"Reducing Total Operating Costs" with Komatsu Innovative Technologies

The fusion of advanced engines and Komatsu’s unique hydraulic system enables the new CX50 series to achieve a significant reduction in the total operation costs and facilitates superior work performance. Our innovative machines challenge the conventional concept of the forklift.

Diesel Engine Truck
An optimum engine achieves low fuel consumption and high performance.

Gasoline Engine Truck
A fully electronically controlled engine with a 3-way catalytic system conforms to the latest emission regulations.

Komatsu’s Hydraulic System and the NEW Diesel Engine reduce the Fuel Consumption

In order to minimize hydraulic loss and reduce the engine load, the new CX50 Series adopts the CLSS hydraulic system, a proven technology of Komatsu construction machines. The compact 3.3-liter engine features superior performance and achieves up to 20% less fuel consumption.

The "CLSS" contributes to Low Fuel Consumption and High Productivity

The hydraulic load is automatically detected and only the appropriate amount of oil is supplied via a variable displacement pump. This system eliminates the loss of hydraulic oil and reduces the engine load.

Fixed amount of oil is supplied from the gear pump and excess oil is returned to the hydraulic oil tank. This resulted in increased engine load.

Greatly Reduced Total Operating Costs (Diesel)

The sealed wet disc brakes can withstand about 10,000* hours operation without maintenance and eliminating frequent brake shoe replacements. The engine oil replacement interval has been extended to 300 hours, which reduces oil costs. The reduced maintenance costs and significant fuel saving provide a total operating cost reduction of about 14% over eight years of usage. A periodical check and oil replacement is recommended.

Komatsu genuine engine oil is recommended.

■ Running cost (Accumulated costs for 8 years) assuming 1,000 hours per year:

- Fuel costs: Max. 20% saving
- Brake maintenance costs: Max. 36% saving
- Engine oil costs: Max. 48% saving

Total operating cost: Approx. 14% saving (8 years)

The Advanced Technology offers Reduced CO2 Emissions (Diesel)

The diesel models feature the SAA4D95LE-5 A engine in combination with the efficient CLSS hydraulic system, enabling them to reduce annual CO2 emissions by about 6.5 tons.

The "CLSS" contributes to Low Fuel Consumption and High Productivity

The hydraulic load is automatically detected and only the appropriate amount of oil is supplied via a variable displacement pump. This system eliminates the loss of hydraulic oil and reduces the engine load.

Fixed amount of oil is supplied from the gear pump and excess oil is returned to the hydraulic oil tank. This resulted in increased engine load.

Greatly Reduced Total Operating Costs (Diesel)

The sealed wet disc brakes can withstand about 10,000* hours operation without maintenance and eliminating frequent brake shoe replacements. The engine oil replacement interval has been extended to 300 hours, which reduces oil costs. The reduced maintenance costs and significant fuel saving provide a total operating cost reduction of about 14% over eight years of usage. A periodical check and oil replacement is recommended.

Komatsu genuine engine oil is recommended.

■ Running cost (Accumulated costs for 8 years) assuming 1,000 hours per year:

- Fuel costs: Max. 20% saving
- Brake maintenance costs: Max. 36% saving
- Engine oil costs: Max. 48% saving

Total operating cost: Approx. 14% saving (8 years)

The Advanced Technology offers Reduced CO2 Emissions (Diesel)

The diesel models feature the SAA4D95LE-5 A engine in combination with the efficient CLSS hydraulic system, enabling them to reduce annual CO2 emissions by about 6.5 tons.

The "CLSS" contributes to Low Fuel Consumption and High Productivity

The hydraulic load is automatically detected and only the appropriate amount of oil is supplied via a variable displacement pump. This system eliminates the loss of hydraulic oil and reduces the engine load.

Fixed amount of oil is supplied from the gear pump and excess oil is returned to the hydraulic oil tank. This resulted in increased engine load.

Greatly Reduced Total Operating Costs (Diesel)

The sealed wet disc brakes can withstand about 10,000* hours operation without maintenance and eliminating frequent brake shoe replacements. The engine oil replacement interval has been extended to 300 hours, which reduces oil costs. The reduced maintenance costs and significant fuel saving provide a total operating cost reduction of about 14% over eight years of usage. A periodical check and oil replacement is recommended.

Komatsu genuine engine oil is recommended.

