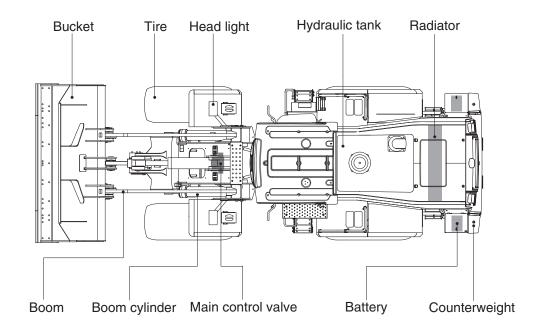
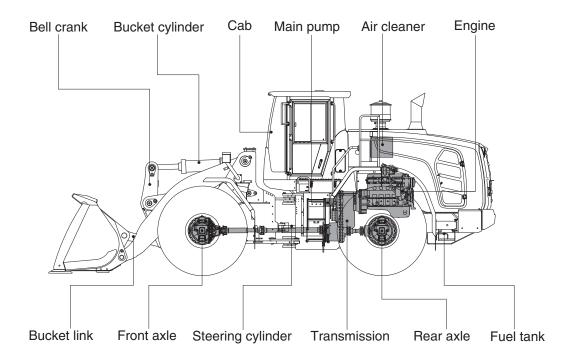
2. SPECIFICATIONS

1. MAJOR COMPONENTS

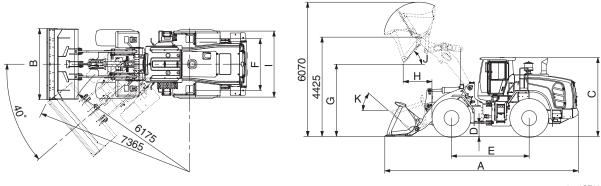




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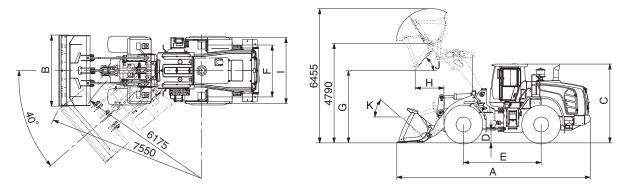
2. SPECIFICATIONS

1) WITH BOLT-ON CUTTING EDGE TYPE BUCKET (HL975)



| Description | | Unit | Specification | |
|------------------|----------------------|--------------------|---------------|----------------|
| Operating weight | | kg (lb) | 26500 (58430) | |
| Bucket capacity | | Struck | | 4.1 (5.4) |
| | | Heaped | m³ (yd³) | 4.8 (6.3) |
| Overall length | | А | | 9205 (30' 2") |
| Overall width | | В | | 3250 (10' 8") |
| Overall height | | С | | 3590 (11' 9") |
| Ground clearar | nce | D | | 460 (1' 6") |
| Wheelbase | | Е | mm (ft-in) | 3550 (11' 8") |
| Tread | | F | | 2300 (7' 7") |
| Dump clearance | e at 45° | G | | 3120 (10' 3") |
| Dump reach (fu | ull lift) | Н | | 1335 (4' 5") |
| Width over tires | S | I | | 2975 (9' 9") |
| Dump angle | | J | degree (°) | 48 |
| Roll back angle | (carry position) | К | | 48 |
| | | Lift (with load) | sec | 5.9 |
| Cycle time | | Dump (with load) | | 1.7 |
| | | Lower (empty) | | 3.9 |
| Maximum trave | Maximum travel speed | | km/hr (mph) | 40.0 (24.9)) |
| Braking distant | се | | m (ft in) | 14.3 (46' 11") |
| Minimum turnir | ng radius (cente | r of outside tire) | m (ft-in) | 6.18 (20' 3") |
| Gradeability | | | degree (°) | 30 |
| Breakout force | Breakout force | | kg (lb) | 23435 (51670) |
| | | First gear | km/hr (mph) | 6.6 (4.1) |
| Travel speed | Forward | Second gear | | 11.0 (6.8) |
| | | Third gear | | 24.6 (15.3) |
| | | Fourth gear | | 36.5 (22.7) |
| | | First gear | | 6.6 (4.1) |
| | Reverse | Second gear | | 11.0 (6.8) |
| | | Third gear | | 24.6 (15.3) |

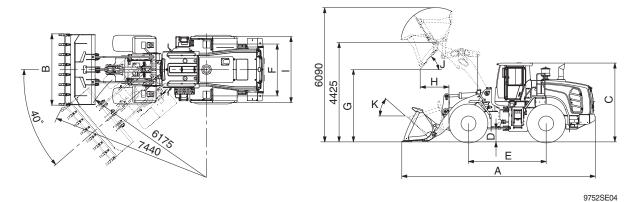
WITH BOLT-ON CUTTING EDGE TYPE BUCKET (HL975 XT)



