

### **7-Series Forklifts**

### Pneumatic Diesel and LPG 2.0 to 3.5 ton Series

D20/25/30/33S-7, D35C-7 Euro Stage IIIA/IIIB G20/25/30/33P-7, G35C-7 (Non-Certi/Tier III) G20N/G25N/G30N/G33N-7, G35NC-7 (Tier III)



Building your tomorrow today

# PRODUCT FEATURES OVERVIEW

### **Operator Compartment**

The newly designed operator compartment provides optimal comfort and productivity.

- Spacious Operator Compartment with lots of leg room.
- Ergonomically located pedals.
- Low cowl height for better visibility.

### Operator Sensing System (OSS)

This systems avoids any unintended forklift movements when the operator is not seated.

### Counterweight & Cooling

The newly designed counterweight shows Doosan's 7-Series design identity and allows better airflow to maximize the cooling capacity.

### Powerful Engine

Powerful and market proven engines:

- Doosan 2.4 Liter D24 NAP Euro Stage IIIB Diesel Engine
- Yanmar 3.oL Euro Stage IIIA Diesel Engine
- MMC 2.4 Liter LPG Engine for P-7-Series
- LPG: GCT K25 Tier III Engine for N-7-Series

### **Engine Hood**

The rigid steel engine hood with a wide open angle provides excellent accessibility to service components.

### Hydrostatic Steer axle

The Doosan 7-Series steer axle provides smooth steering control and durability.

### Easy to Remove Floor Plate & Mat —

The easy to remove floor plate offers great accessibility to the powertrain and other components. The thick rubber floor mat reduces noise and vibration for better operator comfort.



### Overhead Guard / Cabin (optional)

The ergonomically designed overhead guard and cabin offer great visibility and safety.

### High Visibility Mast (only for D20/25S-7/G20/25P-7)

The newly designed mast provides not only maximized operator's visibility, but also perfect mast stability.

### Adjustable Steering Column

The steering column is infinitely adjustable.

#### **New Instrument Panel**

The easily readable, integrated instrument panel provides a clear overview of the truck's status.

### Tilt Cylinder Cover

The Tilt Cylinders are covered neatly, to avoid any hindrance to the operator. Furthermore, the Tilt Cylinder Cover creates additional space at the floor of the operator compartment.

### Rigid Drive-axle with ODB

The solid one-piece cast iron housing and J-hook mounts for the mast enhances reliability for low maintenance cost.

Oil-cooled Disc Brakes (ODB) are totally enclosed and contained in a sealed unit for maximum protection against contamination. This reduces maintenance and repair time, as well as costs.









### High Powered, Fuel Efficient Engines

The Doosan D24NAP (Euro Stage IIIB) diesel engine, the Yanmar 3.oL (Euro Stage IIIA), the 2.4L MMC LPG Engine and the 2.5L GCT LPG Engine are built to meet the latetest emission regulations. They provide powerful performance and excellent fuel efficiency.

### Oil-cooled Disc Brakes

The oil-cooled disc brake system is totally enclosed, for maximum protection against contamination. This maintenance free brakes system ensures maximum uptime, less damage, and zero cost for you.

### **Powershift Transmission**

The market proven powershift transmission modulates precisely clutch oil pressure, for smooth forward and reverse directional changes, to prevent damage to the transmission and make the forklift more durable.

### Cyclone, Dual Elements Air Cleaner

The cyclone type and heavy duty dual element air filter cleaning system protects the engine against contamination. This extends the engine's service life and keeps the best engine condition in any environment.

### **Enhanced Cooling System**

The combination of a large capacity radiator and optimized airflow in the counterweight design enhances reliability and durability of the truck and increases uptime in heavy duty applications.



### ECO Mode (only available for Doosan D24NAP)

The operator can easily change the driving mode by a switch on the dashboard. The ECO mode will reduce the fuel consumption by an additional 5% compared to STD mode.

### Limp Home Mode (only available for Doosan D<sub>24</sub>NAP)

This mode is checking the transmission oil or engine coolant temperatures and limits truck's performance when the temperature is too high. This protects transmission and engine from failure.