■ Running cost (Accumulated costs for 8 years) assuming 1,000 hours per year:

- Fuel costs: Max. 20% saving
- Brake maintenance costs: Max. 36% saving
- Engine oil costs: Max. 48% saving

Total operating cost: Approx. 14% saving (8 years)

The Advanced Technology offers Reduced CO2 Emissions (Diesel)

The diesel models feature the SAA4D95LE-5 A engine in combination with the efficient CLSS hydraulic system, enabling them to reduce annual CO2 emissions by about 6.5 tons.
Superior "Productivity" and "Reliability" satisfy demanding operations

Durable Wet Disc Brakes to withstand Severe Conditions

The wet disc brake is sealed with oil to block dust penetration, providing durable, water resistant and fade resistant characteristics. Smooth, stable braking provides "Productivity" and "Reliability" in demanding operation.

A Cooling System to achieve Increased Braking Stability

The oil in the wet disc brake system is circulated through the brake oil cooler. This mechanism ensures stable braking under a heavy work load and prevents deterioration of the braking force due to raised oil temperatures.

A Cushion Valve improves the Brake Feeling

Komatsu's unique cushion valve enables a controlled braking force that precisely reflects the pressure on the brake pedal. The braking behavior is thus improved.

First-class Productivity is achieved

First-class Cycle Time

The diesel models adopt a compact 3.3-liter engine with the advanced CLSS hydraulic system to achieve high productivity and a first-class cycle time. The gasoline engine model also achieves a superior cycle.

The CLSS enables Lifting at Low Engine RPMs

The CLSS makes it possible to lift the load for fine height adjustment without increasing the engine speed.

Improved Reliabilities for the Hydraulic and Electrical Systems

The main hydraulic pipe connectors are face-sealed using O-rings. Waterproof connectors are provided to the main harnesses and the system controller in order to provide higher resistance to water and dust. Hydraulic and electrical piping systems are in separate configurations to improve the reliability and servicing.

Engine Protection for Maintaining the Engine in Top Condition

The electronic engine controls upgrade the performance of the engine protection (fail-safe functions).

Trouble diagnosis: Engine malfunctions are automatically detected and an alarm lamp blinks.

Overheating prevention (Diesel): The engine output and RPMs are reduced when the coolant temperature is high.

Automatic engine warm-up (Diesel): The RPMs are accelerated to warm up the engine at low temperatures.

Engine failure indicator

Fully Hydrostatic Power Steering for Superb Maneuver

The FHPS (Fully Hydrostatic Power Steering) mechanism facilitates fully stationary steering as well as switchback operations using the small diameter steering wheel. The system has a superior response capability so that the operator can pick up or place cargo flexibly even in a narrow space. In addition, steering knob synchro-function is available.

Excellent Durability for Demanding Work

Rugged Design with High Rigidity

The high rigidity mast, front and rear axles ensure outstanding reliability even when performing heavy-duty work.

Frame

A heavy mast rail profile for excellent rigidity.

[Front]

Increased thickness of the counterweight mounting section.

[Rear]

The durability of the Power Steering cylinders is improved.

Improved Reliabilities for the Hydraulic and Electrical Systems

The main hydraulic pipe connectors are face-sealed using O-rings. Waterproof connectors are provided to the main harnesses and the system controller in order to provide higher resistance to water and dust. Hydraulic and electrical piping systems are in separate configurations to improve the reliability and servicing.

Engine Protection for Maintaining the Engine in Top Condition

The electronic engine controls upgrade the performance of the engine protection (fail-safe functions).

Trouble diagnosis: Engine malfunctions are automatically detected and an alarm lamp blinks.

Overheating prevention (Diesel): The engine output and RPMs are reduced when the coolant temperature is high.

Automatic engine warm-up (Diesel): The RPMs are accelerated to warm up the engine at low temperatures.

Engine failure indicator

First-class Cycle Time

The diesel models adopt a compact 3.3-liter engine with the advanced CLSS hydraulic system to achieve high productivity and a first-class cycle time. The gasoline engine model also achieves a superior cycle.

The CLSS enables Lifting at Low Engine RPMs

The CLSS makes it possible to lift the load for fine height adjustment without increasing the engine speed.