9752SE03-1

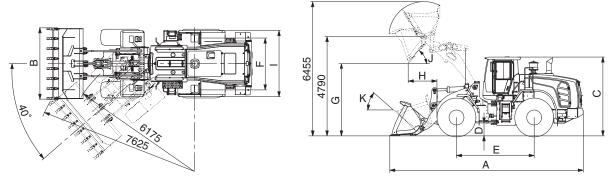
| Description | | Unit | Specification | |
|----------------------|-----------------------------------|------------------|---------------|----------------|
| Operating weight | | | kg (lb) | 27295 (60180) |
| B | | Struck | | 4.1 (5.4) |
| Вискет сарасіт | Bucket capacity | | m³ (yd³) | 4.8 (6.3) |
| Overall length | | А | | 9640 (31' 8") |
| Overall width | | В | | 3250 (10' 8") |
| Overall height | | С | | 3590 (11' 9") |
| Ground clearar | nce | D | | 460 (1' 6") |
| Wheelbase | | Е | mm (ft-in) | 3550 (11' 8") |
| Tread | | F | | 2300 (7' 7") |
| Dump clearand | ce at 45° | G | | 3485 (11' 5") |
| Dump reach (fo | ull lift) | Н | | 1420 (4' 8") |
| Width over tire | S | I | | 2975 (9' 9") |
| Dump angle | | J | do eve o (°) | 48 |
| Roll back angle | Roll back angle (carry position) | | degree (°) | 49 |
| | | Lift (with load) | sec | 5.9 |
| Cycle time | | Dump (with load) | | 1.7 |
| | | | | 3.9 |
| Maximum travel speed | | | km/hr (mph) | 40.0 (24.9) |
| Braking distand | Braking distance | | (ft :) | 14.3 (46' 11") |
| Minimum turnii | Minimum turning radius (center of | | m (ft-in) | 6.18 (20' 3") |
| Gradeability | Gradeability | | degree (°) | 30 |
| Breakout force | Breakout force | | kg (lb) | 23290 (51350) |
| | | First gear | | 6.6 (4.1) |
| Travel speed | Forward | Second gear | km/hr (mph) | 11.0 (6.8) |
| | | Third gear | | 24.6 (15.3) |
| | | Fourth gear | | 36.5 (22.7) |
| | Reverse | First gear | | 6.6 (4.1) |
| | | Second gear | | 11.0 (6.8) |
| | | Third gear | | 24.6 (15.3) |

2) WITH 1-PIECE TOOTH TYPE BUCKET (HL975)



Unit Description Specification Operating weight 26395 (58190) kg (lb) Struck 4.0 (5.2) **Bucket capacity** m3 (yd3) Heaped 4.6 (6.0) Overall length Α 9355 (30' 8") Overall width В 3300 (10' 10") С Overall height 3590 (11'9") Ground clearance D 460 (1' 6") Wheelbase Ε mm (ft-in) 3550 (11'8") Tread F 2300 (7' 7") Dump clearance at 45° G 2995 (9' 10") Н Dump reach (full lift) 1420 (4' 8") I Width over tires 2975 (9' 9") Dump angle J 48 degree (°) Κ Roll back angle (carry position) 48 Lift (with load) 5.9 1.7 Cycle time Dump (with load) sec Lower (empty) 3.9 Maximum travel speed km/hr (mph) 40.0 (24.9) Braking distance 14.3 (46' 11") m (ft-in) Minimum turning radius (center of outside tire) 6.18 (20' 3") Gradeability degree (°) 30 Breakout force 24725 (54510) kg (lb) First gear 6.6 (4.1) Second gear 11.0 (6.8) Forward Third gear 24.6 (15.3) Travel speed Fourth gear km/hr (mph) 36.5 (22.7) First gear 6.6 (4.1) Second gear 11.0 (6.8) Reverse Third gear 24.6 (15.3)

WITH 1-PIECE TOOTH TYPE BUCKET (HL975 XT)



