DP70N, DP100-160N

POWER TO DELIVER

ENGINE POWERED LIFT TRUCKS
7.0 - 16.0 TONNES

CAT®

DP70N | 7.0 TONNES

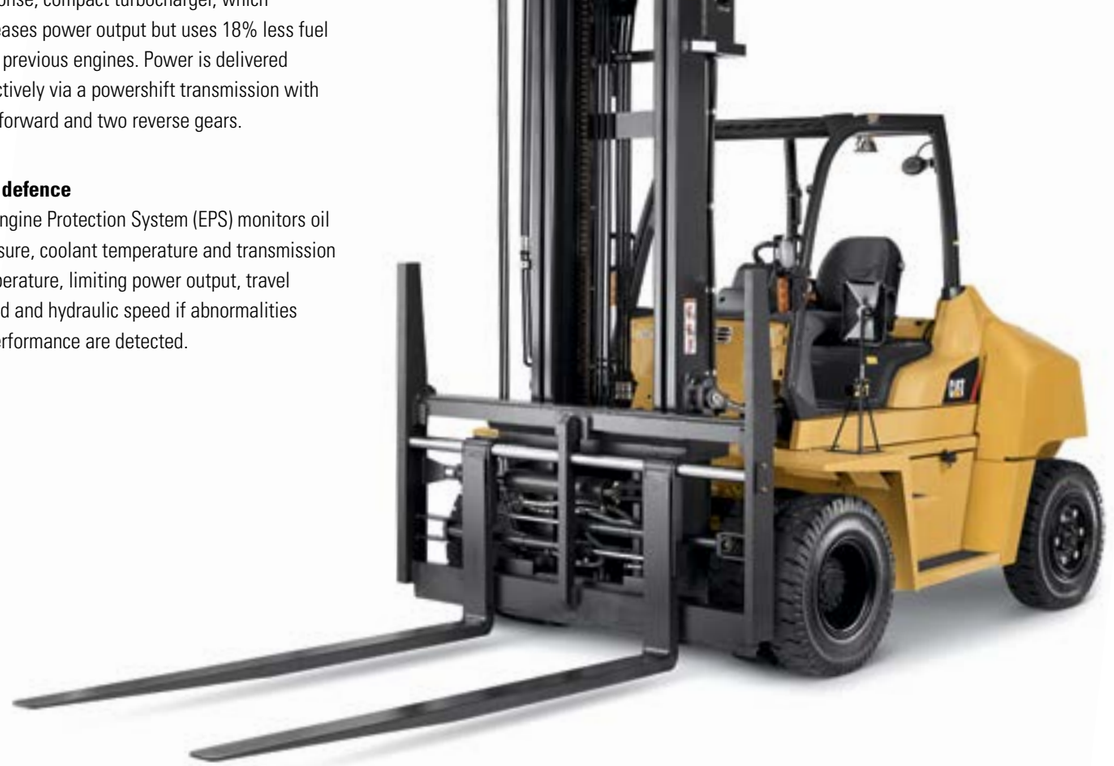
COST-EFFECTIVE CAPABILITY

Built to meet the needs of a variety of demanding applications, the DP70N blends strength, stability and durability with a clean, fuel-efficient engine and user-friendly design to boost productivity and reduce operating costs.

Advanced engine
The advanced Perkins 4-cylinder 854E engine offers high power with low fuel consumption and low emissions that meet EURO Stage IIIB regulations. Key advances include a fast-response, compact turbocharger, which increases power output but uses 18% less fuel than previous engines. Power is delivered effectively via a powershift transmission with two forward and two reverse gears.

Self defence
An Engine Protection System (EPS) monitors oil pressure, coolant temperature and transmission temperature, limiting power output, travel speed and hydraulic speed if abnormalities in performance are detected.

Filter technology
Featuring the latest Diesel Particulate Filter (DPF) technology with Passive Regeneration (PR), the engine burns off soot during truck operation rather than needing to take downtime. The ceramic filter is maintenance-free and requires no additives such as urea.



