



**ELECTRIC LIFT TRUCK  
STAND-ON REACH TRUCKS  
*Platter***

**FBR9-30**





# Platter

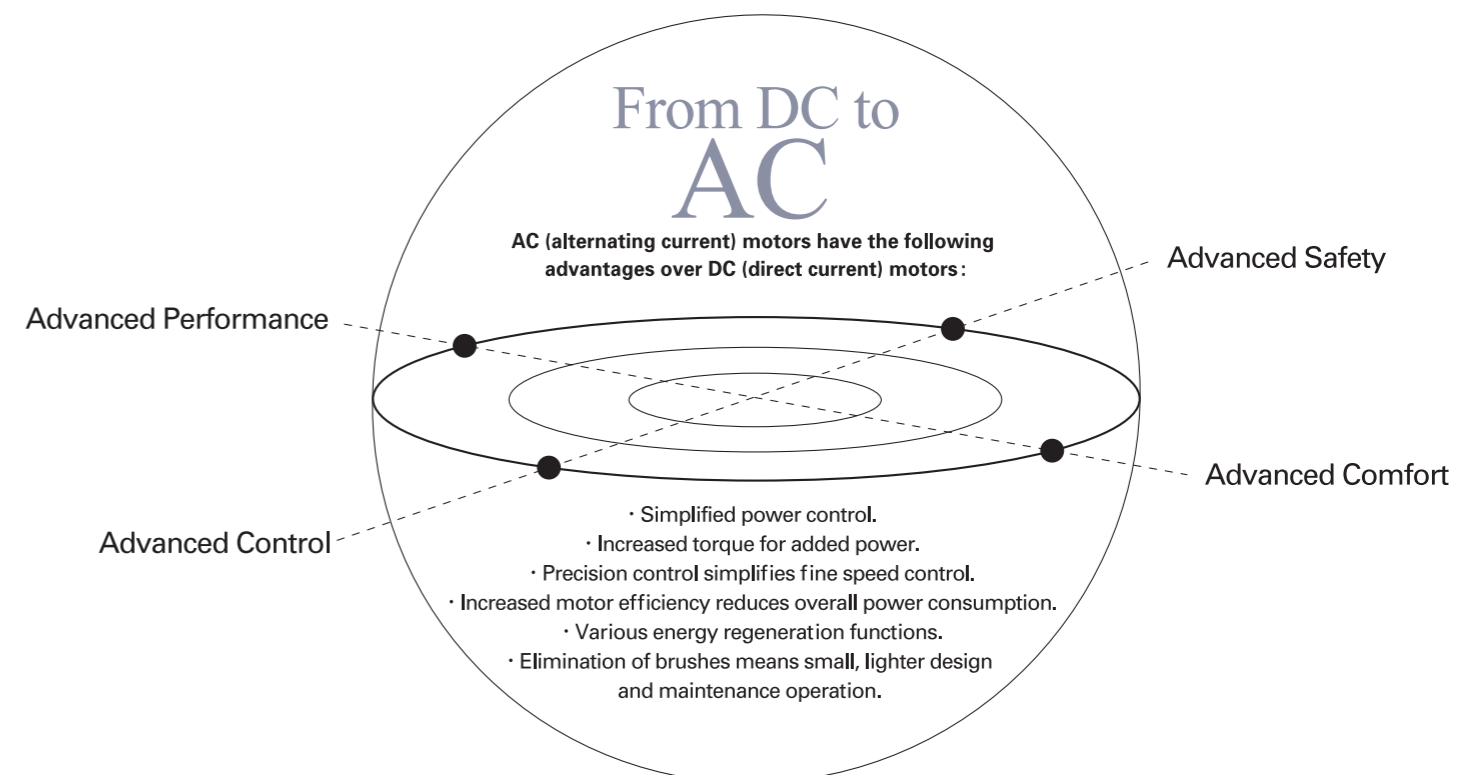
Electric Stand-on Reach Trucks FBR Series

Bringing a new dimension of quality to materials handling in the warehouse

# Advanced

*Experience the evolution of the reach forklift truck  
Platter FBR Series — The confidence of quality*

Nichiyu, Japan's pioneer in the field of electric forklift trucks, has focused its technology on developing the Platter FBR Series, a new type of electric reach forklift truck. We've confidently improved this truck by further refining the reputed maneuverability, safety, operability and comfort of the conventional forklift. We're bringing a new dimension of quality to materials handling in the warehouse while ensuring that we never betray our customers' confidence and expectations of our industry leadership. Now, we invite you to fully experience the evolution of the reach forklift truck.