9752SE04-1

| Description | | Unit | Specification | |
|----------------------|------------------|--------------------|---------------|----------------|
| Operating weight | | | kg (lb) | 27190 (59950) |
| Bucket capacity | | Struck | - ()-) | 4.0 (5.2) |
| | | Heaped | m³ (yd³) | 4.6 (6.0) |
| Overall length | | A | | 9790 (32' 1") |
| Overall width | | В | | 3300 (10' 10") |
| Overall height | | С | | 3590 (11' 9") |
| Ground clearar | ice | D | | 460 (1' 6") |
| Wheelbase | | Е | mm (ft-in) | 3550 (11' 8") |
| Tread | | F | | 2300 (7' 7") |
| Dump clearance | e at 45° | G | | 3360 (11' 0") |
| Dump reach (fu | ıll lift) | Н | | 1505 (4' 11") |
| Width over tires | 3 | I | | 2975 (9' 9") |
| Dump angle | | J | degree (°) | 48 |
| Roll back angle | (carry position) | K | | 49 |
| | | Lift (with load) | sec | 5.9 |
| Cycle time | | Dump (with load) | | 1.7 |
| | | Lower (empty) | | 3.9 |
| Maximum travel speed | | | km/hr (mph) | 40.0 (24.9) |
| Braking distance | e | | m (ft-in) | 14.3 (46' 11") |
| Minimum turnin | g radius (cente | r of outside tire) | | 6.05 (19' 10") |
| Gradeability | | | degree (°) | 30 |
| Breakout force | | | kg (lb) | 24580 (54190) |
| Travel speed | Forward | First gear | km/hr (mph) | 6.6 (4.1) |
| | | Second gear | | 11.0 (6.8) |
| | | Third gear | | 24.6 (15.3) |
| | | Fourth gear | | 36.5 (22.7) |
| | Reverse | First gear | | 6.6 (4.1) |
| | | Second gear | | 11.0 (6.8) |
| | | Third gear | | 24.6 (15.3) |

3. WEIGHT

| lt | em | kg | lb |
|------------------------------|-----------------|---------|-----------|
| Front frame assembly | | 2222 | 4900 |
| Rear frame assembly | | 2504 | 5520 |
| Front fender (LH & RH) | | 78 | 172 |
| Counterweight (HL975) | | 1950 | 4300 |
| Counterweight (HL975 XT |) | 2450 | 5400 |
| Cab assembly | | 1070 | 2360 |
| Engine assembly | | 860 | 1896 |
| Transmission assembly (4 | -speed/5-speed) | 760/810 | 1680/1790 |
| Drive shaft (front) | | 41 | 90 |
| Drive shaft (center) | | 37 | 82 |
| Drive shaft (rear) | | 21 | 46 |
| Front axle (include differen | tial) | 1770 | 3900 |
| Rear axle (include differen | tial) | 1300 | 2870 |
| Tire (26.5 R25, * L3) | | 474 | 1050 |
| Hydraulic tank assembly | | 233 | 515 |
| Fuel tank assembly | | 416 | 917 |
| Main pump assembly | | 55 | 121 |
| Fan & brake pump asseml | oly | 12 | 26 |
| Main control valve (2 spoo | l/3 spool) | 68/81 | 150/179 |
| Flow amplifier | | 29 | 64 |
| De ann a canadala | HL975 | 1715 | 3780 |
| Boom assembly | HL975 XT | 1975 | 4350 |
| Bell crank assembly | | 494 | 1089 |
| Bucket link | | 73 | 161 |
| 4.8 m³ bucket, with bolt on | cutting edge | 2390 | 5270 |
| 4.6 m³ bucket, with tooth | | 2285 | 5040 |
| Boom cylinder assembly | | 231 | 509 |
| Bucket cylinder assembly | | 289 | 637 |
| Steering cylinder assembly | | 46 | 101 |
| Seat | | 80 | 176 |
| Battery | | 55 | 121 |

4. SPECIFICATION FOR MAJOR COMPONENTS

1) ENGINE

| Item | Specification |
|-------------------------------------|---|
| Model | Cummins QSG12 (~#0178) / Cummins X12 (#0179~) |
| Туре | 4-cycle turbocharged, charge air cooled diesel engine |
| Control type | Electronic control |
| Cooling method | Water cooling |
| Number of cylinders and arrangement | 6 cylinders, in-line |
| Firing order | 1-5-3-6-2-4 |
| Combustion chamber type | Direct injection type |
| Cylinder bore × stroke | 132×144 mm (5.2"×5.7") |
| Piston displacement | 11800 cc (720 cu in) |
| Compression ratio | 17:1 |
| Rated gross horse power | 335 hp at 2100 rpm |
| Maximum gross torque (1400 rpm) | 180 kgf · m (1302 lbf · ft) |
| Engine oil quantity | 34 ℓ (9.0 U.S. gal) |
| Wet weight | 860 kg (1900 lb) |
| High idling speed | $2130\pm50~\mathrm{rpm}$ |
| Low idling speed | 800 \pm 25 rpm |
| Rated fuel consumption | 226 g/kW · hr |
| Starting motor | Prestolite (24 V - 7.5 kW) |
| Alternator | Dehong (24 V - 110 Amp) |
| Battery | 2×12 V×220 Ah |