### Autotilt Leveling System (optional)

The Autotilt Leveling system easily returns the mast back to a perfect vertical position by tilt angle sensing. Thanks to this system, product damage is prevented when the forks are not parallel with the rack.

### **Under Protection & Engine Protection** (optional)

The Belly Plate and Engine Guard protect the powertrain, engine, fan blades and many components against dirt and debris. This option is especially valuable in environments with very small waste materials (e.g. powder, iron filings, wood shavings, etc.) on the floor.

### Mast Visibility

The neatly arranged hydraulic hoses and chains enhance wide front visibility while keeping the strength and rigidity.

# HIGH POWERED, FUEL EFFICIENT PERFORMANCE



All our powerful diesel and LPG engines are compliant to the current regulations for reduced emissions. These in-line, 4-cylinder, water cooled, overhead valve engines provide high torque at low engine speeds for applications requiring ramp loading and unloading, fast lift speeds, or heavy hydraulic flow requirements.

### 2.4 Liter Doosan Diesel Engine

for D20/25/30/33S-7, D35C-7 The new Doosan D24A 2.4 Liter diesel engine provides excellent performance for even the toughest applications. The Doosan engine is very powerful and works great up-hill. It provides high torque at low rpm or at low engine speed, reduces fuel consumption, and meets Euro Stage IIIB Regulation.



- 4 cylinders, 4 cycles, 2,392 cc
- High torque at low rpm.: 262 Nm @1,600 rpm

### 3.0 Liter Yanmar Diesel Engine

for D20/25/30/33S-7, D35C-7

This 3.0 liter diesel engine has been designed with advanced computer techniques to provide low noise levels and the combustion pre-chamber, BOSCH VE injection pump and injectors provide low emission characteristics. The 4TNE94L diesel engine complies with all Euro Stage IIIA emission requirements.

### 2.4 Liter MMC LPG Engine(MMC)

for G20/25/30/33P-7, G35C-7 This engine provides great torque and high performance. The engine includes hydraulic lash adjusters which ensures a service free valvetrain for life of engine. A premium camshaft and balance shaft belts help not only to extend service intervals but also to reduce noise.

**2.5 Liter GCT LPG Engine** for G20/G25/G30/G33N-7, G35NC-7 GCT K25 LPG engine provides excellent performance, Low noise, Low vibration and Durability. The reliability and durability of this engine are already proven in the industrial engine field. Also this engine meets CARB and EPA emission regulation.

- Electronic controlled engine

- 4 cylinders, 4 cycles, 2,488cc
- After-treatment : Catalytic Muffler









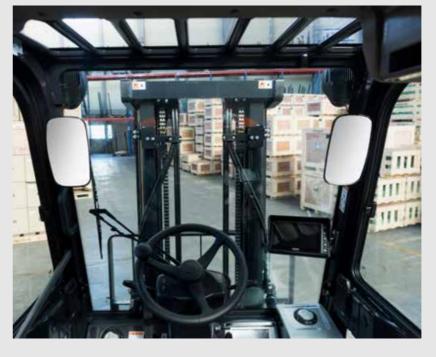


## **SUPERB ERGONOMICS**

Doosan 7-Series forklifts are designed with a focus on operator comfort.









### Tilt Cylinder Cover

The Tilt Cylinders are covered neatly, to avoid any hindrance to the operator. Furthermore, the Tilt Cylinder Cover creates additional space at the floor of the operator compartment.

Easy Entry Grab Bar and

all weather conditions.

Enables easy entry and exit.

The wide anti slip step plates

ensure the operator's safety in

Anti Slip Step Plate



### **Optimized Components Location**

All components such as the seat, switches, instrument panel, levers and pedals are ergonomically designed and located to provide optimal comfort to the operator.



### Premium Seat (optional)

Designed with a low-profile mechanical suspension that significantly reduces vibrations. It helps the operator stay comfortable, no matter how rough the day gets.



