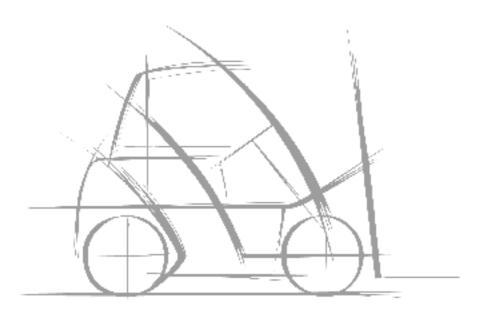


#### MAIN SPECIFICATIONS

Model		TX-13	TX-15	TX-15	TX-16	TX-18	TX-18	TX-20
Load capacity	kg	1250	1500	1500	1600	1750	1800	2000
Load centre	mm	500	500	500	500	500	500	500
Wheelbase	mm	1195	1195	1300	1410	1300	1410	1410
Overall width	mm	1070	1070	1070	1090	1070	1120	1120
Turning radius	mm	1420	1420	1525	1635	1525	1635	1635
Overhead guard height	mm	2110	2110	2110	2110	2110	2110	2110

Model		TX-13	TX-15	TX-15	TX-16	TX-18	TX-18	TX-20
Battery capacity (std)	V/Ah	48/375	48/430	48/460	48/575	48/460	48/750	48/750
Battery capacity (high)	V/Ah	48/430	48/430	48/625	48/750	48/625	48/750	48/750
Electric Motor (driving)	kWxunit	5.0 X 2						
Electric Motor (lifting)	kW	8	8	8	11	8	11	11

<sup>\*</sup> Larger battery capacities on request



#### **NISSAN FORKLIFT EUROPE B.V.**

http://www.nissan-nfe.com CEN-TX-01.NFE/05-10-8000 Printed in the Netherlands

Nissan Motor Co., Ltd. reserves the right to make any changes without notice concerning colors, equipment or specifications detailed in this brochure, or to discontinue individual models. The colors of vehicles delivered may differ slightly from those in this brochure. The specifications vary for different countries depending on local market conditions. Please consult your local dealer to ensure that the vehicle delivered accords with your expectations. All values given may vary, due to motor and system tolerances and operational conditions. Some equipment shown on photos are optional.



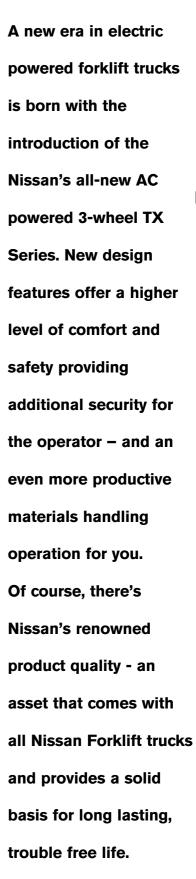


# TX Series

1.25 - 2.0 Tonne



43800013 CEN\_TX\_01\_NFE\_10.indd 1-2







NISSAN



#### **FINGERTIP Control Levers** on Armrest

A multitude of functions are conveniently located within the TX Series' integrated armrest. The optional FINGERTIP uses electro-hydraulic control levers, making travel direction, horn and lift operations simple with just a slight tip of the finger. Combined with the ergonomic design and positioning of the armrest, the TX Series is a pleasure to drive.



#### Wide Step and Ample Legroom

The TX Series has been designed to provide a wide step with ample legroom for easy access to a spacious cabin and optimal seating comfort.



#### **Adjustable Steering Wheel**

As each individual driver has a different physique, the tilting steering column can be easily adjusted to the most comfortable ergonomic working position. This reduces the steering efforts and allows the driver to concentrate on the essentials.





An excellent operator's environment has always been paramount in Nissan's design philosophy. The Nissan TX Series has been designed around the operator and his daily workplace. The spacious operator platform and its clearly positioned controls and display makes this series a pleasure to work with, not a chore.