KEY FEATURES AT A GLANCE

- Advanced Perkins 854E 4-cylinder diesel engine delivers powerful performance with 18% greater fuel efficiency than previous units and meets EURO Stage IIIB emissions standard.
- Low-maintenance Diesel Particulate Filter (DPF) technology with Passive Regeneration (PR) avoids the need for downtime by burning off soot while truck is operating.
- Engine Protection System (EPS) monitors oil pressure, coolant temperature and transmission temperature, giving warnings and limiting power output, travel speed and hydraulic speed if abnormalities are detected.
- Robust steel frame designed using Finite Element Analysis gives durable structure with low centre of gravity, resulting in higher residual capacity.
- Fully floating drive axle adds extra durability and capacity compared to semi- or non-floating alternatives.
- Steer axle construction as a single solid unit maximises strength and rigidity.
- Dependable engine and strong resistance of all truck components to damage and wear helps minimise repair and service bills.
- Easy and quick access to all areas for routine checks and maintenance keeps truck in sound working condition, saves time and reduces expense.
- Noise and vibration limitation features include rubber-mounted key components, fully insulated steel engine hood and specially designed transmission gears.
- Fully hydrostatic assisted steering via small-diameter steering wheel ensures accurate and rapid response with little effort.
- Counterweight design allows small turning circle and clear view to the rear for precise manoeuvring.
- Mast with narrow channels and small-diameter lift cylinders increases forward vision and uses six load rollers with side rollers to achieve high load stability.
- Vacuum-boosted hydraulic brakes increase braking efficiency and safety.