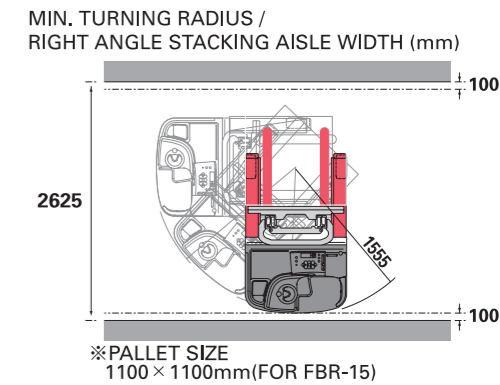




# Advanced Performance

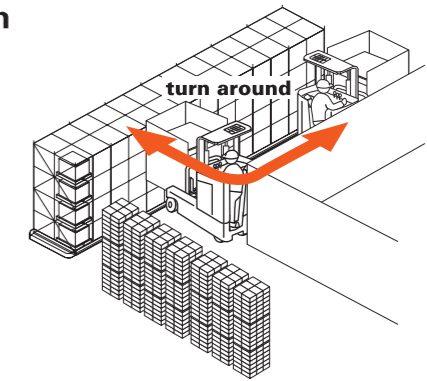
## Top-class turning radius

Because the Platter FBR Series offers the smallest turning radius of any reach forklift truck, it effectively handles the tightest of turns. As a result, it can be operated comfortably even in work locations with narrow aisles. What's more, thanks to the electric power steering (EPS) feature, the FBR Series can be steered with ease even at slow travel speeds.



## Outstanding stability in motion

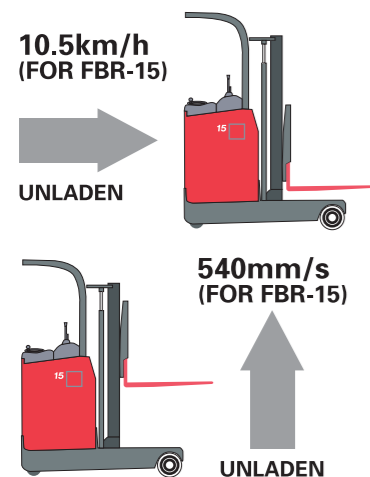
The FBR Series now incorporates an automatic suspension system. This feature ensures stability when the forklift is traveling by counteracting the rolling motion caused by centrifugal force during travel.



The stylish, compact design of this forklift truck is underpinned by substantial power. Its efficient material-handling capability is supported by the highest level of operability. Having extensively researched material handling applications on-site, Nichiyu is demonstrating the next step in the evolution of the reach forklift truck.

## Top-class material handling capabilities and travel speed

The Platter FBR Series employs more powerful AC motors for its propulsion and hydraulic system. Compared with conventional reach forklift trucks, this new model offers exceptional operational capabilities in terms of traveling speed, acceleration and lifting speed. Thanks to the smooth, stress-free movement of this new truck, operators can handle additional work opportunities.



## Maximized operation time between recharges

The SICOS-AC computer control system carefully governs power consumption. As a result, a single charge provides ample power for long periods of operation, increasing the efficiency of material handling tasks.

## Minimal load reduction for lift height

Our 1.5 metric ton model is subject to no load reduction up to 4-meter lifting for the standard chassis and up to 5-meter for the long wheelbase chassis. Thanks to the stability offered by its low center of gravity, work can be performed safely at 4 or 5 meters lifting range.



## More economical maintenance

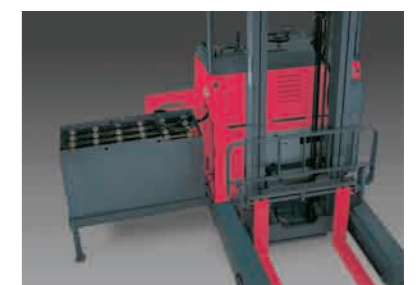
### Designed for forward battery loading

This forklift is designed so that the battery can be extracted from the front of the forklift. As a result, battery charging and replenishment of water can be performed with ease. What's more, there is no need to deal with the inconvenient battery roller table required by conventional side roll-out type reach forklift trucks.