Reduced engine RPM in the following cases:

- Fine adjustment of fork height
- Fine adjustment for side shifting
- Lifting forks tips before stacking

The CLSS enables advantages such as:

- Smooth traveling during hydraulic operation
- Superior productivity is also featured when fitted with attachments
- Fuel consumption reduction up to 20% (Diesel)

Fully Hydrostatic Power Steering for Superb Maneuver

The FHPS (Fully Hydrostatic Power Steering) mechanism facilitates fully stationary steering as well as switchback operations using the small diameter steering wheel. The system has a superior response capability so that the operator can pick up or place cargo flexibly even in a narrow space. In addition, steering knob synchro-function is available.

First-class Productivity is achieved

First-class Cycle Time

The diesel models adopt a compact 3.3-liter engine with the advanced CLSS hydraulic system to achieve high productivity and a first-class cycle time. The gasoline engine model also achieves a superior cycle.

The NEW CX50 Series achieves high productivity equivalent to the previous CX Series.

The CLSS enables Lifting at Low Engine RPMs

The CLSS makes it possible to lift the load for fine height adjustment without increasing the engine speed.

Reduced engine RPM in the following cases:

- Fine adjustment of fork height
- Fine adjustment for side shifting
- Lifting forks tips before stacking

The CLSS enables advantages such as:

- Smooth traveling during hydraulic operation
- Superior productivity is also featured when fitted with attachments
- Fuel consumption reduction up to 20% (Diesel)

Fully Hydrostatic Power Steering for Superb Maneuver

The FHPS (Fully Hydrostatic Power Steering) mechanism facilitates fully stationary steering as well as switchback operations using the small diameter steering wheel. The system has a superior response capability so that the operator can pick up or place cargo flexibly even in a narrow space. In addition, steering knob synchro-function is available.

First-class Productivity is achieved

First-class Cycle Time

The diesel models adopt a compact 3.3-liter engine with the advanced CLSS hydraulic system to achieve high productivity and a first-class cycle time. The gasoline engine model also achieves a superior cycle.

The NEW CX50 Series achieves high productivity equivalent to the previous CX Series.

The CLSS enables Lifting at Low Engine RPMs

The CLSS makes it possible to lift the load for fine height adjustment without increasing the engine speed.

Reduced engine RPM in the following cases:

- Fine adjustment of fork height
- Fine adjustment for side shifting
- Lifting forks tips before stacking

The CLSS enables advantages such as:

- Smooth traveling during hydraulic operation
- Superior productivity is also featured when fitted with attachments
- Fuel consumption reduction up to 20% (Diesel)

Fully Hydrostatic Power Steering for Superb Maneuver

The FHPS (Fully Hydrostatic Power Steering) mechanism facilitates fully stationary steering as well as switchback operations using the small diameter steering wheel. The system has a superior response capability so that the operator can pick up or place cargo flexibly even in a narrow space. In addition, steering knob synchro-function is available.
Advanced Design in Pursuit of "Safety and Comfort"

**Effective Safety Mechanisms**

"Operator Presence Sensing system"
The Operator Presence Sensing system incorporates a Lifting/Traveling interlocking function. This is a safety function for disabling traveling and lifting mechanisms when the operator is not correctly occupying the seat. An alarm buzzer sounds if the operator leaves the seat while traveling.

Parking Brake Alarm
A double-actuated type brake lever prevents mishandling

A Neutral Start Function for Preventing a Sudden Start
The engine cannot be started unless the F-R switch is in the neutral position.

ISO-Compliant Enhanced Overhead Guard for Operator's Protection

A Safety Mechanism that prevents starting the engine unless the brake pedal is pressed

**Secure Operation Controls Improve Operator Work Efficiency**

Secure Lever Controls with Minimum Movement
Finger-tip operation with the electric F/R lever

A Smaller Steering Wheel Permits Widened Front Visibility
Use of a smaller steering wheel and redesign of the dashboard have improved the visibility of the bottom of the fork, thus further facilitating the lifting operation.

Steering wheel diameter: 300 mm

Improved Brake Feeling
Komatsu's unique cushion valve enables control of the braking force in proportion to the pressure on the brake pedal and improves the brake feeling.

**Comfortable & Fatigue-Free Operation Even Over Long-Hour Operation**

Dual Floating Structure Reduces Vibrations
A unique dual vibration cushioning mechanism reduces vibrations in the compartment, steering wheel, control levers and the mast. Any vibrations transmitted from the engine or road surface are quickly absorbed. The mechanism is friendly to both operator and load.