DP100-160N | 10.0-16.0 TONNES

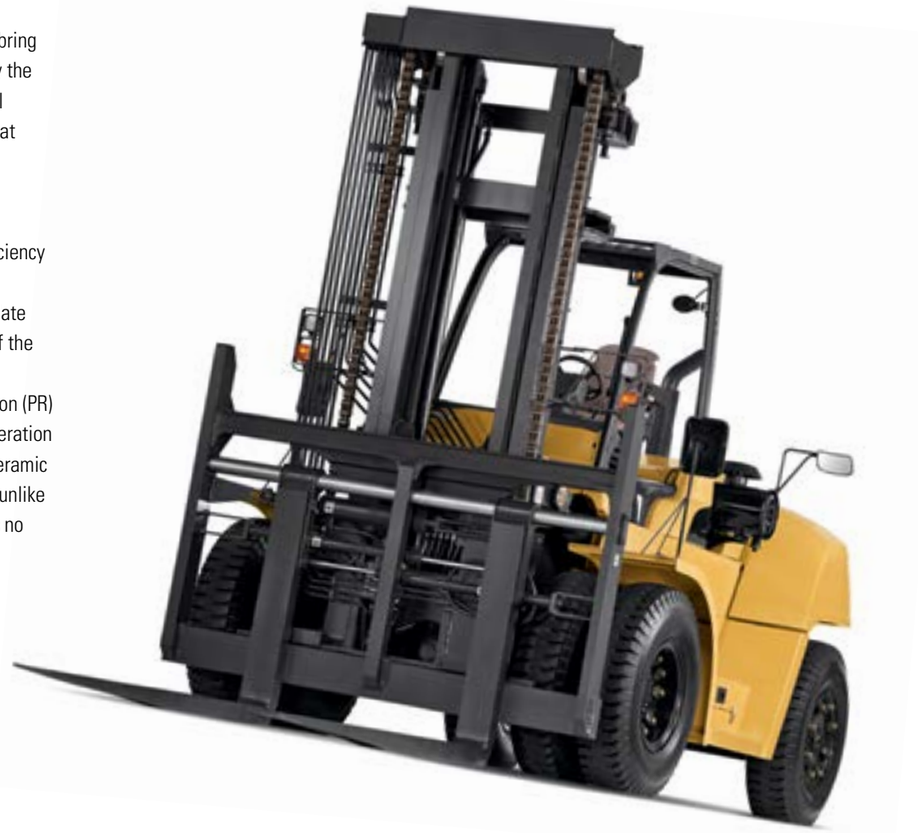
EFFICIENT POWER

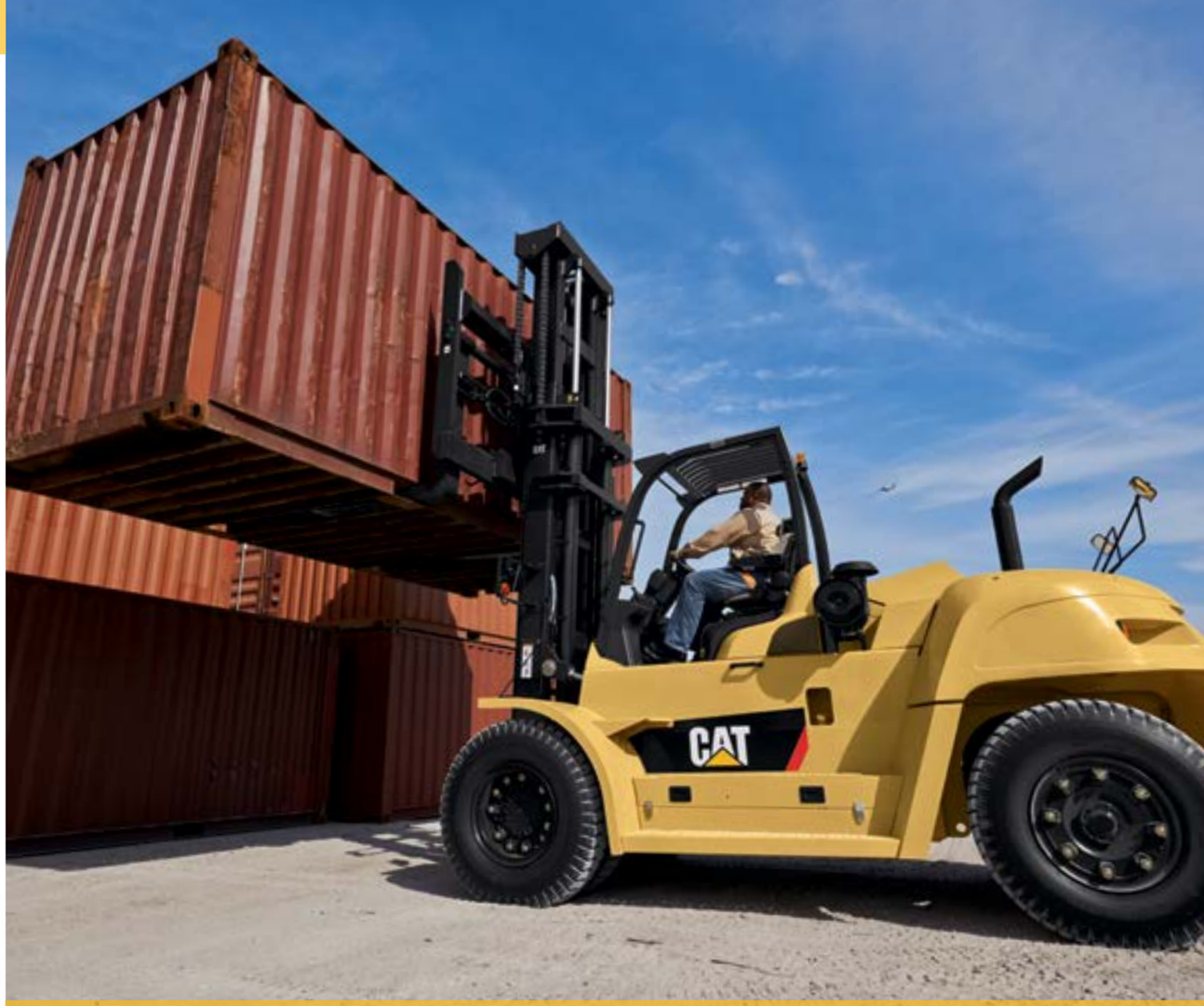
Combining impressive power with a strong, stable, durable construction, a clean, economical engine and an ergonomic design, the DP100-160N range delivers excellent performance and low running costs for higher profitability in heavy applications.

Fuel efficiency
At the heart of the DP100-160N range is its state-of-the-art Perkins 1204E 4-cylinder twin turbo diesel engine. The designers have been able to save 13% on fuel consumption compared to previous engines, and to bring emissions within the limits required by the EURO Stage IIIB regulations, while still providing the powerful performance that heavy duty applications demand.

