**Features:**
With over 300 deliveries world-wide, the Cat® 6030/6030 FS is our most popular and best-selling hydraulic mining shovel model. Along with the same advanced technology available on its larger Cat counterparts, the 6030/6030 FS provides the most powerful engine output in its class for added productivity and facilitates the mobility and flexibility you need from a 300 tonne machine. When optimally paired with our 777 or 785 Series mining trucks, you’ll experience the operational efficiency and productivity you’re looking for, supported by our unmatched Cat dealer network.

**Specifications**

**General Data**

<table>
<thead>
<tr>
<th>Operating weight</th>
<th>294 tonnes 324 tons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engine output SAE J1995</td>
<td>1140 kW 1,530 hp</td>
</tr>
<tr>
<td>Standard bucket capacity</td>
<td>16.5 m³ 21.6 yd³</td>
</tr>
<tr>
<td>Backhoe (heaped 1:1)</td>
<td>17.0 m³ 22.2 yd³</td>
</tr>
</tbody>
</table>

**Diesel Engines**

<table>
<thead>
<tr>
<th>Make and model</th>
<th>2 × Cat C27 ACERT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total rated net power – ISO 3046/1</td>
<td>1140 kW 1,530 hp</td>
</tr>
<tr>
<td>Total rated net power – SAE J1349</td>
<td>1140 kW 1,530 hp</td>
</tr>
<tr>
<td>Total rated gross power – SAE J1995</td>
<td>1140 kW 1,530 hp</td>
</tr>
</tbody>
</table>

**Features**

- TriPower shovel attachment
- Independent oil cooling system
- Spacious walk-through machine house
- 5-circuit hydraulic system
- On-board electronics system: Control and Monitoring Platform (CAMP)
- Board Control System (BCS III)
- Torque control in closed-loop swing circuit
- Automatic central lubrication system
- LED working lights

**Operating Weight**

**6030 FS**

<table>
<thead>
<tr>
<th>Standard track pads</th>
<th>1000 mm 3 ft 3 in</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating weight</td>
<td>294 300 kg 648,810 lb</td>
</tr>
<tr>
<td>Ground pressure</td>
<td>21.9 N/cm² 31.7 psi</td>
</tr>
</tbody>
</table>

**6030**

<table>
<thead>
<tr>
<th>Standard track pads</th>
<th>1000 mm 3 ft 3 in</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating weight</td>
<td>296 500 kg 653,660 lb</td>
</tr>
<tr>
<td>Ground pressure</td>
<td>22.1 N/cm² 32.0 psi</td>
</tr>
</tbody>
</table>

- Other track pads available on request
Electric Motor – 6030 AC/6030 AC FS

- Type: Squirrel cage induction motor
- Output: 1000 kW
- Voltage: 6.3 kV ± 10% (other on request)
- Rated current IN: 109A (at 6.3 kV)
- Frequency: 50 Hz (60 Hz on request)
- Revolutions: 1,500 min⁻¹ (1,800 min⁻¹ at 60 Hz)
- Starting current: 450% of IN (253% of IN optional)

Electrical System (diesel drive)

- System voltage: 24V
- Batteries in series/parallel installation: 4 × 210 Ah – 12V each
  420 Ah – 24V in total

  - Battery isolation relays
  - Emergency stop switches accessible from ground level
    and in engine module
  - 12 LED high-brightness working flood lights
    - 8 for working area
    - 2 for rear end
  - 2 LED high-brightness access flood lights
  - 14 LED service lights

Hydraulic System with Pump Managing System

- Main pumps: 4 × variable swash plate pumps
- Maximum oil flow
  - Diesel version: 4 × 552 L/min 4 × 146 gal/min
  - AC version: 4 × 543 L/min 4 × 143 gal/min
- Maximum pressure, attachment: 310 bar 4,495 psi
- Maximum pressure, travel: 360 bar 5,220 psi
- Swing pumps
  - 2 × reversible swash plate double pumps
  - Maximum oil flow
    - Diesel version: 2 × 394 L/min 2 × 104 gal/min
    - AC version: 2 × 426 L/min 2 × 113 gal/min
  - Maximum pressure, swing pumps: 350 bar 5,080 psi
- Total volume of hydraulic oil – approximately: 3500 L 925 gal
- Hydraulic tank capacity – approximately: 2500 L 660 gal

