Major equipment

		DX50 Seri
	Engi	ine Diesel
Vet	disc brake	•
	EPA Tier 3/EU Stage IIIA compliant Diesel engine	•
	Electronic engine control system	•
B	Heavy duty High Pressure Common Rail system	•
Engine-related	New combustion system	•
Ē	Air to air charge air cooling system	•
5	Overheat prevention function	•
	Auto engine warm-up function	•
	Auto air pre-heat function	•
	Large capacity radiator	•
	Dual floating structure	•
3	New operator's seat with suspension	•
iraveiiiig-reiaieu	Tiltable steering column	•
Ē	Electric forward/reverse lever	•
Ê	Combination switch (turn signal light & light switch)	•
N CE	Indicator auto-return mechanism	•
σ	Wide slip-resistant step	•
	Paper binder at engine hood	•
	Meter panel	•
0	Hourmeter (6-digit)	•
Merers	Engine cooling water temperature gauge	•
Ē	Torque converter oil temperature gauge	
	Fuel gauge	
	Lifting interlock lamp	
n	Charge warning lamp	
	Neutral indicator	
salety indicators	Failure indicator	
Ĕ	Engine failure indicator	
Š	Air cleaner element warning lamp	
	Cooling water level warning lamp	
	Glow indicator	
	Large capacity alternator	
n	Quick auto glow system	
Electric components	Neutral safety function	
Ē	Auto fuse	
Ē	Low maintenance battery	
8	Engine key stop function	
Ĕ	Halogen headlight	
5	Rear combination light	
ш	Back-up buzzer	
	Operator Presence Sensing system	
	Sedimenter with priming pump	
	Cyclone air cleaner (double element)	
	Parking brake with release button	
	Fully hydrostatic power steering	
2		
σ	Steering knob synchronizer function Non-asbestos parking brake linings	0
Mechanis		
ž	Key-off lift lock	•
	Floor mat	
	Assist grip	•
	Overhead guard with front/rear conduits	•
_	Rearview mirrors (pair)	•
	Full shield solid-state engine hood	•
Exterior	Easy-removable floor panel	•
	Easy-removable radiator cover	•
ž	Engine hood lock	•
-	Radiator reservoir tank	

Komatsu Utility Tochigi Plant has been certified according to ISO 9001 Quality Management System and ISO 14001 Environmental Management System.

For other options and attachments, please consult with your Komatsu dealer. Features and specifications may vary in different countries and regions. Please contact your Komatsu dealer to confirm machine details in your region. Forklift trucks in this catalog may be shown with optional equipment Komatsu products and specifications are subject to change without notice. The performance values indicated herein represent nominal values obtained under typical operating conditions.

Komatsu Utility Co., Ltd. FORKLIFT COMPANY

Head office: 2-4-1, Shiba-koen, Minato-ku, Tokyo 105-0011, Japan URL: http://www.komatsu-utility.com Fax: +81-3-3433-3120

Options

- Engine & power train related
- Extra fuel filters
- Pre-cleaner
- Upward exhaust muffler Automatic transmission
- Steering knob synchronizer
- function

Exterior

- Canvas cabin
- Steel cabin Heater
- Air-conditioner
- Tilt cylinder boots
- Power steering cylinder boots
- Fuel cap with key
- Front glass with wiper
- Fire extinguisher
- Rear under mirror

Rear working light

Yellow strobe light

Meters & gauges

Tyre-related

Speedmeter with alarm

• Elastic cushion tyre (6.0 & 7.0 ton)

Mast tilt angle gauge

Electrical equipment

 Headlights, 2-stage (High-Low) operator's seat. Mast mount type head lights

• Fork positioner with side shifter

Fork positioner

Mast

is required.

performed.

Side shifter

• 2-stage free view mast The mast enables a wide view with

excellent forward visibility.

• 2-stage full free view mast This is ideal for sites with height

• 3-stage full free view mast

Attachments

the right and to the left.

fork spread width from the

limitations, where the large free lift

The mast extends in three stages and high level loading is easily

The fork may be shifted sideways

together with its backrest, both to

The operator is able to adjust the

The combination of fork positioner and side shifter.