Suspension Seat for Improved Comfort at Work
The deluxe suspension seat features improved vibration resistance and reduces the burden on the body.

**Comfortable Reversing by Preventing Exposure to Hot Air/Exhaust Gas**
Two countercurrent air outlets are provided on the left and right sides and an exhaust pipe outlet is provided at a lower position so that the operator is not exposed to hot air from radiator or to exhaust gasses when reversing.

Clean Exhaust Air with a 3-Way Catalytic System (Gasoline)
The 3-way catalytic system purifies the nitrogen oxide (NOx), hydrocarbons (HC) and carbon monoxide (CO) emissions.

The Low Noise Design
The low noise design of the engine and the fully sealed floor reduce offending noise volumes during operation.

Wide Opening Engine Hood with a Lock for Easy Servicing

Wide Opening Engine Hood
Wide Opening Engine Hood

Easy Radiator Cleaning
A fully-opening door plate.

Careful Design Facilitates Inspection and Servicing

Simple and easy access to the engine is provided for maintenance and cleaning.

Filter Layout Optimization for Improved Serviceability
A fully-opening door plate.
**Compact model**

- This model is designed specfically for operating in restricted spaces. The load center is 500 mm.

**Standard model**

- This model is designed to perform a broad range of general-purpose applications. The load center is 600 mm.

**Optional Specification Truck**

- LPG specification truck
  - Komatsu offers both single fuel (LPG) and dual fuel systems (LPG/Gasoline) for the LPG Specification truck.

**Mast**

- 3-stage free view mast
  - The mast enables a wide view with excellent forward visibility.
- 3-stage full free view mast
  - This is ideal for sites with height limitations, where the large free lift is required.
- 3-stage free view mast
  - The mast extends in three stages and high level loading is easily performed.

**Attachments**

- **Side shifter**
  - The fork may be shifted sideways together with its backrest, both to the right and to the left.
- **Fork positioner**
  - The operator is able to adjust the fork spread width from the operator’s seat.
- **Hinged fork**
  - The fork is hinged upward using its hinge as a fulcrum.
- **Load stabilizer**
  - The load is securely held from the bottom by the pressure plate of the load stabilizer.
- **Bale clamp**
  - This attachment is recommended for handling packaged pulp or raw cotton. The bale is efficiently held from both sides by the bale clamps.
- **Fork clamp**
  - This attachment is effective for handling packaged cotton and rough textile loads by grabbing them firmly from both sides.
- **Block clamp**
  - This attachment can pick up concrete blocks without using pallets.
- **Rotating fork**
  - Used together with the fork inserted container, this attachment is used for transporting items such as powder, fluids, etc. The fork is rotated in order to discharge the load.
- **Roll clamp**
  - Rolls of paper or cylindrical objects are safely and securely handled by this attachment. It is possible to rotate the clamped load through 360 degrees.
- **Rolling fork**
  - This attachment can pick up concrete blocks without using pallets.
- **Fork positioner**
  - The operator is able to adjust the fork spread width from the operator’s seat.

**Options**

- **Engine & power train related**
  - Bypass fuel filter
  - Pre-cleaner
  - Spark arrester
  - Power steering cylinder protector plate
  - Fuel cap with key
  - Seat heater
  - Front glass with wiper
  - Rear view mirror (pair)
  - Rear overhead guard cover
  - Fire extinguisher
- **Electrical equipment**
  - Back-up chime
  - Mast mount type head lights
  - Rear working light
  - Yellow strobe light
  - Red strobe light
- **Meters & gauges**
  - Air cleaner element warning lamp
  - Fuel level warning lamp
  - Cooling water level warning lamp
  - Battery electrolyte level warning lamp
  - Speedometer with alarm
  - Load checker
  - Mast tilt angle gauge
  - Individual key switch
- **Tyre-related**
  - Elastic cushion tyre
  - Color non-marking tyre
  - Double front tyre
  - Upward exhaust muffler
  - Front glass with wiper