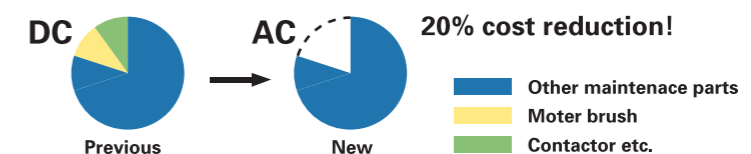
### Designed for side battery loading

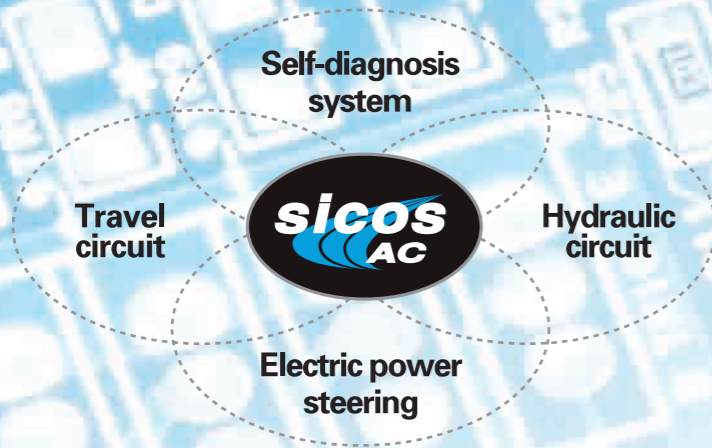
To accommodate customers who frequently change batteries, the sideroll-out type is also available to eliminate the need for a crane when batteries are removed and replaced.



### Brushless motor Reduced maintenance because of less moving parts

The use of an AC motor has eliminated the need for brushes. What's more, the elimination of contactors has reduced maintenance of electrical parts. This forklift truck is more economical because there is no need to replace consumable electrical components.





## SICOS-AC: A multifunction centralized control system for AC control

SICOS-AC represents the evolution of the conventional SICOS control system, as it incorporates a new type of controller fully tuned for compatibility with AC systems. This system, which features advanced intelligence to optimize the reciprocal relationship between the operator and forklift, exhibits higher level and more powerful capabilities while integrating travel operation, hydraulic operation and the electric power steering.

## Energy-saving design

Various power regeneration functions control battery consumption and can extend operating hours.

### Switchback regeneration

When the direction of travel is changed by means of switch-back operation, this function effectively recovers wasted energy and provides it to the battery.

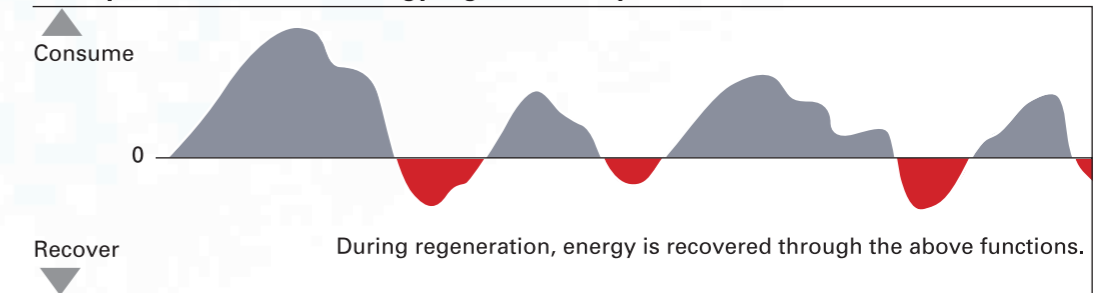
### Braking regeneration

This function recovers energy during regular braking. It helps to reduce the power required for braking, minimizes abrasion of brake linings, and prolongs brake life.

### Accelerator off regeneration

The regeneration function works when the operator releases the accelerator lever while driving. It recovers energy while reducing the traveling speed and retains the sensation of natural deceleration.