- Pump Managing System contains:
  - Electronic load limit control
  - Flow on demand from main pumps depending on joystick position
  - Automatic regulation of main pumps to zero flow without demand
  - Automatic RPM reduction of engine speed during working breaks
  - Reduced oil flow of main pumps at high hydraulic oil temperature
  - Pressure cut-off for main pumps
  - Cooling of pump transmission gear oil

Hydraulic Oil Cooling

- Oil flow of cooling pumps
  - Diesel version: 2 × 467 L/min 2 × 123 gal/min
  - AC version: 2 × 459 L/min 2 × 121 gal/min
- Diameter of fans: 2 × 1220 mm 2 × 48 in

  - Cooling system is fully independent of all main circuits, i.e. controlled
    cooling capacity is available whenever engine is running
  - Gear-type cooling pumps supplying high-volume, low-pressure
    oil to fans and aluminum coolers
  - Variable axial piston pumps supplying low-volume, high-pressure
    oil to fans
  - Fan speed is thermostatically controlled
  - Extremely high cooling efficiency to ensure optimum oil temperature

Swing System

- Swing drives: 2 compact planetary transmissions with axial
  piston motors
- Parking brakes: Wet multiple-disc brake, spring-loaded/hydraulically
  released
- Maximum swing speed
  - Diesel version: 4.6 rpm
  - AC version: 5.0 rpm
- Swing ring: Triple-race roller bearing with sealed internal gearing

  - Closed-loop swing circuit with torque control
  - Hydraulic braking of the swing motion by counteracting control
  - All raceways of swing ring as well as grease bath for internal gearing
    supplied by automatic, central lubrication system

Retractable Service Station

Retractable service station installed underneath the engine module and
easily accessible from ground.

Equipped with:

- Quick couplings for:
  - Diesel fuel
  - Engine coolant – left/right
  - Pump transmission gear oil – left/right
  - Engine oil – left/right
  - Hydraulic oil tank
  - Grease container
- Cat jump-start socket
- Indicator lights for fuel tanks left/right full and grease container full
**Operator’s Cab**

**Operator’s eye level – approximately** 6.5 m 21 ft 4 in

**Internal dimensions of cab**
- Length 2200 mm 7 ft 3 in
- Width 1600 mm 5 ft 3 in
- Height 2150 mm 7 ft 1 in

- Under roof mounted heating ventilating and air conditioning system
- Pneumatically cushioned and multi-adjustable comfort seat with lumbar support, seat heating, safety belt, head- and armrests
- Switch in seat cushion to automatically neutralize the hydraulic controls when operator leaves the seat
- Joystick controls integrated in independently adjustable seat consoles
- Fold-away auxiliary seat with safety belt
- FOPS (rock guard; approved according to DIN ISO 3449) integrated into cab structure
- All-round safety glass, armored windshield and sliding side window
- Windshield with parallel intermittent wiper/washer
- Roller blinds at all windows
- External sun shields at side and rear windows
- Robust instrument panel including large colored BCS screen with transflective technology
- Board Control System (BCS) electronic monitoring and data logging system for vital signs and service data of engines, hydraulic system and lubrication system
- Machine access via retractable access stairway, stairway angle approximately 45°, hydraulically operated
- Sliding emergency ladder (kick-down type) with ladder cage

**Undercarriage**

**Travel speed (2 stages)**
- 1st stage – maximum 1.4 km/h 0.87 mph
- 2nd stage – maximum 2.7 km/h 1.68 mph
- Maximum tractive force 1637 kN 367,880 lbf
- Gradeability of travel drives – approximate 64%
- Track pads (each side) 47
- Bottom rollers (each side) 7
- Support rollers (each side) 2 plus a skid plate in between
- Travel drives (each side) 1 planetary transmission with 2 two-stage axial piston motors