Environmentally friendly economy
The environmental benefits of this efficiency include conservation of fossil fuel and reduction in carbon emissions. Particulate emissions are reduced with the help of the latest Diesel Particulate Filter (DPF) technology, whose Passive Regeneration (PR) allows soot to be burned off during operation rather than requiring downtime. The ceramic filter needs minimal maintenance and unlike many alternatives on the market it has no need for additives such as urea.

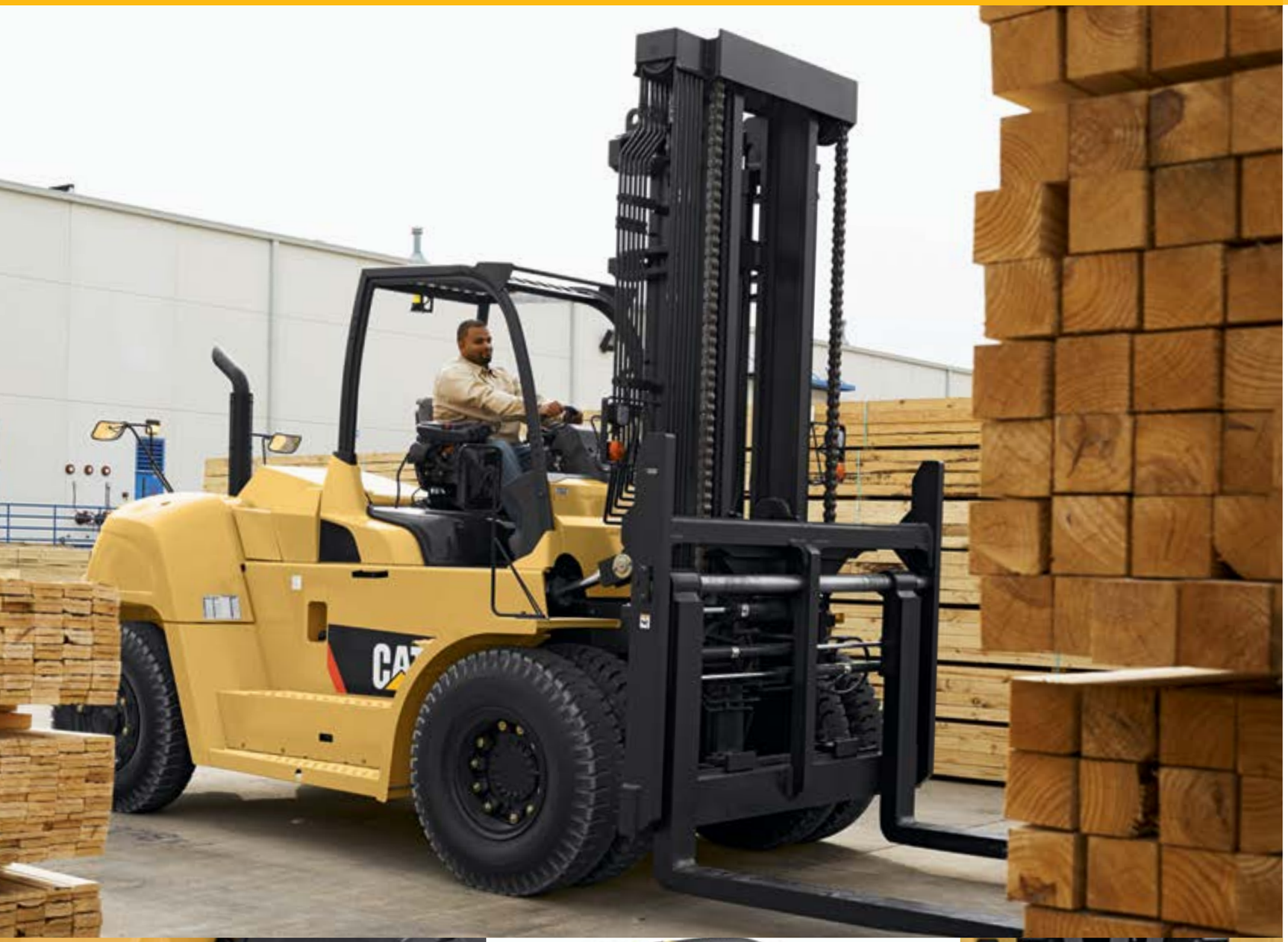
Turbocharged performance
Drivers are sure to enjoy the experience of the truck's power, which is enhanced by the rapid response of its twin turbochargers. To meet every need, powerfully and effectively, they have the choice of three forward and three reverse gears through a powershift transmission which is smoothly controlled by the Vehicle Control Module (VCM).