Conceptual illustration of energy regeneration system

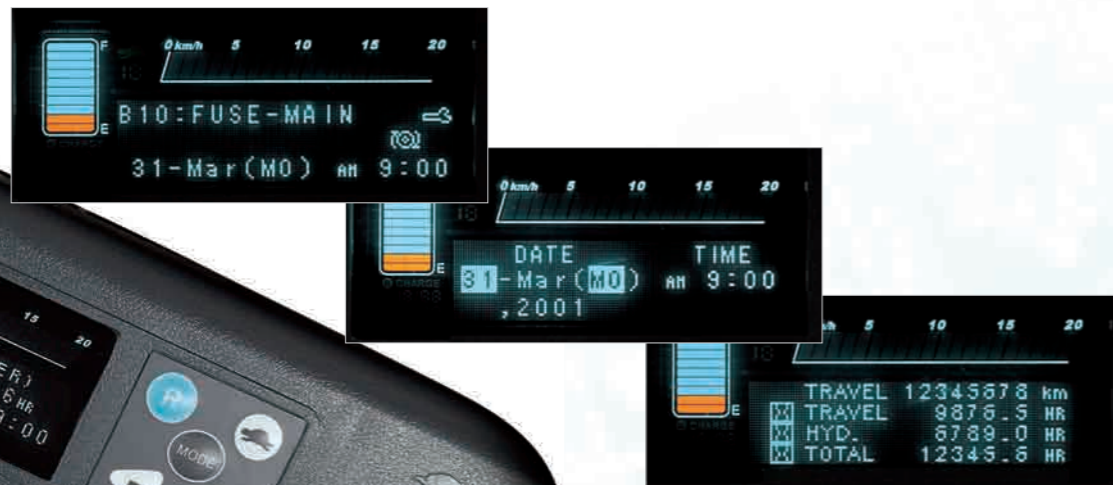


# Advanced Control

*The FBR Series incorporates an AC control system that provides improved operability and more economical maintenance. This advanced intelligent control system ensures that material handling operations are always optimized.*

### Easy-to-read display

Our new vacuum fluorescent display (VFD) has been positioned directly in front of the driver's compartment. It provides various kinds of information in real time, including travel speed, remaining battery power, current time and hour meter display. As a result, the operator is able to determine the status and condition of the machine with a quick glance at the panel.



### Failure self-diagnosis function

The FBR Series is equipped with Nichiyu's proprietary self-diagnosis function. If a malfunction should occur, a computer performs a self-diagnosis of the condition of the control system of the forklift truck and indicates the location of any abnormality by means of an icon and a text message. This greatly speeds up service and maintenance operations.

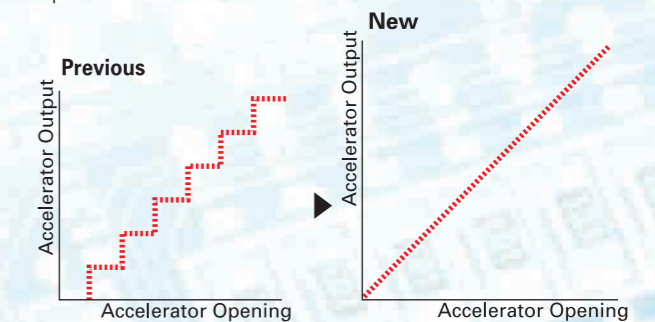
### Multiple driving mode settings

To accommodate operating conditions as well as operator experience levels and preferences, the operator can freely select among eight driving modes and three acceleration modes. The settings range from a smoother, energy-conserving economy mode to a power mode that quickly provides ample amounts of power. Simply choose the mode that best meets your circumstances.

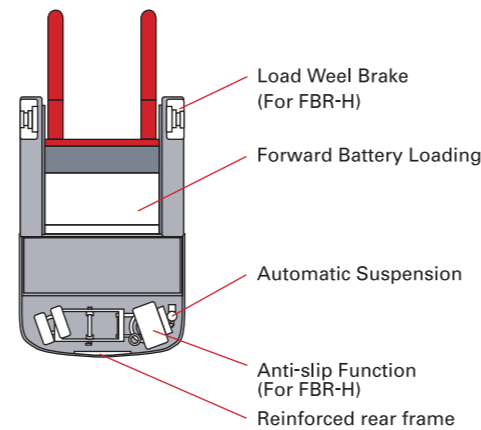


### Dramatically improved inching operation for travel speed and material handling

The SICOS-AC control system makes possible very precise speed adjustments. It dramatically improves inching during fine acceleration, fork operation and other operations.