2) MAIN PUMP

| ltem | Specification | |
|----------------------------|-----------------------------|----------------------------|
| nem | Steering | Loader |
| Туре | Variable tandem piston pump | |
| Capacity | 110 cc/rev | 74 cc/rev |
| Maximum operating pressure | 210 kgf/cm² (2990 psi) | 280 kgf/cm² (3980 psi) |
| Rated oil quantity | 211 ½ /min (55.7 U.S.gpm) | 142 \(/min (37.5 U.S.gpm) |
| Maximum speed | 2100 rpm | |

3) FAN + BRAKE PUMP

| Item | Specification |
|----------------------------|--------------------------|
| Туре | Variable piston pump |
| Capacity | 28 cc/rev |
| Maximum operating pressure | 250 kgf/cm² (3560 psi) |
| Rated oil quantity | 80 l /min (21.1 U.S.gpm) |
| Maximum speed | 2100 rpm |

4) MAIN CONTROL VALVE

| Item | Specification |
|---------------------------------------|------------------------|
| Туре | 2 spool |
| Operating method | Hydraulic pilot assist |
| Main relief valve pressure | 280 kgf/cm² (3980 psi) |
| Overload relief valve pressure | 340 kgf/cm² (4840 psi) |
| Overload relief valve pressure (dump) | 310 kgf/cm² (4410 psi) |

5) ELECTRO-HYDRAULIC BLOCK

| Item | Specification | |
|-----------------|--------------------------------------|--|
| Туре | Proportional pressure reducing valve | |
| Control current | 0~950 mA | |
| Resistance | 10.5 Ω | |
| Normal flow | 12 <i>l</i> /min (3.17 U.S.gpm) | |

6) REMOTE CONTROL VALVE (EH TYPE)

| Item | Specification | |
|-------------------|---|--|
| Туре | Fingertip | |
| Axle | Single axle for boom, bucket, auxiliary | |
| Operating voltage | 4.5~5.5 V | |
| Output signal | 0.5~4.5 V (neutral 2.5 V) | |

7) REMOTE CONTROL VALVE (FNR TYPE)

| Item | Specification | |
|----------------|---|--|
| Туре | Joystick | |
| Axle | Two axle for boom, bucket, roller for auxiliary | |
| Operating type | CAN J1939 | |
| Baud rate | 500 kbps | |

8) CYLINDER

| Item | | Specification |
|---------------------------|-----------------------------|------------------------|
| Boom cylinder | Bore dia × Rod dia × Stroke | ø 170 × ø 100 × 795 mm |
| Bucket cylinder (HL975) | Bore dia × Rod dia × Stroke | Ø 190 × Ø 100 × 565 mm |
| Bucket cylinder (HL975XT) | Bore dia × Rod dia × Stroke | Ø 190 × Ø 100 × 585 mm |
| Steering cylinder | Bore dia × Rod dia × Stroke | Ø 100 × Ø 55 × 480 mm |

9) DYNAMIC POWER TRANSMISSION DEVICES

| Item | | | Specification |
|----------------------------|-----------------|-------------------|---|
| 4-speed transmission (std) | Model | | ZF 4WG 260 |
| | Туре | Converter | Single-stage, single-phase |
| | | Transmission | Full-automatic power shift |
| | Gear shift | | Forward fourth gear, reverse third gear |
| | Control | | Electrical single lever type, kick-down system Automatic kick down from 2nd to 1st gear FNR switch on joystick lever (option) |
| | Pump rated flow | | 120 ℓ /min (31.7 U.S.gpm) at 2000 rpm |
| | Travel speed | | See the page 2-2. |
| 5-speed transmission (opt) | Model | | ZF 5WG 260 |
| | Туре | Converter | Single-stage, double-phase (with lock up clutch) |
| | | Transmission | Full-automatic power shift |
| | Gear shift | | Forward fifth gear, reverse third gear |
| | Control | | Electrical single lever type, kick-down system Automatic kick down from 2nd to 1st gear FNR switch on joystick lever (option) |
| | Pump rated flow | | 120 ℓ /min (31.7 U.S.gpm) at 2000 rpm |
| | Travel speed | Forward 1/2/3/4/5 | 6.5/11.1/17.6/25.2/40.0 km/hr |
| | | Reverse 1/2/3 | 6.5/11.1/25.2 km/hr |
| Axle | Drive devices | | 4-wheel drive |
| | Front | | Front fixed location |
| | Rear | | Oscillation ±11° of center pin-loaded |
| Wheels | Tires | | 26.5 R25, *(L3) |
| Brakes | Travel | | Four-wheel, wet-disc type, full hydraulic |
| | Parking | | Spring applied, hydraulic released brake on T/M |
| Steering | Туре | | Full hydraulic, articulated |
| | Steering angle | | 40° to both right and left angle, respectively |