**Parking brakes**
- Wet multiple disc brake, spring loaded/hydraulically released

- Cast double-grouser combined pad-links with bushings connected by hardened full floating pins
- All running surfaces of sprockets, idlers, rollers and pad links, as well as teeth contact areas of sprocket and pad links, are hardened
- Fully hydraulic self-adjusting track tensioning system with membrane accumulator
- Automatic hydraulic retarder valve to prevent over-speed on downhill travel
- Acoustic travel alarm

**Automatic Lubrication System**

**Capacity of grease container** 450 L 120 gal

- Dual-circuit system with hydraulically driven heavy-duty pump and electronic time relay control to adjust the pause/lube times
- Connected to the lubrication system are the swing roller bearing with internal gearing and all pivot points of attachment, bucket and cylinders
- Lubricated pinion for greasing of internal gearing of swing ring
- System failures displayed by Board Control System
- Grease filters (200 μm) between service station and container as well as directly behind grease pump

**Attachments**

- Booms and sticks are torsion-resistant, welded box design of high-tensile steel with solid steel castings at pivot areas
- Welding procedures allow for internal counter-welding (double prep weld) wherever possible
- Booms and sticks are stress-relieved after welding
- Catwalks with rails at booms
- Pressure-free lowering of boom (FS and BH) and stick (FS) by means of a float valve
- Shovel attachment with unique TriPower kinematics ensuring the following main features:
  - Horizontal automatic constant-angle bucket guidance
  - Vertical automatic constant-angle bucket guidance
  - Automatic roll-back limiter to prevent material spillage
  - Kinematic assistance to hydraulic forces
  - Constant boom momentum throughout the whole lift arc
  - Crowd force assistance
- All buckets (FS and BH) are equipped with a wear package consisting of:
  - Special liner material covering main wear areas inside and outside of bucket
  - Lip shrouds between teeth
  - Wing shrouds on side walls
  - Heel shrouds at bottom edges
- Special wear packages for highly abrasive materials on request
Dimensions (All dimensions are approximate. Dimensions and weights of AC machine differ slightly. Separate drawings, dimensions and weights can be provided upon request.)

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6500 mm</td>
</tr>
<tr>
<td>2</td>
<td>2170 mm</td>
</tr>
<tr>
<td>3</td>
<td>4970 mm</td>
</tr>
<tr>
<td>4</td>
<td>1940 mm</td>
</tr>
<tr>
<td>5</td>
<td>880 mm</td>
</tr>
<tr>
<td>6</td>
<td>6010 mm</td>
</tr>
<tr>
<td>7</td>
<td>7660 mm</td>
</tr>
<tr>
<td>8</td>
<td>6450 mm</td>
</tr>
<tr>
<td>9</td>
<td>6310 mm</td>
</tr>
<tr>
<td>10</td>
<td>7420 mm</td>
</tr>
<tr>
<td>11</td>
<td>5300 mm</td>
</tr>
<tr>
<td>12</td>
<td>1000 mm</td>
</tr>
<tr>
<td>13</td>
<td>5800 mm</td>
</tr>
<tr>
<td>14</td>
<td>7620 mm</td>
</tr>
</tbody>
</table>

OPTIONAL EQUIPMENT

GENERAL
- Export crating
- Custom paint

SUPERSTRUCTURE
- C27 ACERT engines meet U.S. EPA Tier 4 Interim equivalent emission standards
- Oil change interval extension for engine oil up to 1,000 hours
- Hydraulic service crane on superstructure with auxiliary engine

CAB
- Round container for a standard 200 L (53 gal) grease barrel (instead of 450 L (119 gal) grease container)
- Cold-weather package
- Cab heating
- Dual (redundancy) HVAC system
- Camera monitoring system
- Windshield guard (FOGS)

UNDERCARRIAGE
- Track pad width 800 mm (2 ft 7 in) or 1200 mm (3 ft 11 in)
- Cover plate under carbody (belly plate)

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at www.cat.com

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