#### Rear Grab Bar with Horn

The horn button on the Rear Grab Bar enhances the comfort and safety while travelling in reverse, by enabling the operator to sound the horn while maintaining full control of the vehicle.

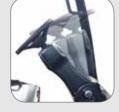


### **Optimal Visibility**

The low profile dashboard and the precisely designed overhead guard profile with pressed roof provide a clear view upwards whilst ensuring ultimate strength for safety.



The steering column and seat position are fully adjustable to fit the individual preferences of each operator.



### Easily Readable Display

The easily readable, integrated instrument panel provides a clear overview of the truck's status.



The new Doosan cabin provides not only great comfort to operator, but also higher productivity with ergonomically designed features.

Full Cabin (optional)



### Modular Cabins A/B/C (optional)

The following modular cabins are available:

- A: steel roof with top glass window
- B: steel roof with top glass window and front windshield
- C: steel roof with top glass window, front and rear windshield





### Safety Light

The Safety Light projects a blue light to the ground to alert other workers that a forklift is approaching. This system is especially useful when the surroundings are too noisy to hear any alarm signals.



### Panoramic Mirror

The panoramic mirror offers additional safety, to reduce accidents and damage to the truck, products or rack system.



### **Emergency Locking Seat Belt**

This provides not only comfort, but also safety to operator, thanks to the function which is not locking in the normal operation and working conditions, but only in case of an accident.



D24NAP: standard MMC: optional GCT: optional

### **Ground Speed Control**

The travel speed can be limited to 8, 10 or 15 km/h. Ground Speed Control reduces the risk on accidents due to unadjusted speed.



### Seat Belt Interlock

The forklift will not move without fastened seat belt. The tilt, lift and lowering functions are disabled if the seat belt is not fastened.



### 4th Lever Interlock

Prevents unintended use of the 4th lever, reducing the risk of load dropping accidents. This option is especially useful to optimize safety for applications with a bale clamp attachment.









Paper



Chemicals



Wood



and equipment

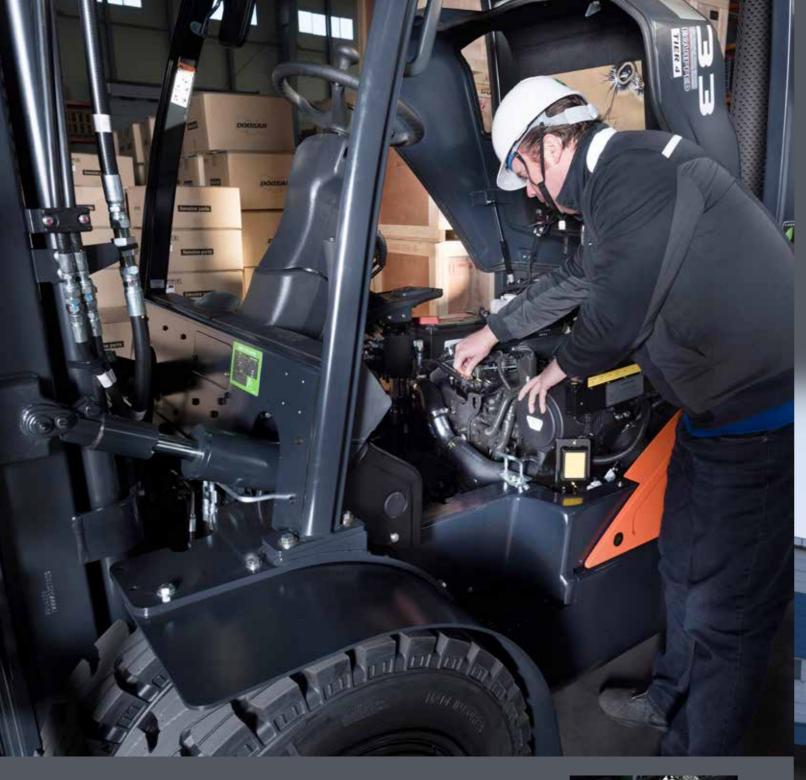


Industrial machinery Fishery



Wholesale trade durable goods





## **SERVICEABILITY**

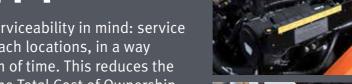
Doosan 7-Series have been designed with serviceability in mind: service components have been placed on easy-to-reach locations, in a way that the forklift can be serviced in a minimum of time. This reduces the service cost, which has a positive effect on the Total Cost of Ownership.

