

REACH FOR OPTIMUM USE OF SPACE AND TIME

Boost your warehouse storage density and productivity with telescopic fork stackers from Cat® Lift Trucks. These 1.2 tonne stand-in and sit-on models extend the advantages of our advanced Cat® stacker ranges. And while they're primarily aimed at users with double-deep racking set-ups, they can do much more besides. In fact, they're probably the most versatile trucks in the entire market.

FILL YOUR WAREHOUSE

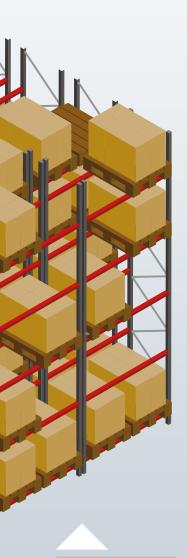
By moving to a double-deep approach, you can immediately increase your warehouse capacity by almost 30%. Or, to put it another way, you can save substantially on your warehouse rental costs (see example on the next page). That's because you will need only half as many aisles. From each aisle, telescopic forks will reach into the racking to stack and retrieve loads at two pallet depths.

This is a very cost-effective way of making fuller use of your building. With an extensive choice of triplex masts, you can also maximise utilisation of your vertical space. What's more, enhanced load deration performance allows you to store heavier loads at each level. And thanks to low-profile straddle legs, there's minimal waste of space under the bottom racking beam.



TWO MODELS TO CHOOSE FROM						
MODEL	CAPACITY (tonnes)	TYPE	MAX SPEED (km/h)	MAX LIFT HEIGHT (metres)	VOLTS/Ah	
NSR12N2TF	1.2	Stand-in	8.0	6.3*	24 / 465-775	
NSS12N2TF	1.2	Sit-on	8.0	6.3*	24 / 465-775	





Double-deep storage system. Four pallets – instead of two – can be stored in each racking module. The number of aisles needed is halved.

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EXAMPLE OF DOUBLE-DEEP COST SAVINGS

In the following example, a business moves from racking arrangement ${\bf A}$ to double-deep approach ${\bf B}$.

RACKING ARRANGEMENT	RACKING WIDTH (m)	AISLE WIDTH (m)	MODULE WIDTH (m)
A. Single-deep	1.250	2.525	5.025
B . Double-deep	1.250	2.734	7.734

In each case, the business needs to store 7,000 pallet loads. To achieve this, the racking is arranged as follows:

RACKING ARRANGEMENT	NO. OF MODULES	PALLETS PER MODULE	LEVELS PER BAY	AISLE LENGTH (m)
A. Single-deep	14	2	5	50
B . Double-deep	7	4	5	50

Based on these figures, single-deep storage will require 3,518 m² of warehouse space. Double-deep will need just 2,707 m². That's a saving of 23%. In other words, the business can save 23% on warehouse rental cost.

At a typical European price of €90 per m² per year, it means an annual saving of €72,954.

Alternatively, by choosing to keep the same warehouse space, the business could increase its storage capacity by 29.9%.

OTHER APPLICATIONS? USE YOUR IMAGINATION!

In addition to double-deep storage, these telescopic fork stackers have many other potential uses. Handling long loads is one obvious possibility. Another is stretching into goods vehicles, or across lorry cargo areas, to pick up hard-to-reach loads. Or, conversely, loading goods into near and far positions from the side of a vehicle.

They can also act as reach trucks, straddle stackers, pallet trucks, order pickers, and more. For long-distance transport, the sit-on model's comfortable seat and the stand-in stacker's optional EFTC (ergo forks trailing control) are welcome.

The trucks' wide straddle design gives extra functionality outside of the racking. They can lower their forks right down to the floor between widely spaced support legs. This helps in handling closed-base pallets and other load carriers without open fork spaces or pockets. It also means the trucks can place pallets directly onto the floor and lift them from there.

Further scope for handling different tasks comes from the wide range of optional features. It creates feature-rich and hence highly agile and adaptable solutions.

DO EVERYTHING FASTER

The stackers' super-fast telescopic fork attachment is precisely speed-regulated for accurate control. This applies both to small adjustments at creep speeds and to rapid extension or retraction of the forks. It ensures confident, safe operation and a satisfying user experience.



Drive-in and ground clearance, as well as gradient performance, are enhanced by the structure of the support legs. In addition to their low profile, they have a slight downward angle toward their end point. Each has a single wheel or — optionally — a pair of tandem wheels, for smooth motion.

Fork tips are slightly pointed and tapered to prevent sticking. Their shape enables easier and faster pallet entry and exit, even when the truck is simultaneously turning.

Lifting and lowering are smoothly controlled by a stepless, speed-regulated hydraulic motor. This powerful but quiet unit provides quick but safe and accurate fork positioning.