### Major equipment

<table>
<thead>
<tr>
<th>Engine</th>
<th>Diesel</th>
<th>Gasoline/LPG</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLSS (Closed-center Load Sensing System)</td>
<td><img src="CLSS.png" alt="Image" /></td>
<td><img src="CLSS.png" alt="Image" /></td>
</tr>
<tr>
<td>Wet disc brake</td>
<td><img src="WDB.png" alt="Image" /></td>
<td><img src="WDB.png" alt="Image" /></td>
</tr>
<tr>
<td>EPA Tier 3/EEU Stage III compliant Diesel engine</td>
<td><img src="EPA.png" alt="Image" /></td>
<td><img src="EPA.png" alt="Image" /></td>
</tr>
<tr>
<td>EPA Tier 2 compliant Gasoline engine</td>
<td><img src="EPA.png" alt="Image" /></td>
<td><img src="EPA.png" alt="Image" /></td>
</tr>
<tr>
<td>Electronic engine control system</td>
<td><img src="EECS.png" alt="Image" /></td>
<td><img src="EECS.png" alt="Image" /></td>
</tr>
<tr>
<td>Heavy duty High Pressure Common Rail system</td>
<td><img src="HDP.png" alt="Image" /></td>
<td><img src="HDP.png" alt="Image" /></td>
</tr>
<tr>
<td>Gear combination system</td>
<td><img src="GCS.png" alt="Image" /></td>
<td><img src="GCS.png" alt="Image" /></td>
</tr>
<tr>
<td>Air to air charge air cooling system</td>
<td><img src="AAC.png" alt="Image" /></td>
<td><img src="AAC.png" alt="Image" /></td>
</tr>
<tr>
<td>Overheat prevention function</td>
<td><img src="OP.png" alt="Image" /></td>
<td><img src="OP.png" alt="Image" /></td>
</tr>
<tr>
<td>Auto engine warm-up function</td>
<td><img src="AEWF.png" alt="Image" /></td>
<td><img src="AEWF.png" alt="Image" /></td>
</tr>
<tr>
<td>Auto air pre heat function</td>
<td><img src="AAPH.png" alt="Image" /></td>
<td><img src="AAPH.png" alt="Image" /></td>
</tr>
<tr>
<td>Slow catalytic system</td>
<td><img src="SCS.png" alt="Image" /></td>
<td><img src="SCS.png" alt="Image" /></td>
</tr>
<tr>
<td>Ampere capacity radiator</td>
<td><img src="ACR.png" alt="Image" /></td>
<td><img src="ACR.png" alt="Image" /></td>
</tr>
<tr>
<td>Dual floating structure</td>
<td><img src="DFS.png" alt="Image" /></td>
<td><img src="DFS.png" alt="Image" /></td>
</tr>
<tr>
<td>New operator’s seat with suspension</td>
<td><img src="EOS.png" alt="Image" /></td>
<td><img src="EOS.png" alt="Image" /></td>
</tr>
<tr>
<td>Small diameter steering wheel</td>
<td><img src="SDS.png" alt="Image" /></td>
<td><img src="SDS.png" alt="Image" /></td>
</tr>
<tr>
<td>Tiltable steering column</td>
<td><img src="TSC.png" alt="Image" /></td>
<td><img src="TSC.png" alt="Image" /></td>
</tr>
<tr>
<td>Electric forward/reverse lever</td>
<td><img src="EFR.png" alt="Image" /></td>
<td><img src="EFR.png" alt="Image" /></td>
</tr>
<tr>
<td>Combination switch (turn signal light &amp; light switch)</td>
<td><img src="CS.png" alt="Image" /></td>
<td><img src="CS.png" alt="Image" /></td>
</tr>
<tr>
<td>Indicato auto return mechanism</td>
<td><img src="IARM.png" alt="Image" /></td>
<td><img src="IARM.png" alt="Image" /></td>
</tr>
<tr>
<td>Full-open step</td>
<td><img src="FOS.png" alt="Image" /></td>
<td><img src="FOS.png" alt="Image" /></td>
</tr>
<tr>
<td>Paper binder at engine hood</td>
<td><img src="PBH.png" alt="Image" /></td>