- Optimized location to service :

Integration of fuses and relays

(only for D24NAP)

- Easy to open hood
- Wide hood open angle
- Locking type gas spring
- Easy removable floor mat and plate





2.0 to 3.5 Ton Series



### STANDARD FEATURES AND OPTIONS

SAFETY		Yanmar 3.oL		GCT K25 LPC
Directional Lever	•	•	•	•
Mast Interlock - Tilt, Lift and Lower	•	•	•	•
Operator Sensing System (OSS)	•	•	•	•
Emergency Locking Orange Seat Belt	•	•	•	•
Seat Belt Interlock	0	0	0	0
4th Lever Interlock	0	0	0	0
Spark Arrestor	0	0	n/a	n/a
Safety Light	0	0	0	0
Rear Grab Bar with Horn	0	0	0	0
Panoramic Mirror	0	0	0	0
Ground Speed Control	•	n/a	0	0
Back-up buzzer	0	0	0	0
PRODUCTIVITY	Doosan D24 NAP	Yanmar 3.oL	MMC 2.4 Liter LPG	GCT K25 LP
Electronic Controlled TCI (Turbo Charged Intercooler) Doosan Engines	•	n/a	n/a	n/a
Pedal Location (Accelerator, Brake and Inching)	•	•	•	•
Inching Pedal	•	•	•	•
LED Lights (Front / Rear)	0	0	0	0
LED Combination Lamps	0	0	0	0
Weight Scale	0	0	0	0
Autotilt Leveling	0	0	0	0
Quick Disconnect Hose Couplings	0	0	0	0
Special Overhead Guard - Drive in Rack / Low or High Overhead Guard	0	0	0	0
COMFORT	Doosan D24 NAP	Yanmar 3.oL	MMC 2.4 Liter LPG	GCT K25 LP
Adjustable Steering column	•	•	•	•
Integrated Instrument Panel	•	•	•	•
Full Cabin with Heater or Airconditioner	0	0	0	0
Modular Cabin, type A/B/C	0	0	0	0
Premium Suspension Seat, Heat Rays, Hip Restraint	0	0	0	0
Steering Wheel Knob	0	0	0	0
DURABILITY			MMC 2.4 Liter LPG	GCT K25 LP
Electronic Control Units (ECU) Cover	•	n/a	n/a	•
Waterproof connectors	•	•	•	•
Dual Element Air Cleaner	•	•	•	•
Full Floating Driveaxle with Oil-Cooled Disc Brakes (ODB)	•	•	•	•
Autoshift Controller	0	0	0	0
Heavy Duty Cooling	0	0	0	n/a
Radiator Screen	0	0	0	0
Vented Side Panel	0	0	0	0
Pre-Cleaner	0	0	0	0
SERVICEABILITY			MMC 2.4 Liter LPG	GCT K25 LP
CANbus communications	•	n/a		•
		, α	, α	
Removable Floor Mat and Plate	•	•	•	•

- Integrated Electric Components in the Junction Box (Relays and Fuses)
- Tool-less Side Floor Mat and Plate
- Wide Hood Open Rang

- Wide Hood Open Kange				
ENVIRONMENT				
Emission Regulations	•	•	•	•
Ultra Low PM Conbustion (ULPC) System with DOC	•	n/a	n/a	n/a
ISO 9001 / ISO 14001	•	•	•	•
2 Operation Modes (STD / ECO Mode)	•	n/a	n/a	•
HOMOLOGATION	Doosan D24 NAP	Yanmar 3.oL	MMC 2.4 Liter LPG	GCT K25 LPG
CE	•	•	•	•

Remark: This list is based on factory data. Standard or optional options can vary for specific countries. Contact your local sales contact to see if the G25N-7 is available in your country.







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