 3,090 lbf |

WEIGHT (APPROXIMATE)

Operating weight, including 2,030 mm (6' 8") boom; 1,120 mm (3' 8") arm, SAE heaped 0.08 m³ (0.1 yd³) excavator bucket, lubricant, coolant, full fuel tank, hydraulic tank and the standard equipment.

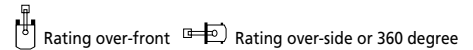
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|------------------|---------------------------|--------------------------------------|
| Shoe Width | Rubber shoes 300 mm (12") | |
| Operating Weight | Cabin | 2,880 Kg (6,350 lb) |
| | Canopy | 2,730 Kg (6,020 lb) |
| Ground Pressure | Cabin | 0.34 kg / cm ² (4.83 psi) |
| | Canopy | 0.32 kg / cm ² (4.55 psi) |

UNDERCARRIAGE

X-type center frame is integrally welded with reinforced box-section track frames. The undercarriage includes lubricated rollers, track adjusters with shock absorbing springs, sprockets and rubber shoes.

| | |
|------------------------------------|---------------------|
| Center frame | X-leg type |
| Track frame | Pentagonal box type |
| No. of carrier roller on each side | 1 |
| No. of track roller on each side | 3 |

LIFTING CAPACITIES R27Z-9



Boom : 2.03 m (6' 8") / Arm : 1.12 m (3' 8") / Bucket : 0.08 m³ (0.1 yd³) SAE heaped / Dozer up : 300 mm (12") rubber track with 220kg (485 lb) counterweight

| Load point height m (ft) | | Load radius | | | | | | | | At max. reach | | |
|-----------------------------|----|----------------|-------|----------------|------|----------------|------|-----------------|-----|---------------|------|-----------------|
| | | 2.0 m (6.6 ft) | | 2.5 m (8.2 ft) | | 3.0 m (9.8 ft) | | 3.5 m (11.5 ft) | | Capacity | | Reach m (ft) |
| | | | | | | | | | | | | |
| 3.5 m | kg | | | | | | | | | *550 | 460 | 3.07 |
| 11.5 ft | lb | | | | | | | | | *1210 | 1010 | (10.1) |
| 3.0 m | kg | | | | | 610 | 450 | | | 460 | 340 | 3.63 |
| 9.8 ft | lb | | | | | 1340 | 990 | | | 1010 | 750 | (11.9) |
| 2.5 m | kg | | | | | 610 | 450 | 460 | 340 | 380 | 290 | 3.99 |
| 8.2 ft | lb | | | | | 1340 | 990 | 1010 | 750 | 840 | 640 | (13.1) |
| 2.0 m | kg | | *790 | 610 | 600 | 450 | 460 | 340 | 350 | 350 | 250 | 4.22 |
| 6.6 ft | lb | | *1740 | 1340 | 1320 | 990 | 1010 | 750 | 770 | 550 | 550 | (13.8) |
| 1.5 m | kg | | 800 | 590 | 590 | 440 | 460 | 340 | 320 | 240 | 240 | 4.35 |
| 4.9 ft | lb | | 1760 | 1300 | 1300 | 970 | 1010 | 750 | 710 | 530 | 530 | (14.3) |
| 1.0 m | kg | | 770 | 560 | 580 | 420 | 450 | 330 | 320 | 230 | 230 | 4.39 |
| 3.3 ft | lb | | 1700 | 1230 | 1280 | 930 | 990 | 730 | 710 | 510 | 510 | (14.4) |
| 0.5 m | kg | | 750 | 540 | 570 | 410 | 440 | 320 | 320 | 230 | 230 | 4.35 |
| 1.6 ft | lb | | 1650 | 1190 | 1260 | 900 | 970 | 710 | 710 | 510 | 510 | (14.3) |
| Ground Line | kg | 1080 | 750 | 740 | 530 | 560 | 400 | 440 | 320 | 330 | 240 | 4.22 |
| | lb | 2380 | 1650 | 1630 | 1170 | 1230 | 880 | 970 | 710 | 730 | 530 | (13.8) |
| -0.5 m | kg | 1080 | 750 | 740 | 530 | 550 | 400 | 440 | 320 | 360 | 260 | 4.00 |
| -1.6 ft | lb | 2380 | 1650 | 1630 | 1170 | 1210 | 880 | 970 | 710 | 790 | 570 | (13.1) |
| -1.0 m | kg | 1090 | 760 | 740 | 530 | 560 | 400 | | | 420 | 300 | 3.64 |
| -3.3 ft | lb | 2400 | 1680 | 1630 | 1170 | 1230 | 880 | | | 930 | 660 | (11.9) |
| -1.5 m | kg | 1110 | 780 | 760 | 550 | | | | | 550 | 400 | 3.09 |
| -4.9 ft | lb | 2450 | 1720 | 1680 | 1210 | | | | | 1210 | 880 | (10.1) |
| -2.5 m | kg | | | | | | | | | *450 | 420 | 3.06 |
| -8.2 ft | lb | | | | | | | | | *990 | 930 | (10.0) |

