HD1430 III
HD1430 III-LC
FULLY HYDRAULIC EXCAVATOR

Bucket capacity: 0.7m³ - 1.8m³ (ISO)
Engine output: 183kW/2,150min⁻¹
(249PS/2,150rpm) (ISO Net)
Operating weight: 30,200kg (HD1430III)/
31,100kg (HD1430III-LC)

Address inquiries to:

KATO WORKS CO., LTD.
9-37, Higashi-cho 1-chome, Shinagawa-ku, Tokyo 140-0011 Japan.
Tel: Head Office Tokyo (03)3458-1111
Overseas Marketing Department Tokyo (03)3458-1115
Fax: (03)3458-1152
URL: http://www.kato-works.co.jp

NOTE: Illustrations may include optional equipment. KATO products and specifications are subject to improvements and changes without notice.
Powerful Machine
Harmonized with Your Demands

High Power & Speedy Operation
- Digging force: Arm: 162 kN
  Bucket: 223 kN
- Improvement in slewing torque: 12 % up*1

Reliable Undercarriage
- Heavy-duty track guard
- Heavy-duty front idler support
- Tough track-link & shoe plate

Fatigue Free & Comfortable Cabin
- Auto air conditioner
- UV-cut glass
- Mono piece big & wide side window
- Wide range adjustable seating position
- Anti-static-electricity fabric seat

Powerful New Engine
- Max. Output: 183 kW/2,150 min-1 (ISO Net)
- Max. Torque: 831 N·m/1,800 min-1 (ISO Net)
- Improvement in fuel consumption: up to 15 %*1
  (general/H-mode)

Durable Cooling System
- High Performance radiator and aluminum oil cooler
- Easy access for cleaning

580 litter fuel tank, 18 hours continuous operation.*2

Replacement Interval of Hydraulic Oil: 5000 hours

*1 Based on the comparison with HD1430
*2 Depends on condition of machine and type of work,
Technical Specifications

ENGINE
Model: Mitsubishi 6D16-TLE2A, 4 cycle intercooler turbocharged diesel engine
Number of cylinders: 6
Bore & Stroke: 115mm x 155mm
Total displacement: 7.54 L
Rated output: 183kW/2,150min^-1 (249PS/2,150rpm)
Max. torque: 831N·m/1,800min^-1 (84.7kgf·m/1,800rpm)
Compression ratio: 17.5:1
Combustion system: Direct injection
Specific fuel consumption: 220g/kW-hour (162g/PS-hour)
Cooling system: Pressurized water circulated by a centrifugal pump with thermostat
Lubrication system: Pressurized oil fed by a gear pump through full-flow and by-pass cartridge filter
Starters: Electric, 24V-3kW
Generators: Alternator, 24V-25kW
Governors: Electric
Air cleaner: Dry type filter

SWING SYSTEM
Drive: Axial piston motor with shockless valve and reduction gear.
Brake: A hydraulic brake that locks automatically when the swing control lever is in the neutral position and a mechanical parking brake which is applied when the safety lock lever is pulled backwards, the engine is turned off or the swing control lever is in the neutral position.
Lubrication: Completely housed and grease bathed
Max. swing speed: 10.0min^-1 (100rpm)
Tail swing radius: 3,460mm
Min. front swing radius: 4,840mm

BOOM, ARM AND BUCKET
Boom cylinders: Two, double acting
Bore & Stroke: 150mm x 1,450mm
Arm cylinder: One, double acting
Bore & Stroke: 170mm x 1,840mm
Bucket cylinder: One, double acting
Bore & Stroke: 150mm x 1,230mm
Lubrication: Grease nipples, with centralized greasing for remote points
Bucket digging force: 223kN (22,800kgf)
(high power: 233kN (23,900kgf))
Arm digging force: 162kN (16,000kgf)
(high power: 170kN (17,300kgf))
Note: High power can be used with STD arm and short arm