<td><img src="PBH.png" alt="Image" /></td>
</tr>
<tr>
<td>Glove box at dashboard</td>
<td><img src="GB.png" alt="Image" /></td>
<td><img src="GB.png" alt="Image" /></td>
</tr>
<tr>
<td>Meter panel</td>
<td><img src="MP.png" alt="Image" /></td>
<td><img src="MP.png" alt="Image" /></td>
</tr>
<tr>
<td>Boom meter (Up/Depth)</td>
<td><img src="BMW.png" alt="Image" /></td>
<td><img src="BMW.png" alt="Image" /></td>
</tr>
<tr>
<td>Engine cooling water temperature gauge</td>
<td><img src="ECT.png" alt="Image" /></td>
<td><img src="ECT.png" alt="Image" /></td>
</tr>
<tr>
<td>Turbo converter oil temperature gauge</td>
<td><img src="TCT.png" alt="Image" /></td>
<td><img src="TCT.png" alt="Image" /></td>
</tr>
<tr>
<td>Fuel gauge</td>
<td><img src="FG.png" alt="Image" /></td>
<td><img src="FG.png" alt="Image" /></td>
</tr>
<tr>
<td>Lifting interlock lamp</td>
<td><img src="LIL.png" alt="Image" /></td>
<td><img src="LIL.png" alt="Image" /></td>
</tr>
<tr>
<td>Engine oil pressure warning lamp</td>
<td><img src="EOPL.png" alt="Image" /></td>
<td><img src="EOPL.png" alt="Image" /></td>
</tr>
<tr>
<td>Charge warning lamp</td>
<td><img src="CWL.png" alt="Image" /></td>
<td><img src="CWL.png" alt="Image" /></td>
</tr>
<tr>
<td>Neutral indicator</td>
<td><img src="NI.png" alt="Image" /></td>
<td><img src="NI.png" alt="Image" /></td>
</tr>
<tr>
<td>Parking indicator</td>
<td><img src="PI.png" alt="Image" /></td>
<td><img src="PI.png" alt="Image" /></td>
</tr>
<tr>
<td>Engine failure indicator</td>
<td><img src="EFI.png" alt="Image" /></td>
<td><img src="EFI.png" alt="Image" /></td>
</tr>
<tr>
<td>Brake fluid pressure warning buzzer</td>
<td><img src="BFW.png" alt="Image" /></td>
<td><img src="BFW.png" alt="Image" /></td>
</tr>
<tr>
<td>Air cleaner element warning lamp</td>
<td><img src="ACEWL.png" alt="Image" /></td>
<td><img src="ACEWL.png" alt="Image" /></td>
</tr>
<tr>
<td>Fuel level warning lamp</td>
<td><img src="FLWL.png" alt="Image" /></td>
<td><img src="FLWL.png" alt="Image" /></td>
</tr>
<tr>
<td>Cooling water level warning lamp</td>
<td><img src="CWLL.png" alt="Image" /></td>
<td><img src="CWLL.png" alt="Image" /></td>
</tr>
<tr>
<td>Battery electrolyte level warning lamp</td>
<td><img src="BELL.png" alt="Image" /></td>
<td><img src="BELL.png" alt="Image" /></td>
</tr>
<tr>
<td>Glow indicator</td>
<td><img src="GI.png" alt="Image" /></td>
<td><img src="GI.png" alt="Image" /></td>
</tr>
<tr>
<td>Large capacity alternator</td>
<td><img src="LCA.png" alt="Image" /></td>
<td><img src="LCA.png" alt="Image" /></td>
</tr>
<tr>
<td>Quick auto idle system</td>
<td><img src="QAINS.png" alt="Image" /></td>
<td><img src="QAINS.png" alt="Image" /></td>
</tr>
<tr>
<td>Neutral start function</td>
<td><img src="NSF.png" alt="Image" /></td>
<td><img src="NSF.png" alt="Image" /></td>
</tr>
<tr>
<td>Auto lock</td>
<td><img src="AL.png" alt="Image" /></td>
<td><img src="AL.png" alt="Image" /></td>
</tr>
<tr>
<td>Low maintenance battery</td>
<td><img src="LMB.png" alt="Image" /></td>
<td><img src="LMB.png" alt="Image" /></td>
</tr>
<tr>
<td>Engine key stop function</td>
<td><img src="EKSF.png" alt="Image" /></td>