This graph compares the acceleration time and control capabilities of a superceded model and a new model.



### Antibacterial Specification

We have developed the industry's first forklift truck to incorporate an antibacterial specification. This innovation accommodates the material-handling requirements of sites requiring extremely hygienic environments, such as plants involved in the production of foods, beverages and pharmaceuticals. This specification calls for the use of antibacterial materials on parts such as the top cover and grips, which the operator touches frequently, as well as the use of antibacterial paint on the side covers, overhead guard, mast and frame. In addition, the solid color tires incorporate an antibacterial agent. This approach prevents the accumulation of contaminants such as colon bacilli on the surface of the vehicle, contributing to the maintenance of hygienic conditions in warehouses.

### Automatic power off

The automatic power off feature automatically cuts power to the truck when it has not been in use for 15 minutes. This prevents wasteful power consumption as well as accidents.

### Neutral safety function during travel and material handling

This function ensures that, if the key switch is turned on while the accelerator lever or the hydraulic lever is being operated, all truck functions are disabled. Any miss-operations are indicated with an audible warning as well as a message on the display. To reset, just release all levers and turn the key switch on again.

### Operation interlock system(OIS)

If the operator does not stand correctly in the compartment for more than two seconds, traveling and hydraulic operations are interlocked.

# Advanced Safety

*Forklifts are required to demonstrate absolute reliability at all times. After thoroughly studying potential safety issues associated with reach forklift trucks, Nichiyu has succeeded in solving these potential problems. We deliver safety and peace of mind.*

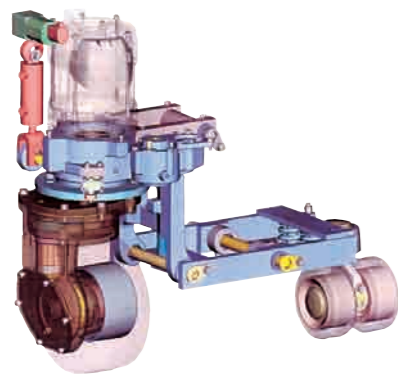


ILLUSTRATION:  
FBR-15 AUTOMATIC SUSPENSION  
(CONTROL LINKAGE)

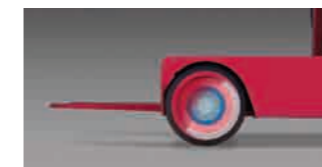
### Automatic suspension as standard equipment

Conventional reach forklift trucks are at risk of overturning due to centrifugal force when making sharp turns. The Platter FBR Series is provided with automatic suspension as standard equipment to overcome this safety problem. The automatic suspension prevents body sway during sharp turns and minimizes the lifting of the front wheels. Moreover, it eliminates the sensation of instability caused by the shift in the center of gravity during reach operation.

### Anti-slip function (Equipped on FBR-H Series only)

We have added the FBR-H Series to our product line which includes our anti-slip features. These features solve tyre-slippage problems during left and right turns and when operating in refrigerated and freezer warehouses. The FBR-H is also equipped with a load wheel brake, ensuring safer traveling and braking on slippery floors. It also minimizes abrasion of the drive tyre caused by spinning tyres. An electric load wheel brake is a standard feature, which ensures

higher reliability compared with hydraulic controlled brakes and removes the risk of operational failure due to oil evaporation or freezing.



LOAD WHEEL BRAKE

### Reinforced overhead guard

The rigidity of the overhead guard has been strengthened and overhead visibility has been improved for increased safety.