Small time gains in each of these areas, and others, soon add up to substantial savings in highly repetitive processes.



Additional performance-enhancing features include:

- Advanced AC motor and control technology enabling fast, smooth and precise driving as well as lifting and lowering.
- **Creep speed feature** increasing load capacity for lifts above 1.18 m by automatically limiting travel to 5 km/h when forks reach that height.
- Integrated functionality saving time by allowing simultaneous control of drive speed and mast/fork movements.
- Progressive electric power steering —
 automatically adjusting sensitivity according to
 speed, for high precision in tight manoeuvres and
 high stability when travelling fast and straight.
- Automatic cornering control reducing maximum travel speed according to steering angle, to ensure quick but safe, stable and confident turns.
- Li-ion battery (if chosen) enhancing performance and allowing fast opportunity charging, via an easily accessible connector, for continuous operation without battery changes.





NSR12N2TF

ETION BATTERY TECHNOLOGY

STAND-IN STACKER

THIS STACKER HAS THE SMALLEST FOOTPRINT – ENABLING THE HIGHEST STORAGE DENSITIES.

The stand-in operator compartment has a fully floating floor which gives outstanding levels of vibration damping. A low step-in-height, cushioned backrest, uncluttered space and quiet operation add to the user's comfort. An optical presence sensor activates automatic braking if the operator appears to be leaving the compartment. However, it ignores smaller foot movements, which are needed to reduce stress and fatigue in the legs.

Controls include a fully adjustable steering console, which can be moved up, down, forwards and backwards. This allows a variety of driving positions, to suit different users, travel directions and tasks. Other controls, including a thumbwheel throttle and fingertip hydraulic levers, are mounted on an adjustable armrest. These can be easily reached and simultaneously operated, with the hand and wrist optimally positioned and supported.



STAND-IN STACKER						
MODEL	CAPACITY (tonnes)	ТҮРЕ	MAX SPEED (km/h)	MAX LIFT HEIGHT (metres)	VOLTS/Ah	
NSR12N2TF	1.2	Stand-in	8.0	6.3*	24 / 465-775	











- 1. Low step-in height for easy on-off access.
- 2. Fully floating floor with optical presence sensor for comfort and safety.
- 3. Ergonomic, positionally adjustable controls.
- 4. Smooth lifting, lowering and telescoping movements.



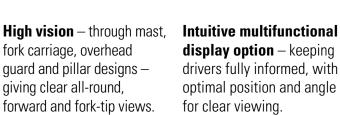
SIT-ON STACKER						
MODEL	CAPACITY (tonnes)	TYPE	MAX SPEED (km/h)	MAX LIFT HEIGHT (metres)	VOLTS/Ah	
NSS12N2TF	1.2	Sit-on	8.0	6.3*	24 / 465-775	





FURTHER ERGONOMIC FEATURES INCLUDE:







carriage damping —
ensuring soft landings,
smooth stage transitions
and rattle-free travel, for
comfortable and confident
load handling and driving
with maximum performance
throughout long shifts.

Effective mast and fork



Low-noise specification

including quiet,
 temperature-controlled fans
 and speed-regulated lift
 pump motors — creating a
 pleasant operator
 environment.

ADAPTABILITY

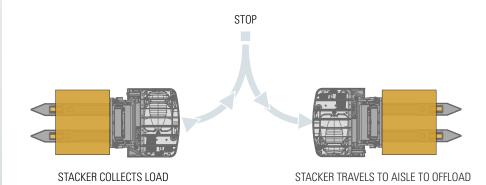


Here are just some of the optional features you might add to meet your specific needs:

- Level Assistance System (LAS) giving a highly intuitive way of stopping at, or bypassing, pre-set heights.
- Load weight (LWI) and lift height (LHI) indicators — providing additional useful information via the optional multifunctional display.
- Ergo forks trailing control allowing speed adjustment from a more convenient position (with clearer vision) for operators standing in the direction of travel with forks trailing. (Stand-in stacker only.)