<td><img src="EKSF.png" alt="Image" /></td>
</tr>
<tr>
<td>Heiligon headlight</td>
<td><img src="HHL.png" alt="Image" /></td>
<td><img src="HHL.png" alt="Image" /></td>
</tr>
<tr>
<td>Rear combination light</td>
<td><img src="RC.png" alt="Image" /></td>
<td><img src="RC.png" alt="Image" /></td>
</tr>
<tr>
<td>Back-up buzzer</td>
<td><img src="BB.png" alt="Image" /></td>
<td><img src="BB.png" alt="Image" /></td>
</tr>
<tr>
<td>Operator Presence Scanning System</td>
<td><img src="OPSSS.png" alt="Image" /></td>
<td><img src="OPSSS.png" alt="Image" /></td>
</tr>
<tr>
<td>Cabinet with pump ( Diesel )</td>
<td><img src="CM.png" alt="Image" /></td>
<td><img src="CM.png" alt="Image" /></td>
</tr>
<tr>
<td>Cyclone air cleaner ( double element )</td>
<td><img src="CA.png" alt="Image" /></td>
<td><img src="CA.png" alt="Image" /></td>
</tr>
<tr>
<td>Parking brake with release button</td>
<td><img src="PB.png" alt="Image" /></td>
<td><img src="PB.png" alt="Image" /></td>
</tr>
<tr>
<td>Fully hydraulic power steering</td>
<td><img src="FP.png" alt="Image" /></td>
<td><img src="FP.png" alt="Image" /></td>
</tr>
<tr>
<td>Steering knob synchronizer function</td>
<td><img src="SKSF.png" alt="Image" /></td>
<td><img src="SKSF.png" alt="Image" /></td>
</tr>
<tr>
<td>Non-collapsible parking brake (spring)</td>
<td><img src="NCPB.png" alt="Image" /></td>
<td><img src="NCPB.png" alt="Image" /></td>
</tr>
<tr>
<td>Key off tilt lock</td>
<td><img src="KOTL.png" alt="Image" /></td>
<td><img src="KOTL.png" alt="Image" /></td>
</tr>
<tr>
<td>Floor mat</td>
<td><img src="FM.png" alt="Image" /></td>
<td><img src="FM.png" alt="Image" /></td>
</tr>
<tr>
<td>Aerial grab</td>
<td><img src="AG.png" alt="Image" /></td>
<td><img src="AG.png" alt="Image" /></td>
</tr>
<tr>
<td>Overhead guard with frontliner conduct</td>
<td><img src="OG.png" alt="Image" /></td>
<td><img src="OG.png" alt="Image" /></td>
</tr>
<tr>
<td>Ride angle center mirror</td>
<td><img src="RAM.png" alt="Image" /></td>
<td><img src="RAM.png" alt="Image" /></td>
</tr>
<tr>
<td>Rear view mirror (pair)</td>
<td><img src="RVM.png" alt="Image" /></td>
<td><img src="RVM.png" alt="Image" /></td>
</tr>
<tr>
<td>Full shield cold-steel engine hood</td>
<td><img src="FSEH.png" alt="Image" /></td>
<td><img src="FSEH.png" alt="Image" /></td>
</tr>
<tr>
<td>Easy removable floor panel</td>
<td><img src="ERFP.png" alt="Image" /></td>
<td><img src="ERFP.png" alt="Image" /></td>
</tr>
<tr>
<td>Easy removable radiator cover</td>
<td><img src="ERR.png" alt="Image" /></td>
<td><img src="ERR.png" alt="Image" /></td>
</tr>
<tr>
<td>Engine hood lock</td>
<td><img src="EHL.png" alt="Image" /></td>
<td><img src="EHL.png" alt="Image" /></td>
</tr>
<tr>
<td>Radiator reservoir tank</td>
<td><img src="RRT.png" alt="Image" /></td>
<td><img src="RRT.png" alt="Image" /></td>
</tr>
<tr>
<td>Resin dashboard cover</td>
<td><img src="RDC.png" alt="Image" /></td>
<td><img src="RDC.png" alt="Image" /></td>
</tr>
<tr>
<td>Sacking points</td>
<td><img src="SP.png" alt="Image" /></td>
<td><img src="SP.png" alt="Image" /></td>
</tr>
</tbody>
</table>
### CX50 Series Specifications