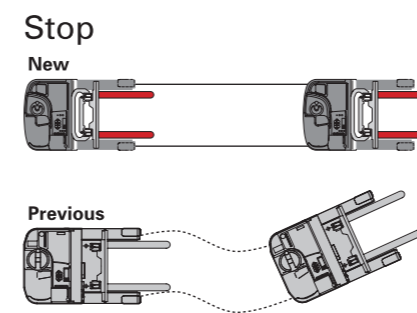
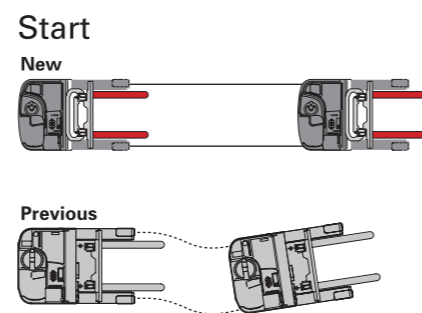
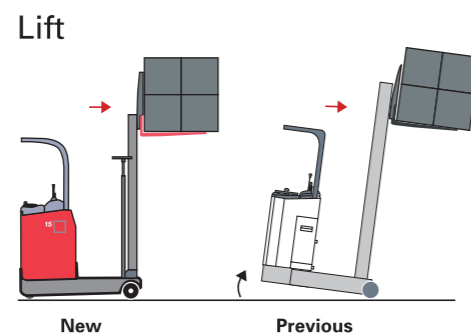
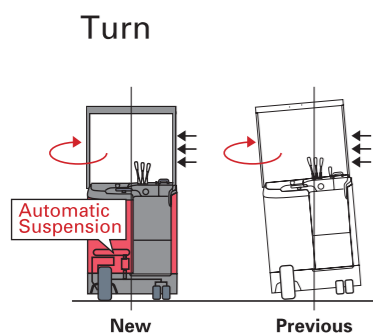
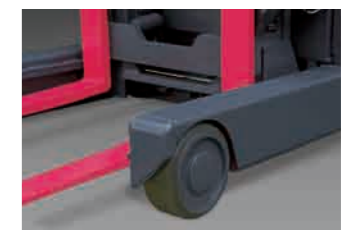
### Reinforced rear frame

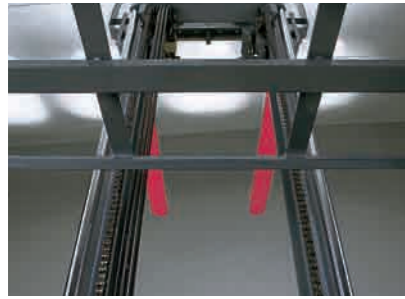
The manufacture of the rear frame has been enhanced to provide increased rigidity and strength. This innovation ensures enhanced operator safety.



### Load wheel cover

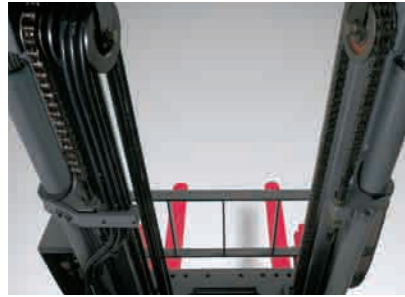
A load wheel cover is provided as standard equipment to protect the front wheel.





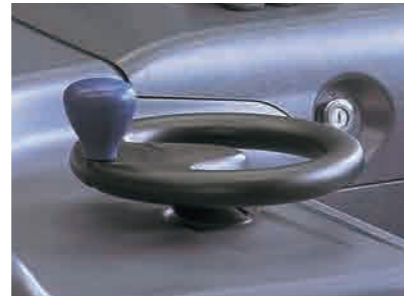
### Provides a wide visibility for enhanced operation

We have further widened the upper and forward visibility by redesigning the overhead guard and mast structure.



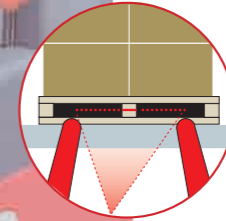
### Small-diameter steering wheel

The small diameter steering wheel reduces operator fatigue during repeated material handling operations, less steering is required for maneuverability. (A large diameter steering wheel is available as an option.)



### Laser pointer (optional)

The red laser beam clearly indicates the fork insertion point on a palette, allowing even beginners to easily adjust their position. Moreover, when the forks are horizontal, the fork horizontal icon appears on the display, making it very easy to make any adjustments for a horizontal position — something that is difficult to determine by eye. This unique Nichiyu function increases the efficiency and safety of operation.