Boom : 2.03 m (6' 8") / Arm : 1.12 m (3' 8") / Bucket : 0.08 m³ (0.1 yd³) SAE heaped / Dozer down : 300 mm (12") rubber track with 220kg (485 lb) counterweight

| Load point height m (ft) | | Load radius | | | | | | | | At max. reach | | |
|-----------------------------|----|----------------|-------|----------------|-------|----------------|-------|-----------------|-------|---------------|------|-----------------|
| | | 2.0 m (6.6 ft) | | 2.5 m (8.2 ft) | | 3.0 m (9.8 ft) | | 3.5 m (11.5 ft) | | Capacity | | Reach m (ft) |
| | | | | | | | | | | | | |
| 3.5 m | kg | | | | | | | | | *550 | 490 | 3.07 |
| 11.5 ft | lb | | | | | | | | | *1210 | 1080 | (10.1) |
| 3.0 m | kg | | | | | *640 | 480 | | | *550 | 360 | 3.63 |
| 9.8 ft | lb | | | | | *1410 | 1060 | | | *1210 | 790 | (11.9) |
| 2.5 m | kg | | | | | *640 | 490 | *570 | 370 | *570 | 310 | 3.99 |
| 8.2 ft | lb | | | | | *1410 | 1080 | *1260 | 820 | *1260 | 680 | (13.1) |
| 2.0 m | kg | | *790 | 650 | *720 | 480 | *680 | 370 | *570 | 270 | 270 | 4.22 |
| 6.6 ft | lb | | *1740 | 1430 | *1590 | 1060 | *1500 | 820 | *1260 | 600 | 600 | (13.8) |
| 1.5 m | kg | | *1020 | 630 | *830 | 470 | *730 | 360 | *570 | 260 | 260 | 4.35 |
| 4.9 ft | lb | | *2250 | 1390 | *1830 | 1040 | *1610 | 790 | *1260 | 570 | 570 | (14.3) |
| 1.0 m | kg | | *1260 | 600 | *960 | 450 | *800 | 350 | *600 | 250 | 250 | 4.39 |
| 3.3 ft | lb | | *2780 | 1320 | *2120 | 990 | *1760 | 770 | *1320 | 550 | 550 | (14.4) |
| 0.5 m | kg | | *1410 | 580 | *1050 | 440 | *850 | 350 | *630 | 250 | 250 | 4.35 |
| 1.6 ft | lb | | *3110 | 1280 | *2310 | 970 | *1870 | 770 | *1390 | 550 | 550 | (14.3) |
| Ground Line | kg | *1490 | 810 | *1460 | 570 | *1090 | 430 | *860 | 340 | *650 | 260 | 4.22 |
| | lb | *3280 | 1790 | *3220 | 1260 | *2400 | 950 | *1900 | 750 | *1430 | 570 | (13.8) |
| -0.5 m | kg | *1990 | 810 | *1420 | 570 | *1070 | 430 | *810 | 340 | *660 | 280 | 4.00 |
| -1.6 ft | lb | *4390 | 1790 | *3130 | 1260 | *2360 | 950 | *1790 | 750 | *1460 | 620 | (13.1) |
| -1.0 m | kg | *1740 | 820 | *1260 | 570 | *930 | 440 | | | *660 | 330 | 3.64 |
| -3.3 ft | lb | *3840 | 1810 | *2780 | 1260 | *2050 | 970 | | | *1460 | 730 | (11.9) |
| -1.5 m | kg | *1290 | 840 | *910 | 590 | | | | | *620 | 430 | 3.09 |
| -4.9 ft | lb | *2840 | 1850 | *2010 | 1300 | | | | | *1370 | 950 | (10.1) |
| -2.5 m | kg | | | | | | | | | *450 | *450 | 3.06 |
| -8.2 ft | lb | | | | | | | | | *990 | *990 | (10.0) |

- Lifting capacity is based on SAE J1097, ISO 10567.
- 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.
- The load point is a hook located on the back of the bucket.
- (*) indicates the load limited by hydraulic capacity.