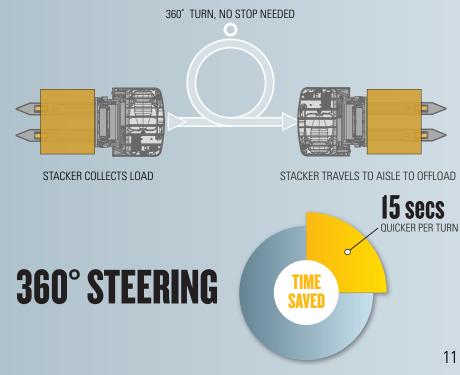


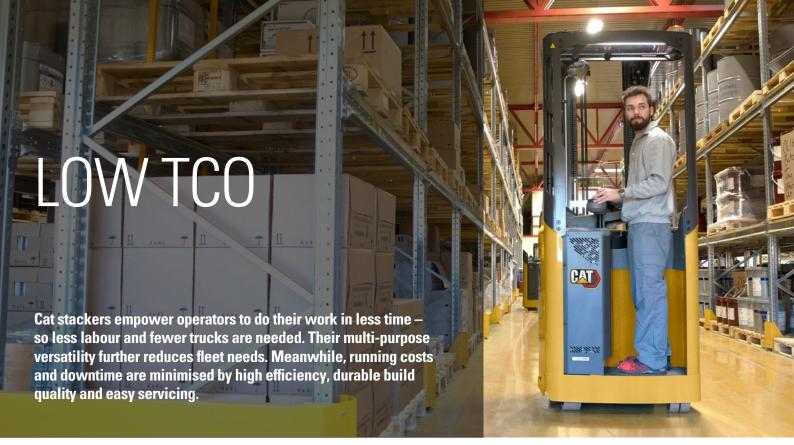
• **360-degree steering** — enabling the truck to turn and move in the opposite direction, without stopping, in one smooth manoeuvre, for substantial time gains especially in complex layouts and highly repetitive handling cycles.



CONVENTIONAL 180°-200° STEERING













Their cost-saving features include:

- **Robust construction and component sealing** minimising damage and wear, even in demanding multi-shift operations.
- **Multifunctional display option** encouraging correct use of the truck.
- PIN code identification preventing unauthorised use.
 (Only with multifunctional display option.)
- Choice of PRO, ECO and EASY modes matching truck performance to operator experience and application, to minimise accident risk. (Only with multifunctional display option.)
- Easy, fail-safe battery lock avoiding delays and accidents at exchanges.
- **Fast maintenance access** combining with low servicing requirements and long service intervals to reduce downtime.
- Fully integrated Li-ion technology (if chosen) increasing battery efficiency, runtime and lifespan, while minimising maintenance needs.
- Advanced motors, regenerative braking and efficient mast designs – saving on energy and hydraulic oil consumption.
- High levels of component sharing maximising parts
 availability (and reducing downtime, stock and carbon costs) across the
 Cat stacker and power pallet ranges.

ALTERNATIVES TO DOUBLE-DEEP STORAGE

Your local Cat lift truck dealer can give you expert advice on which storage solution will best meet your needs. This may be a double-deep racking system served by stackers with telescopic forks. Alternatively, it may be one of the approaches below. In any case, the dealer will supply trucks from the comprehensive Cat warehouse range — optimally specified for your business.





Conventional pallet racking

Storage densities are lower with this approach, but they may be sufficient for your needs. Set-up costs are relatively low and racking arrangements can be altered quite easily as needs change. We have a wide variety of Cat stacker (pedestrian, platform, stand-in and sit-on), reach truck and counterbalance forklift ranges for these systems.

VNA (very narrow aisle) racking

These highly specialised systems offer highly efficient space utilisation. They require specialised trucks, often guided by rails or wires. Set-up costs can be high, but the investment is worthwhile if warehouse real estate is especially expensive or limited in availability. We have ranges of Cat man-down VNA trucks, man-up turret trucks and high-level order pickers for such applications.



A WEALTH OF DEALER SERVICES



Wherever you are, and however hard your challenges, your local Cat lift truck dealership is there to help. Our dealers' customer support and service teams are dedicated to answering every need. They will work closely in partnership with you and your business to ensure:

- You have the right trucks and equipment for the job
- Your trucks keep on running at optimum efficiency
- Your operation achieves maximum results

Aftersales service

Our fully equipped service vans will respond quickly to your calls. They carry specialised tools and stocks of genuine parts. Their drivers are well-trained service technicians with the latest technical information and knowledge. You can be sure of highly professional inspection, servicing and repair work.

Maintenance programmes

Carefully scheduled servicing by our factory-trained technicians will minimise downtime and extend truck life. Our individually tailored programmes also help you with accurate budgeting and control over operating costs. We can work out a maintenance plan that's right for you.

Financing options

We offer a wide range of finance plans to suit your cashflow and other circumstances. They include outright purchase, leasing and rental agreements. We can spread the cost of your trucks over their working life in the most tax-efficient way.

Fleet management

We can monitor, control and reduce your materials handling costs. We can then re-engineer your fleet to meet your needs more cost-effectively. Our optional benefits for national or multinational operations include: service contracts; training and safety programmes; fleet audits; application surveys; centralised billing; cost analysis and reporting.

Parts supply

Parts availability is crucial to maintaining productivity. Our 'full line, first pick' rate is the best in the industry. It currently stands at 97%. For current models it's even higher.

Dependable support

You can depend on our dealerships. They, in turn, can depend on the support, expertise and resources of our global organisation. Together we'll do whatever it takes to make your business stronger.