A wide step and ample legroom make access to the wide-space cabin easy, while the multi-adjustable full suspension seat, with generous front to back travel adjustments, and the adjustable small diameter steering wheel, allow each operator to select his or her ideal driving position.

Driving fun is assured by the silence in the operator's compartment. The low noise levels provide a stress free environment wherein the driver can fully concentrate on the job throughout a long working day.

The hydraulic powered steering makes the TX Series highly responsive and nearly effortless to operate. Even more driving ease is provided by the automatic deceleration which takes place when the opposite travel direction is engaged or the foot is lifted from the accelerator pedal.

FINGERTIP control on the armrest and Steering Synchroniser, which provides a fixed position of the steering wheel knob relative to the position of the rear wheels, are options to improve natural operation and productivity even further.





#### **Standard High Overhead Guard**

The TX Series has one of the market's highest available overhead guards (2.11 m) as standard, providing generous headroom for the operator, even when a helmet is required. For loading and unloading activities in tighter areas, an optional low overhead guard (1.98 m) is also available.



#### **Adjustable Steering Wheel Height**

In addition to the standard for and aft adjustment, each individual working position can be further ergonomically enhanced by having the steering wheel optionally positioned 50 mm higher.



#### **CLEAR-VISION Cabin**

This modern design glass cabin is based on the proven successful concept already introduced on the DX Series in 2000. The cabin offers excellent all-round visibility and its curved front windscreen avoids screen reflections. With the cabin installed, access to the battery compartment remains very easy.



# LIFT choice

A substantial selection of optional equipment allows you to tailor the TX Series to your specific operational requirements. With 7 models ranging from 1.25 to 2.0 tonnes, the Nissan TX Series is suitable for multiple applications in both industry and warehouse operations. All versions are available in cushion and super-elastic tyre versions. A wide range of masts are available too, including the unique 3-stage OPTIVIEW mast which improves the operator's visibility.

A high overhead guard with ample headroom is provided as standard, with an optional lower overhead guard for operations where height is restricted.

Several optional features are available on the TX Series to provide a custom fit for your operator. Included among these items is an optional armrest with FINGERTIP control hydraulics. Combined with a raised steering wheel, excellent ergonomics is achieved.

There's also a Nissan-designed CLEAR-VISION cabin with a panoramic front view, and offering excellent all-around visibility.

This perfectly enclosed surrounding is ideal for keeping your operator comfortable in damp and cold environments, as well as benefiting them from a health and safety perspective.

Additional flexibility is achieved with the optional freezer specification allowing you to operate inside cool storage areas up to -35° Celsius for considerable time.

43800013 CEN\_TX\_01\_NFE\_10.indd 7-8





### Personal Identification Number (PIN) Access

The TX Series is equipped as standard with a 4-digit PIN access system to avoid unauthorised truck usage. The PIN system can also be combined with pre-set performance profiles in line with operator skills or company's safety regulations.

# NISSAN 1-7 LOG IN FUNCTION 4 PM POWER LEUEL E 5 PM MRX. SPD. LMT. 12km/h 6 PM D-POWER LIMIT 91x 7 PM SB RB LEUEL 6 8 PM BRAKE RB LEUEL 3

#### **Personal Settings**

Besides individual adjustment of various performance settings, it is also possible to pre-set up to 5 complete performance profiles to tailor the truck to meet the needs of individual operators and/or applications.



**(** 

#### **Wheel Angle and Travel Speed**

When the truck speed is 3 km/h or less, the LCD displays the rear wheels' position. The display indicator simultaneously changes when a steering wheel input is given. This is very handy when moving in or out of a load. Above 4 km/h the display presents the truck speed.



#### **Diagnostics Menu**

The on-board Built-In-Test-Equipment is a diagnostics system which has integrated self check and dialogue-type functions. This allows for easy troubleshooting and less time in the maintenance shop. In case of a malfunction during operation, a warning on the LCD display will appear.

## LIFT AC TECH

At the heart of the TX Series' is Nissan's state-of-the-art AC TECH controller which combines low energy consumption, through amongst others, regenerative braking and on demand power steering, with high truck performance to make the TX Series go on working while other trucks are back in the charging bay.