STANDARD EQUIPMENT

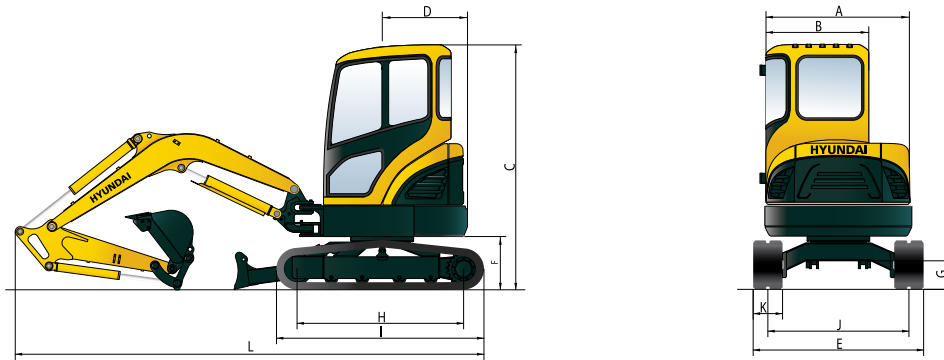
| | | | | |
|--|----------------------------------|---|------------------------------------|---|
| ISO standard cabin | · Lockable door | Engine coolant temperature | · Console box tilting system (LH.) | · Mono boom (2.03 m; 6' 8") |
| · Canopy ROPS (ISO 3471) | · Accessory box & Ash-tray | Preheat engine | · Two front working lights | · Arm (1.12 m; 3' 8") |
| FOPS (ISO 3449) | · Centralized monitoring | Low battery | · Electric horn | · Rubber shoes (300 mm; 12") |
| TOPS (ISO 12117) | · Gauges | Air cleaner clogging | · Battery (1 x 12 V x 80 AH) | · Single acting piping (Breaker, etc) |
| · All-weather steel cab with all-around visibility | Fuel level gauge | Fuel empty | · Battery master switch | · Double acting piping (Clamshell, etc) |
| · Safety glass windows | Engine coolant temperature gauge | · Door and locks, one key fits all | · Automatic swing brake | |
| · Sliding fold-in front window | · Warning lamps | · AM/FM radio and cassette | · Removable reservoir tank | |
| · Sliding side window | Quick clamp | · Mechanical suspension seat with seat belt | · Water separator, fuel line | |
| | Engine oil pressure | | · Counterweight (220 kg; 485 lb) | |

OPTIONAL EQUIPMENT

| | | | |
|-------------------------|--|-----------------|------------------------------|
| ISO standard canopy | · Beacon lamp | · Quick coupler | · Heater & Defroster |
| · Cabin ROPS (ISO 3471) | · Accumulator, work equipment lowering | · Tool kit | · Lever Pattern Change Valve |
| FOPS (ISO 3449) | · Travel alarm | · Operator suit | |
| TOPS (ISO 12117) | | | |

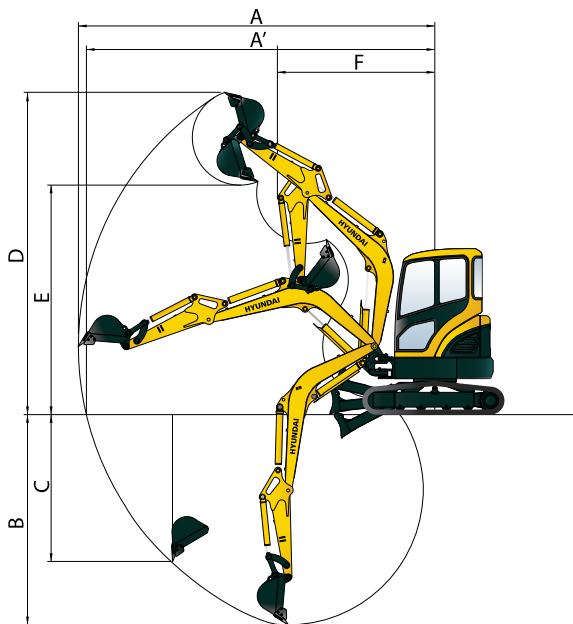
Dimensions & Working Ranges

R27Z-9 DIMENSIONS



| ITEM | R27Z-9 | ITEM | R27Z-9 |
|--------------------------------------|----------|----------------------|----------|
| (A) Overall width of upper structure | 1,485 mm | (G) Ground clearance | 290 mm |
| (B) Overall width of cab | 1,050 mm | (H) Tumbler distance | 1,550 mm |
| (C) Overall height of cab | 2,500 mm | (I) Track length | 1,970 mm |
| (D) Tail swing radius | 775 mm | (J) Track gauge | 1,250 mm |
| (E) Overall width | 1,550 mm | (K) Track shoe width | 300 mm |
| (F) Clearance under counterweight | 540 mm | (L) Overall length | 4,180 mm |

R27Z-9 WORKING RANGES



| | |
|--------------------------------------|----------|
| Boom length | 2,030 mm |
| Arm length | 1,120 mm |
| (A) Max. digging reach | 4,650 mm |
| (A') Max. digging reach at ground | 4,515 mm |
| (B) Max. digging depth | 2,500 mm |
| (C) Max. vertical wall digging depth | 2,085 mm |
| (D) Max. digging height | 4,270 mm |
| (E) Max. dumping height | 2,890 mm |
| (F) Min. swing radius | 2,055 mm |

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

 **HYUNDAI**
HEAVY INDUSTRIES EUROPE
CONSTRUCTION EQUIPMENT