Advanced

# Comfort

*This reach forklift truck was designed so that anyone, from novice to expert, can operate it with ease. The user-friendly design, which consider the needs of the operator, ensures ease of operation.*

### Enlarged operator space

This secure, spacious and wide operator's compartment is larger than other reach forklift trucks. Even big operators can work without feeling cramped.

### Lowest noise level in its class

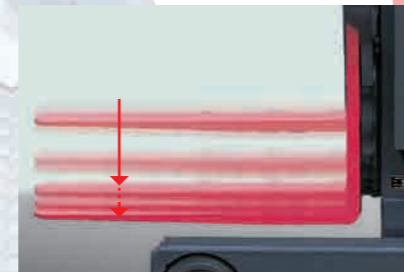
The SICOS-AC system ensures the lowest noise level in its class by eliminating chopping hum and contactor activating noise. This feature minimizes hearing discomfort and provides for extremely quiet operation. Moreover, compared with a conventional battery-powered forklift - not to mention a conventional engine-powered forklift - this model offers exceptionally quiet operation.

70.8dB

Previous

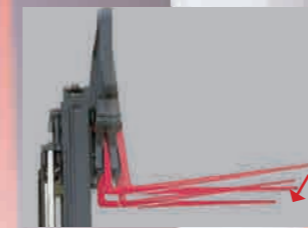
65dB

New



### Mast soft landing cylinder & shock absorption mast

The soft landing cylinder function dramatically reduces the sound and shock experienced when the forks are lowered. The speed at which the forks are lowered is reduced just before the forks reach the ground, eliminating any shock. Moreover, a shock absorption function for the mast has been provided, as standard equipment, to relieve any shock occurring from friction while lifting a duplex or triplex mast. This reduces stress on the operator which may occur due to by the threat of collapsing loads, damage and shocks.



### Automatic fork leveling function (optional)

When the level button on the tilt lever knob is pressed while the forks are tilted forward, this function automatically stops the forks in a horizontal position. This feature dramatically increases the ease of operation of fork insertion and withdrawal.



### Fully automatic computer-controlled battery charger

Because charging is fully computer controlled, the operator need only push the start button to begin charging. The system automatically checks the remaining battery power and ensures the optimum charge. Moreover, battery charging time is automatically extended during cold weather. With the built-in charger, equipped a reservation function ensures that a full charge is available at the time you start work.



### Larger waist pad

This model features a freely adjustable waist pad that precisely accommodates the operator's physique. In particular, the cushion effect firmly holds the operator in position and protects from shocks. Large knee pads are also provided as standard equipment.



### Larger brake pedal

The brake pedal is now larger and easier to depress. It also fits the foot more securely.



## Since 1958

### Nichiyu — Japan's pioneering developer of the reach forklift truck

Nichiyu developed Japan's first reach forklift truck.

At first, this model was used on platforms of train stations and for handling cargo inside freighters.

As a result, we named it "Platter" because of its association with the railway platform.

The Platter easily turns in confined spaces and efficiently handles cargo, earning it an excellent reputation with our customers as a revolutionary forklift.

In the 40 years since it was introduced in Japan, the Platter has become synonymous with the reach forklift truck in Japan.

Nichiyu products are top sellers in the Japanese, Chinese and Southeast Asian markets and are gaining ever higher levels of customer satisfaction.

This achievement has been supported by our approach to product development, which focuses on the users' point of view.

Today, the demand for electric forklift trucks is growing worldwide against the background of environmental challenges. In the future, we will continue to develop products from the users' perspective while considering environmental issues.

We are considering ways of rationalizing distribution for customers worldwide while making a substantial contribution to environmental preservation.



All specifications have been determined according to Nichiyu's terms and conditions. Specifications are subject to change without notice in the interests of product improvement.

# NICHYU

**Nippon Yusoki Co., Ltd.**

1-1, 2-chome, Higashikotari, Nagaokakyo-shi, Kyoto 617-8585 Japan

Phone: +81-(0)75-956-8622 Fax: +81-(0)75-955-0480 URL:<http://www.nichiyunet.co.jp/en/>



JQA-QM3889  
JQA-EM4909