The Nissan AC TECH controller constantly monitors and provides the truck status such as travel speed and steering wheel angle through the meter panel.

The multi-function LCD display provides a wealth of information at a glance for quick operation status and maintenance activities.

Three preset performance settings can be easily selected to adapt the truck to optimal productivity demands. Five function keys can be used to adjust the truck's performance more precisely to ensure the safest operating parameters are chosen according to operator experience and the load or handling conditions.

Hydraulic powered steering consumes energy only at demand. Dependent on the steering input AC TECH continuously determines exactly the required amount of energy. This reduces battery consumption and enhances truck productivity.

The AC TECH controller includes a
Built-In-Test-Equipment (BITE) module.
Through the meter panel, the service
engineer can perform diagnostics and
troubleshooting automatically. Additionally,
malfunctions are stored in the controller's
memory. This permits the rapid location
of any problem, resulting in increasing the
TX Series' potential for up-time.





#### **Hands-on Safety**

Safety is improved through the optional FINGERTIP Control on the armrest. The operator can concentrate fully on the truck's movements, with the left hand remaining on the steering wheel at all times and the right hand controlling all hydraulic functions, travel direction and horn.



#### Mast Lock System

This standard safety feature is seat actuated. When the operator leaves the truck it automatically locks lifting and tilting operations. This prevents unsafe mast and fork operations.

Once the operator is seated again, hydraulic functions can be fully utilized.



# Turn Control Speed/acceleration 30° 60° Reduced automatically

#### Turn Control

Travel speeds and acceleration are automatically restricted during turning. This feature improves driving comfort and provides excellent lateral stability while making a turn.



#### Six-disk Wet Type Brakes

The fully enclosed six-disk wet type brakes require minimum maintenance.

NISSAN

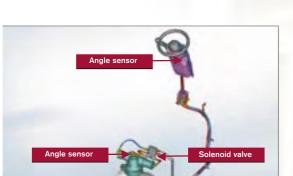


Safety is vital to any forklift operation and it forms the very basis of the Nissan TX Series' design process. The TX Series' RRS (Risk Reduction System) makes a major contribution to the operator's safety and well being and its wide range of designs and functions is incorporated as standard:

- Excellent all round visibility
- Mast Lock System
- Turn Control
- Lift Control
- Rollback Control
- Inhibitor Control
- Parking brake with lock release button

The seat actuated Mast Lock System, provides optimum safety for a parked truck from the moment the seat is left; forks cannot be lowered and the mast cannot be tilted. Automatic travel speed and acceleration reduction during turning is provided by Turn Control while during fast truck travel Lift Control limits lift speed. If the accelerator is released while on a gradient, a Rollback Control device ensures that the truck can reverse only slowly at a constant speed. The parking brake features a lock to prevent accidental release. Unintentional truck/mast movement is avoided when the operator turns on the key-switch while at the same time a mast/truck movement is activated.

The six-disk wet type brakes deliver excellent brake performance while their full enclosure make them resistant to dirt and moisture ingress.



#### **Steering Synchroniser** Option

Misalignment of the steering wheel and the rear wheel is always avoided by the optional Steering Synchroniser. Consequently when traveling in a straight line the steering knob is kept to the pre-defined neutral position.

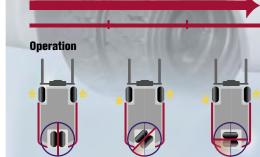
#### Superb Manoeuvrability

Variable traction on the inner whee different turning angles is a key factor in the TX Series' superb manoeuvrability. Additionally, the standard double-rearwheel provides the highest levels of stability and load capacity - particularly at higher lift heights.



1550

1500



Steering angle

#### Excellent "On-the-Spot" Performance

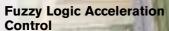
The TX Series' compact design makes it an amazingly manoeuvrable performer especially in confined areas.

The short wheelbase version provides unparalleled turning radius and stacking aisle specifications thereby making it a class-leader.