• Fork positioner with side shift function

This attachment is a fork positioner which has a simultaneous fork movement function to act as a side shifter.

Hinged fork

The fork tilts up/down using its hinge as a fulcrum.

Bale clamp

This attachment is recommended for handling packed pulp or raw cotton. The bale is efficiently held from both sides by the bale clamps.





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Form No. BR-DX50emi-001-ENG Printed in Japan 0608-1-05Shi

"Reducing Total Operating Costs" with Komatsu Innovative Technologies

The fusion of advanced engines and Komatsu's unique hydraulic system enables the new DX50 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.

Komatsu's Hydraulic System and the NEW Diesel Engine Reduce the Fuel Consumption

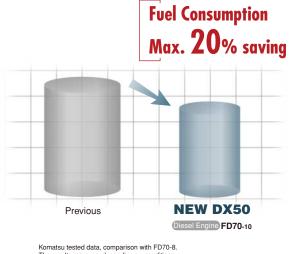
In order to minimize the engine load, the new DX50 Series adopts the Komatsu's latest hydraulic system. The compact 3.3-liter engine features superior performance and achieves up to 20% less fuel consumption.

Komatsu's Latest Hydraulic System Contributes Low Fuel Consumption

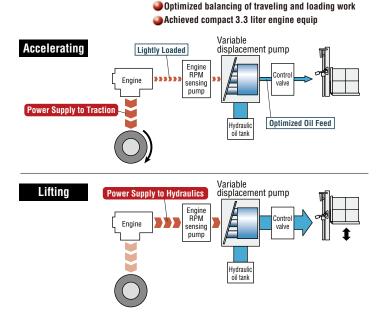
As the engine speed changes, the engine RPMs control pump detects the engine revs. and controls the oil feed to reduce the load on the engine. This hydraulic system offers optimized balancing of traveling and loading work, making it ideal for forklift operations that often put complex demands on the engine such as starting/acceleration while performing lift operations

Optimally controlled hydraulic oil results in;

(8 years)

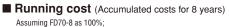


The results may vary depending on condition



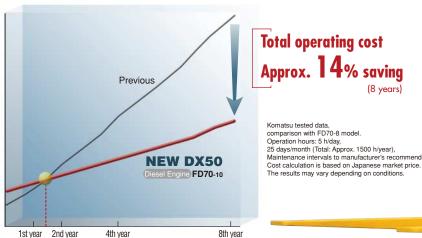
Greatly Reduced Total Operating Costs

The sealed wet disc brakes can withstand about 10,000* hours operation without maintenance and eliminating frequent brake shoes replacements. The engine oil replacement interval has been extended for 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 are necessary Komatsu genuine engine oil is recommended.



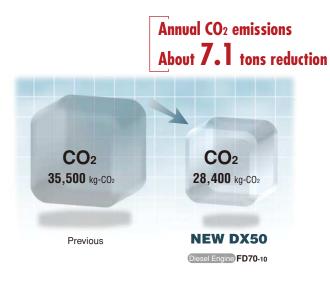


■ Total operating cost (*Image)



The Advanced Technology Offers Reduced CO₂ Emissions

The new DX50 Series feature the SAA4D95LE-5-A engine in combination with Komatsu's efficient hydraulic system. This arrangement enables a reduction in annual CO₂ emissions by about 7.1 tons.



Komatsu tested data, comparison with FD70-8 model. The CO2 emission coefficient is given in the Common Guidelines of the Japanese METI and MLIT (April 2006) The results may vary depending on conditions





An Advanced Diesel Engine Conforms to the Latest Emission Regulations

Low fuel consumption and low environmental impact are enabled by elimination of excess combustion and the use of the combined technologies of the high pressure common rail system, electronic control system, new combustion system and air to air charge air cooling system.

EPA Tier 3 / EU Stage IIIA Emission



SAA4D95LE-5-3,260 cm³ Rated Output: 69.0 kW @ 2,250 rpm Maximum Torque: 343 Nm @ 1,600 rpm

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.