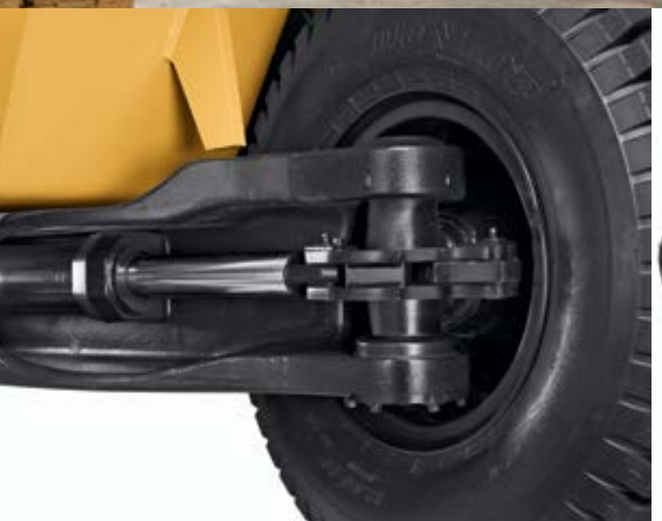


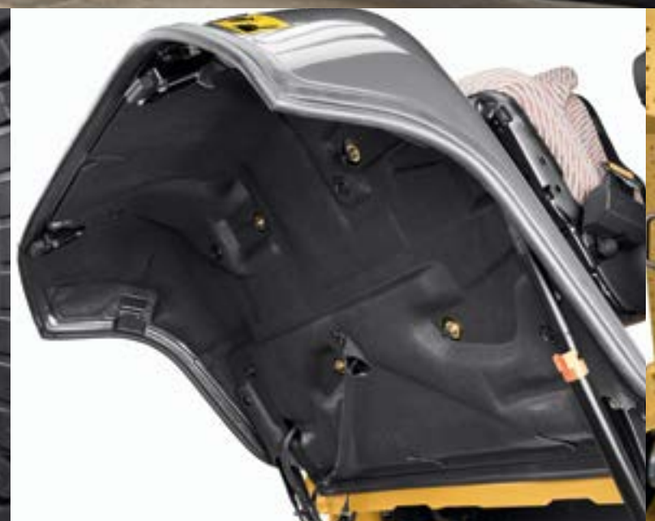


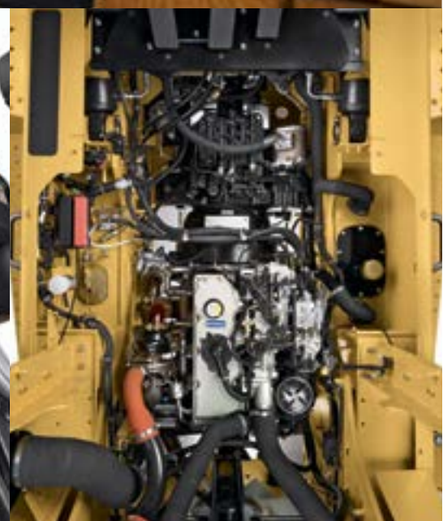
KEY FEATURES AT A GLANCE

- Advanced Perkins 1204E 4-cylinder twin turbo diesel engine delivers powerful performance with 13% greater fuel efficiency than previous units and meets EURO Stage IIIB emissions standard.
- Low-maintenance Diesel Particulate Filter (DPF) technology with Passive Regeneration (PR) avoids the need for downtime by burning off soot while truck is operating.
- Engine Protection System (EPS) monitors oil pressure, coolant temperature and transmission temperature, giving warnings and limiting power output, travel speed and hydraulic speed if abnormalities are detected.
- Robust steel frame designed using Finite Element Analysis gives durable structure with low centre of gravity, resulting in higher residual capacity.
- Fully floating drive axle adds extra durability and capacity compared to semi- or non-floating alternatives.
- Steer axle construction as a single solid unit maximises strength and rigidity.
- Dependable engine and strong resistance of all truck components to damage and wear helps minimise repair and service bills.
- Easy and quick access to all areas for routine checks and maintenance keeps truck in sound working condition, saves time and reduces expense.
- Noise and vibration limitation features include rubber-mounted key components, fully insulated steel engine hood and helical transmission gears.
- Electronic direction control permits easy and smooth shifting between forward and reverse travel, without removing hands from steering wheel, at any speed up to 4.0 km/h.
- Fully hydrostatic assisted steering via small-diameter steering wheel ensures accurate and rapid response with little effort.
- Counterweight design allows small turning circle and clear view to the rear for precise manoeuvring.









DP70N AND DP100-160N

COST-SAVING CONSTRUCTION

Rugged frame
Low fuel consumption is certainly not the only cost-saving benefit of these trucks. Their whole structure, starting with the durable steel frame, is designed to withstand rough treatment and to last for a long lifetime with minimal need for spending on repairs. With the help of Finite Element Analysis (FEA) the frame has been developed for maximum strength and stability, which has at the same time added higher residual capacity to the list of advantages. This is further enhanced by the low-profile counterweight design.

Strong axles
The drive and steer axles are also particularly strong and durable. A fully floating drive axle has been chosen, as it will bear more weight than the alternative semi-floating and non-floating types. The steer axle has been constructed as a single solid unit for extra strength and rigidity.