#### Right angle stacking aisle width

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Width</td>
<td>900</td>
<td>1100</td>
<td>1300</td>
<td>1500</td>
<td>1400</td>
<td>1600</td>
<td>1800</td>
<td>2000</td>
<td>2200</td>
<td>2400</td>
</tr>
<tr>
<td>Height</td>
<td>800</td>
<td>1000</td>
<td>1200</td>
<td>1400</td>
<td>1300</td>
<td>1500</td>
<td>1700</td>
<td>1900</td>
<td>2100</td>
<td>2300</td>
</tr>
</tbody>
</table>

#### Key Dimensions

- **Load Center (mm):**
  - Front: 540
  - Rear: 570

- **Wheelbase (mm):**
  - F: 1400
  - R: 1500

- **Service Weight (kg):**
  - F: 5700
  - R: 5700

- **Axle Loading (kg):**
  - Front: 8075
  - Rear: 9000

#### Turning Radius (mm)

<table>
<thead>
<tr>
<th>Mode</th>
<th>F</th>
<th>G</th>
<th>S</th>
<th>A</th>
<th>F2G4A/T</th>
<th>FG2G4A/T</th>
<th>FG2G4A/T</th>
<th>FG2G4A/T</th>
<th>FG2G4A/T</th>
</tr>
</thead>
<tbody>
<tr>
<td>F2G4A/T</td>
<td>900</td>
<td>1100</td>
<td>1300</td>
<td>1500</td>
<td>1400</td>
<td>1600</td>
<td>1800</td>
<td>2000</td>
<td>2200</td>
</tr>
<tr>
<td>FG2G4A/T</td>
<td>900</td>
<td>1100</td>
<td>1300</td>
<td>1500</td>
<td>1400</td>
<td>1600</td>
<td>1800</td>
<td>2000</td>
<td>2200</td>
</tr>
<tr>
<td>FG2G4A/T</td>
<td>900</td>
<td>1100</td>
<td>1300</td>
<td>1500</td>
<td>1400</td>
<td>1600</td>
<td>1800</td>
<td>2000</td>
<td>2200</td>
</tr>
<tr>
<td>FG2G4A/T</td>
<td>900</td>
<td>1100</td>
<td>1300</td>
<td>1500</td>
<td>1400</td>
<td>1600</td>
<td>1800</td>
<td>2000</td>
<td>2200</td>
</tr>
</tbody>
</table>

#### Other Key Specifications

- **Engine:**
  - Model: SAA4D98L-E5-A
  - Rated Power: 125 kW

- **Transmission:**
  - Type: Mechanical
  - Speed: 12/45

- **Fuel Consumption:**
  - Model: FG4A/T
  - Rated Output: 98 kW

#### Load Capacity

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity</td>
<td>250</td>
<td>300</td>
<td>350</td>
<td>400</td>
<td>450</td>
<td>500</td>
<td>550</td>
<td>600</td>
<td>650</td>
<td>700</td>
</tr>
<tr>
<td>Lift Height</td>
<td>2100</td>
<td>2400</td>
<td>2700</td>
<td>3000</td>
<td>3300</td>
<td>3600</td>
<td>3900</td>
<td>4200</td>
<td>4500</td>
<td>4800</td>
</tr>
<tr>
<td>Load Capacity</td>
<td>3000</td>
<td>3500</td>
<td>4000</td>
<td>4500</td>
<td>5000</td>
<td>5500</td>
<td>6000</td>
<td>6500</td>
<td>7000</td>
<td>7500</td>
</tr>
</tbody>
</table>

---

**Note:** The table above provides a snapshot of specifications for the CX50 Series in different models. For detailed information, please refer to the manufacturer's manual or contact the authorized dealer.

---

**Problem:**

If the maximum load at the specified lift height is 3000 kg, calculate the total load capacity for a lift height of 2400 mm.

**Solution:**

Using the load capacity chart provided, for a lift height of 2400 mm, the load capacity is approximately 3500 kg. Therefore, the total load capacity for a lift height of 2400 mm is 3500 kg.

---

**Problem:**

If the turning radius at the center of wheelbase is 1200 mm, calculate the minimum turning radius for a lift height of 2800 mm.

**Solution:**

Using the turning radius chart provided, for a lift height of 2800 mm, the minimum turning radius is approximately 1300 mm.

---

**Problem:**

If the fuel consumption at 1200 rpm is 98 kW, calculate the fuel consumption at 1500 rpm.

**Solution:**

Using the fuel consumption chart provided, the fuel consumption at 1500 rpm is approximately 105 kW.