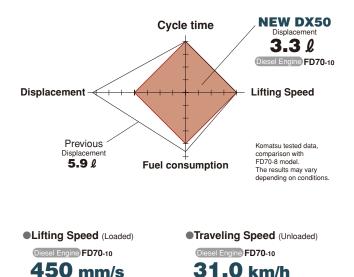


First-class Productivity is Achieved

First-class Cycle Time

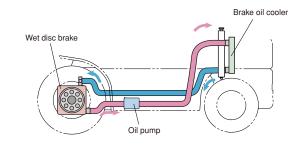
The new DX50 Series adopts a compact 3.3-liter engine in conjunction with Komatsu's advanced hydraulic system. This arrangement features high productivity and achieves a first class cycle time.

The NEW DX50 Series achieves high productivity equivalent to the previous DX20 Series.



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.



Steady breaking is always achieved.

Overheating of the brakes is prevented.

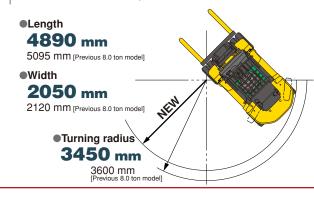
Downtime and maintenance costs are reduced.

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 synchronizer function is available as an option.

The 8.0 ton model offers a significant size reduction

The 8.0 model features a shorter wheelbase and swift mobility while maintaining the power and speed capable of achieving high productivity. The DX50 8.0 ton model is an ideal choice for confined spaces.



Excellent Durability for Demanding Work

Rugged Design with High Rigidity

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

[Mast]

A heavy mast rail profile for excellent rigidity. [Frame] The successful high rigidity structure of previous models is adopted.

[Front axle] The proven reliable design of previous models is adopted. [Rear axle] 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



Careful Design Facilitates Inspection and Servicing



Easy Radiator Cleaning





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 indicate

• Automatic air pre-heating (Diesel): The engine is automatically pre-heated when starting it at low temperatures



Engine hood locking provi







Advanced Design in Pursuit of "Safety and Comfort"

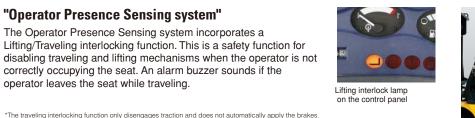
Effective Safety Mechanisms

"Operator Presence Sensing system"

operator leaves the seat while traveling.

The Operator Presence Sensing system incorporates a

correctly occupying the seat. An alarm buzzer sounds if the



*The traveling interlocking function only disengages traction and does not automatically apply the brakes. *Operator Presence Sensing system: ISO3691-1 compliant

A Neutral Safety Function for Preventing a Sudden Start

The engine cannot be started unless the F-R switch is in the neutral position.



Neutral indicator for at-a-glance

Parking Brake Alarm



A double action type brake lever vents mishandling

ISO-Compliant Enhanced Overhead Guard for Operator's Protection

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

Suspension Seat and Cab Floating Structure Absorb Vibrations

The deluxe suspension seat features improved vibration resistance and reduces the burden on the body. The cab floating structure enables the entire cab to be isolated from the frame and the rubber cushioning of the engine mounts reduces

the vibrations transmitted from the engine and road surface. The overall design concept is operator and load friendly.

· Six-step reclining backrest 170 mm slide distance backward and forward Seat cushion adjustment dial The retractable seat belt



Comfortable Braking with the Organ-type Pedal

The organ-type pedal allows an operator to control braking comfortably without lifting the heel from the floor.



70

When the operator leaves the seat,

OPS is activated

The Low Noise Design

The low-noise design of the compact engine reduces unpleasant noise levels during operation.