Inbuilt protection
Hardwearing quality and low maintenance needs apply to all components, including the very dependable engine, drivetrain and other moving parts. The trucks also benefit from an Engine Protection System (EPS). This helps ensure that immediate attention is given to any problem and, if a malfunction occurs, limits use of the truck to avoid damage. The EPS monitors engine oil pressure, coolant temperature and transmission temperature. If these deviate from normal levels the power output, travel speed and hydraulic speed are automatically lowered. Meanwhile, the EPS alerts the driver to issues arising, via warning lights on the instrument panel, and records diagnostic fault codes.

Easy access
Time and money spent on routine checks, maintenance tasks and servicing is reduced by making all key items easy to view and reach. The ease of access is outstanding in these trucks and in particular it includes the axle and mast lubrication points, transmission and torque converter, engine, radiator, coolant recovery bottle, engine oil dipstick, fuel shut-off valve, air cleaner and battery.

DP70N AND DP100-160N
OPTIONS

Many extra features are available as options to help match each truck perfectly with its application. Here we present just a few examples, but your local Cat lift truck dealer can show you many more.

Comfort cabins
Cabins with a range of specifications are available to meet different weather protection and noise reduction needs. The top-specification DP70N cabin is fully enclosed and includes air conditioning. For the DP100-160N range there is a luxury cabin whose functional options include heating, defrosting and air conditioning.

Engine Shutdown System (ESS)
With this system the engine will be shut down automatically, to prevent damage, if the transmission temperature exceeds 110 °C, the coolant temperature exceeds 107 °C or the engine oil pressure drops below 24 kPa.

Oil-cooled disc brakes
In heavy duty applications and difficult environments this option will increase braking power, reduce the cost of replacing worn brake components and protect the system from corrosion. It is available as an option for capacities from 10.0 to 15.0 tonnes but is included as standard on the 16.0 tonne model.

DP70N
- Engine Shutdown System (ESS)
- A range of cabin options topped by fully enclosed version with air conditioning
- Wide range of sideshifters and fork positioners

DP100-160N
- Engine Shutdown System (ESS)
- Oil-cooled disc brakes (standard on 16.0 tonne, optional on others)
- High-comfort cabin
- Fingertip hydraulic control (electric over hydraulic)
- Wide range of sideshifters and fork positioners