# # 3250

1400

Based on extensive experience with the Nissan QX Series this system enables the operator very accurate truck control. A truck acceleration curve is selected according to the speed with



which the pedal is depressed.

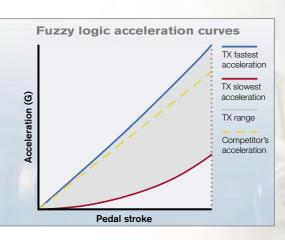


The Nissan TX Series' remarkable, modern and compact wedge-shape design isn't just for good looks, either. It makes the truck an amazingly manoeuvrable performer, especially in confined areas, while the standard double-rear-wheel provides the highest levels of stability and load capacity - particularly at higher lift heights. The result? Nissan's powerful 48 volt TX Series offers unparalleled productivity to achieve your daily targets.

The TX Series has, individually controlled, counter-rotating twin drive motors. Depending on the turn angle input, AC TECH accurately regulates the power output of each motor. For tight turns the inner wheel even counter-rotates allowing the truck to turn on the spot.

Fuzzy Logic Acceleration Control is a unique feature for precise truck handling. The speed at which the accelerator pedal is depressed determines the specific curve along which the truck accelerates. If the pedal is depressed fast, the truck accelerates along a different curve than when the pedal is depressed slowly. It is even possible to pre-set the sensitivity within certain ranges. This provides fast acceleration when needed, such as starting for driving long stretches and slow acceleration for tight manoeuvring and final approach.

Together with the hydraulic powered steering the Nissan TX Series provides superb manoeuvrability and speeds up your operations for a multitude of applications.



NISSAN

CED



#### Optional OPTIVIEW (3V) mast

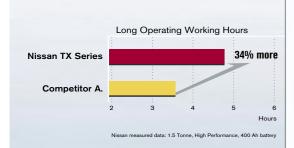
When compared to the standard 3-stage masts, the large, centrally placed free lift cylinder is replaced by two small free lift cylinders moved to the side thereby providing greater free forward visibility. The operator manoeuvres more quickly and precisely in order to improve productivity even more.



#### **Precise Hydraulics Control**

Standard hydraulic levers located on the right hand side are easily accessible. Combined with a excellent tuned hydraulic system, material handling activities can be performed with high accuracy.





### Optimal Endurance and Maximum Productivity

A range of energy-saving features for greater uptime are key benefits of the Nissan TX Series. For example, if the truck is not operated for a preset time, the Auto Power Off function switches off the truck automatically. Together with, amongst others, the regenerative braking systems, this saves considerable energy.

15

NISSAN



### Easy Maintenance and Long Intervals

Diagnostics and troubleshooting can be performed by the service engineer through the instrument panel for rapid location of any problems. Even more up-time is gained through maintenance intervals which have been extended to 1200 hours, the six-disk wet type brakes and AC TECH controller.



The Nissan TX Series is designed to deliver high productivity at very low cost of ownership. Key elements towards achieving this are:

- Supreme comfort and ergonomics
- High productivity and extended working hours
- High truck up-time

Effortless, natural operation is crucial in protecting the driver's health and maximising his productivity potential. So, with standard hydraulic levers on Nissan's TX Series conveniently located right next to the seat, passenger car type pedal lay out to avoid confusion and smooth Fuzzy Logic Acceleration Control, all the operator has to do is to focus on the job at hand.

FINGERTIP control on the armrest and Steering Synchroniser are options to improve natural operation and productivity even further.

The ultra modern, energy efficient, NISSAN AC TECH controller provides optimum truck performance. Three regenerative braking systems, on demand power steering and Auto Power Off are features which increase the number of working hours per battery charge even more.

With 1200-hour maintenance intervals, the TX Series' maintenance free wet type brakes, brushless AC motors and its AC TECH incorporated, Built-In-Test-Equipment (BITE) module the truck's potential for up-time is increased.

Nissan's new powerful TX Series - creating a LIFT in the efficiency of your daily material handling operations.

NISSAN