DX50 Series Specifications

	1.2	Model	Manu	Ifacturer	s Designation		FD60-10	FD70-10	FD80-10
S	1.3	Power Type	Electric, Diesel, Gasoline, LPG, Cable				Diesel	Diesel	Diesel
isti	1.4	Operation Type					Sitting	Sitting	Sitting
cter	1.5	Rated Capacity	Q	Q Rated Capacity			6000	7000	8000
Characteristics	1.6	Load Center	с	Rated	_oad Center	mm	600	600	600
	1.8	Load Distance	x			mm	580	585	635
	1.9	Wheelbase	у			mm	2300	2300	2300
Weight	2.1	Service Weight	-			kg	8555	9245	10910
	2.2				Front	kg	12950	14330	16565
	2.2.1 2.3	- Axle Loading	Loaded Unloaded		Rear	kg	1605	1915	2345
					Front	kg	3890	3725	4270
	2.3.1				Rear	kg	4665	5520	6640
	3.1	Туге Туре					Pneumatic	Pneumatic	Pneumatic
	3.2	>		Front			8.25-15-12PR(I)	8.25-15-14PR(I)	8.25-15-18PR
es	3.3	Tyre Size	Rear			8.25-15-12PR(I)	8.25-15-14PR(I)	8.25-15-18PR	
Tyres	3.5			Front/Rear (x=driven)			4x/2	4x/2	4x/2
	3.6	Tread, Front	b10	10		mm	1470	1470	1540
	3.7	Tread, Rear	b11	1		mm	1640	1640	1640
	4.1	Tilting Angle	α/β	Forwar	d/Backward	degree	6/12	6/12	6/12
	4.2	Mast Height, Lowered	h1			mm	2500	2585	2710
	4.3	Std. Free Lift	h2	-	Std. Mast, from Ground	mm	215	220	220
	4.4	Std. Lift Height	h3	0			3000	3000	3000
	4.5	Mast Height, Extended	h4	,			4350	4350	4350
	4.7	Height, Overhead Guard	h6	0			2440	2440	2440
	4.19	Length, with Std. Forks	L1			mm mm	4700	4785	4890
Dimensions	4.20	Length, to Fork Face		L2		mm	3480	3565	3670
sic	4.21	Width, at Tyre	b1				1980	1980	2050
ner	4.22	Forks	s/e/I Thickness x Width x Length			mm mm	65 x 150 x 1220	65 x 150 x 1220	65 x 170 x 122
ä	4.22	Fork Carriage Class	ISO 2328, Type A/B/no				Class4, A	Class4, A	Class4, A
	4.23	Width, Fork Carriage		b3			1690	1690	1800
	4.24	WIULII, FOIK Carriage	m1	Under	Moot	mm mm	220	220	235
	4.31	Ground Clearance	<u> </u>	m1 Under Mast m2 at Center of Wheelbase			295	220	235
	4.32	Dight Angle Cteching Aiele				mm mm	3830	3935	4085
	4.35	Right Angle Stacking Aisle Turning Radius		Ast Plus load length Wa			3250	3350	3450
	4.35			Loaded, 1st/2nd			11.0/29.0	11.0/29.0	11.0/26.0
	5.1	Travel Speed (FWD)	<u> </u>	Unloaded, 1st/2nd		km/h km/h	12.0/31.0	12.0/31.0	12.0/31.0
			Loaded			mm/s	500	450	400
	5.2	Lifting Speed	Unloaded			mm/s	560	500	400
Performance			Loaded			mm/s	550	480	450
mar	5.3	Lowering Speed	Unloaded			mm/s			
for	5.0	5.6 Max Drowbor Bull					580	500	500
Per	5.6	Max. Drawbar Pull		Loaded 1.5 km/h, 3 min rating			44	44	44
_	5.8	Max. Gradeability		Loaded 1.5 km/h, 3 min rating			29	29	24
	5.10	Service Brake		Operation/Type			Foot/Hydraulic	Foot/Hydraulic	Foot/Hydraulic
	5.11	Parking Brake	· ·	Operation/Control			Hand/Mechanical	Hand/Mechanical	Hand/Mechanica
	5.12	Steering	Type			V/ah	FHPS	FHPS	FHPS
	6.4	Battery	Volta	Voltage/Capacity at 5-hour rating			24/52	24/52	24/52
	7.1	Make					Komatsu	Komatsu	Komatsu
æ		Model					SAA4D95LE-5-A	SAA4D95LE-5-A	SAA4D95LE-5-A
I.C Engine	7.2	Rated Output, SAE net				kW	69	69	69
	7.3	Rated RPM				min-1	2250	2250	2250
	7.3.1	Max. Torque, SAE net				Nm@min-1	343@1600	343@1600	343@1600
	7.4	No. of Cylinder/Displacement				cm ³	4-3260	4-3260	4-3260
	7.6	Fuel Tank Capacity				Ltr	140	140	140
ŝ	8.2	Relief Pressure for Attachment					181	181	181
Others	8.2.1	Hydraulic tank Capacity				Ltr	115	115	115
5	8.7	Transmission					TORQFLOW	TORQFLOW	TORQFLOW