TRAVEL SYSTEM
Drive: Independent axial piston motor with reduction for each side
Brakes: Independent disk parking brake for each side
Track shoes: 48 each side HD1430III
51 each side HD1430IIILC
Roller: 2 upper, 7 lower (8 for LC)
Track adjustment: Grease cylinders with recoil springs
Lubrication: Sealed-for-life rollers and front idlers with floating seals
Travel speed: 0~0.5~3.5km/h
Medium speed: 0~2.6km/h
Gradesability: 70% (35°)
Max. drawbar pull: 264,8kN (27,000kgf)
Ground clearance (less grouser bar): 500mm
Track length: 4,640mm HD1430III
4,970mm HD1430IIILC

HYDRAULIC SYSTEM
Pumps: Variable double piston pump and gear pump controlled by Automatic Power Control (APC) system.
Max. discharge flow: 27x30l/min
Max. discharge pressure: 31.4MPa (320kgf/cm²)
Max. discharge pressure (travel circuit only): 32.9MPa (335kgf/cm²)
Oil filtration: Full-flow filter with replaceable element, a drain cartridge filter, a pilot line filter and a suction strainer
Control valves: 5+4 section multiple control valves (with one free service circuit)
Pilot pump: Gear type
Oil cooler: Fibred tube, forced ventilation
Pressure relief valves: Primary and secondary on each circuit

SERVICE DATA
Fuel tank: 580 L
Cooling system: 36 L
Engine oil: 32 L
Track drives: 2x4.0 L
Swing drive: 11.3 L
Hydraulic oil tank (level): 280 L
In standard figure, with the 3.14m arm, 600mm grouser shoes and 1.4m² (ISO) bucket.
Operating weight: 30,200kg HD1430III
31,100kg HD1430IIILC
Ground pressure: 61kPa (0.62kgf/cm²) HD1430III
58kPa (0.59kgf/cm²) HD1430IIILC

CAB & CONTROLS
Type: At weather sound suppressed, 1,000mm wide pressed steel cab mounted on 6 point viscous coupling.
Right hand lever: Controls the boom & bucket
Left hand lever: Controls the arm & swing
Inner right hand lever (with foot peda) Controls the right hand track
Inner left hand lever (with foot pedal) Controls the left hand track
Left hand lever: Controls the arm & swing
Engine throttle: Electric "Accel dial"
Motor & gauges: Hour meter, water temperature and fuel level
Monitor display: Engine oil pressure, engine oil filter, hydraulic oil filter, hydraulic oil temperature, water temperature, water level, fuel level, battery charge, APC monitor and air cleaner.
Indicator lamps: Caution lamp & Engine preheater indicator lamp & Engine diagnosis lamp
Working lights: Provided on the boom left side and mounted on the frame

Lubrication chart: Provided in the tool box

Air conditioner control panel (optional)
### Working Ranges

**Extension Arm**

- **1,500mm**

**Bucket**

- **Type of bucket**
  - Rake hoe bucket
  - Reel bucket
  - Rock bucket
  - Ripper

- **Bucket capacity**
  - m³: 0.7, 1.1, 1.4, 1.6, 1.8
  - m³: 0.9, 1.1, 1.4, 1.6

- **Width**
  - With side cutters: 750, 1,100, 1,250, 1,400, 1,600

- **Weight**
  - 1,920 kg

- **Number of bucket teeth**
  - 3

### Lifting Capacities

**HD1430III**

<table>
<thead>
<tr>
<th>Type of Bucket</th>
<th>2.00 m</th>
<th>3.00 m</th>
<th>4.00 m</th>
<th>5.00 m</th>
<th>6.00 m</th>
<th>8.00 m</th>
<th>9.00 m</th>
<th>10.00 m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lift Height (m)</td>
<td>7.00</td>
<td>5.03</td>
<td>5.03</td>
<td>5.03</td>
<td>4.30</td>
<td>5.08</td>
<td>4.86</td>
<td></td>
</tr>
<tr>
<td>Lift Radius (m)</td>
<td>6.00</td>
<td>5.27</td>
<td>5.17</td>
<td>4.97</td>
<td>5.00</td>
<td>3.98</td>
<td>3.87</td>
<td>3.21</td>
</tr>
<tr>
<td>Lift Height (m)</td>
<td>5.00</td>
<td>2.59</td>
<td>2.59</td>
<td>2.59</td>
<td>2.52</td>
<td>2.51</td>
<td>2.43</td>
<td>2.36</td>
</tr>
<tr>
<td>Lift Radius (m)</td>
<td>3.00</td>
<td>1.60</td>
<td>1.48</td>
<td>1.43</td>
<td>1.41</td>
<td>1.19</td>
<td>1.16</td>
<td>1.02</td>
</tr>
<tr>
<td>Lift Height (m)</td>
<td>2.00</td>
<td>1.60</td>
<td>1.60</td>
<td>1.60</td>
<td>1.60</td>
<td>1.60</td>
<td>1.60</td>
<td>1.60</td>
</tr>
<tr>
<td>Lift Radius (m)</td>
<td>0.00</td>
<td>1.60</td>
<td>1.48</td>
<td>1.43</td>
<td>1.41</td>
<td>1.19</td>
<td>1.16</td>
<td>1.02</td>
</tr>
<tr>
<td>Lift Height (m)</td>
<td>8.00</td>
<td>0.77</td>
<td>0.77</td>
<td>0.77</td>
<td>0.77</td>
<td>0.77</td>
<td>0.77</td>
<td>0.77</td>
</tr>
<tr>
<td>Lift Radius (m)</td>
<td>9.00</td>
<td>0.77</td>
<td>0.77</td>
<td>0.77</td>
<td>0.77</td>
<td>0.77</td>
<td>0.77</td>
<td>0.77</td>
</tr>
</tbody>
</table>

**HD1430III-LC**

<table>
<thead>
<tr>
<th>Type of Bucket</th>
<th>2.00 m</th>
<th>3.00 m</th>
<th>4.00 m</th>
<th>5.00 m</th>
<th>6.00 m</th>
<th>8.00 m</th>
<th>9.00 m</th>
<th>10.00 m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lift Height (m)</td>
<td>7.00</td>
<td>5.39</td>
<td>5.39</td>
<td>5.39</td>
<td>5.39</td>
<td>4.38</td>
<td>5.08</td>
<td></td>
</tr>
<tr>
<td>Lift Radius (m)</td>
<td>6.00</td>
<td>5.63</td>
<td>5.63</td>
<td>5.63</td>
<td>5.63</td>
<td>4.74</td>
<td>5.49</td>
<td>4.97</td>
</tr>
<tr>
<td>Lift Height (m)</td>
<td>5.00</td>
<td>2.85</td>
<td>2.85</td>
<td>2.85</td>
<td>2.85</td>
<td>2.85</td>
<td>2.85</td>
<td>2.85</td>
</tr>
<tr>
<td>Lift Radius (m)</td>
<td>0.00</td>
<td>1.67</td>
<td>1.67</td>
<td>1.67</td>
<td>1.67</td>
<td>1.67</td>
<td>1.67</td>
<td>1.67</td>
</tr>
</tbody>
</table>

**Track Shoes**

- **Type of shoes**
  - Grouser shoe
  - Flat shoe

<table>
<thead>
<tr>
<th>Shoe Width</th>
<th>820</th>
<th>700</th>
<th>650</th>
<th>570</th>
<th>780</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Width</td>
<td>3,200</td>
<td>3,000</td>
<td>3,000</td>
<td>3,000</td>
<td>3,000</td>
</tr>
<tr>
<td>Ground Pressure (kPa)</td>
<td>HD1430III</td>
<td>51.0 (2)</td>
<td>51.0 (2)</td>
<td>51.0 (2)</td>
<td>51.0 (2)</td>
</tr>
<tr>
<td>6,000 (5)</td>
<td>68.0 (5)</td>
<td>68.0 (5)</td>
<td>68.0 (5)</td>
<td>68.0 (5)</td>
<td>68.0 (5)</td>
</tr>
<tr>
<td>Net Weight</td>
<td>S1/2</td>
<td>5.70</td>
<td>3.30</td>
<td>3.30</td>
<td>3.30</td>
</tr>
</tbody>
</table>

- **Attachable options**
  - Refilling hopper
  - Air cleaner double element
  - Water separator
  - V-belt guard
  - External escape window
  - Cab heater
  - Cab side mirror
  - Cab head guard