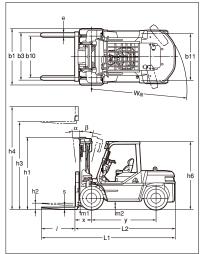
■ Bight angle stacking aisle width

L L	ength of	Width of pallet (mm)								
model	pallet (mm)	800	900	1000	1100	1200	1300	1400		
	800	5050	5050	5050	5050	5050	5050	5050		
	900	5050	5050	5050	5050	5050	5050	5050		
	1000	5050	5050	5050	5050	5050	5050	5050		
6.0t	1100	5050	5050	5050	5050	5050	5050	5050		
	1200	5050	5050	5050	5050	5050	5050	5050		
	1300	5125	5125	5125	5125	5125	5125	5125		
	1400	5225	5225	5225	5225	5225	5225	5225		
	800	5155	5155	5155	5155	5155	5155	5155		
	900	5155	5155	5155	5155	5155	5155	5155		
	1000	5155	5155	5155	5155	5155	5155	5155		
7.0t	1100	5155	5155	5155	5155	5155	5155	5155		
	1200	5155	5155	5155	5155	5155	5155	5155		
	1300	5235	5235	5235	5235	5235	5235	5235		
	1400	5335	5335	5335	5335	5335	5335	5335		
	800	5305	5305	5305	5305	5305	5305	5305		
	900	5305	5305	5305	5305	5305	5305	5305		
	1000	5305	5305	5305	5305	5305	5305	5305		
8.0t	1100	5305	5305	5305	5305	5305	5305	5305		
	1200	5305	5305	5305	5305	5305	5305	5305		
	1300	5385	5385	5385	5385	5385	5385	5385		
	1400	5485	5485	5485	5485	5485	5485	5485		

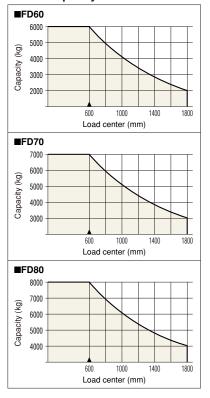
maximum	L	oad capacity (k	(g)	Overall height [Lowered / Extended*] (mm)			
fork height (mm) model	FD60	FD70	FD80	FD60	FD70	FD80	
3000	6000	7000	8000	2500/4350	2585/4350	2710/4350	
3300	6000	7000	8000	2650/4650	2735/4650	2860/4650	
3500	6000	7000	8000	2750/4850	2835/4850	2960/4850	
3700	6000	7000	8000	2850/5050	2935/5050	3060/5050	
4000	6000	7000	8000	3000/5350	3085/5350	3210/5350	
4300	6000	7000	8000	3150/5650	3235/5650	3360/5650	
4500	6000	7000	8000	3350/5850	3435/5850	3560/5850	
5000	6000	7000	8000	3700/6350	3785/6350	3910/6350	
5500	6000	6700	7700	4050/6850	4135/6850	4260/6850	
6000	5700	6500	7500	4300/7350	4385/7350	4510/7350	

B5 Aisle width shownin this table are not inclusive any operational clearance

■Dimensions



■Load capacity curve



Maximum load and overall height of mast by lifting height

* With standard load backrest