

# S3E

DIESEL ELECTRIC  
STRADDLE CARRIER





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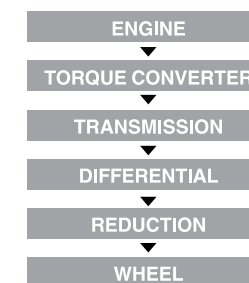
## The Diesel Electric mechanism offers high performance and great cost reduction.

TCM Diesel Electric Straddle Carrier achieves low emissions like Nox, HC, CO and PM together with improved fuel consumption and lower maintenance cost. In addition, the state-of-the-art technology of the machine brings environment-friendliness, ergonomics, speedy maneuverability and efficient container handling operation.

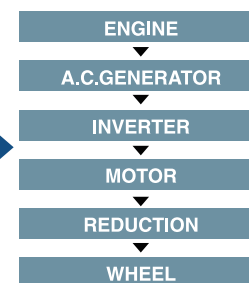
### Diesel Electric Mechanism

A single Diesel engine drives a single generator to produce electric power for the induction motor that drives the straddle carrier. Regulating the third wheels with two motors and two inverters controls the traveling speed of the carrier.

#### DIESEL MECHANICAL TYPE



#### DIESEL ELECTRIC TYPE



### Diesel Engine

The Diesel engine uses less fuel, produces less noise as well as emissions, like Nox, HC, CO, PM and smokes costs when compared to the previous model.



# HIGH PERFORMANCE AND SMOOTH OPERATION



## Quick Container Handling

The small turning radius and quick lifting and lowering speeds ensure better work efficiency.

Hoisting Speed	
With load	Without load
<b>260mm/sec</b>	<b>400mm/sec</b>
Lowering Speed	
With load	Without load
<b>300mm/sec</b>	<b>400mm/sec</b>

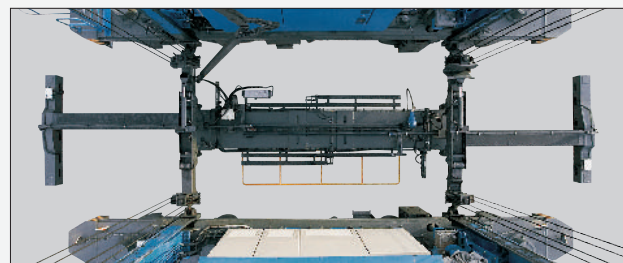
## Quick and Smooth Traveling

Quick acceleration and high traveling speed offers higher container efficiency. In addition, the Diesel Electric design ensures smoother traveling.

- Superb Acceleration**  
30 seconds to accelerate to reach 20km/h
- Smooth Traveling**  
23km/h with load : 27km/h (without load)

## Accurate Hoisting Control & Speedy Handling

The easy-to-identify T-bar spreader works with the floating twist locking device to make sure it grabs containers, even during hectic operations.



## Inverter

The inverters ensure smoother operations



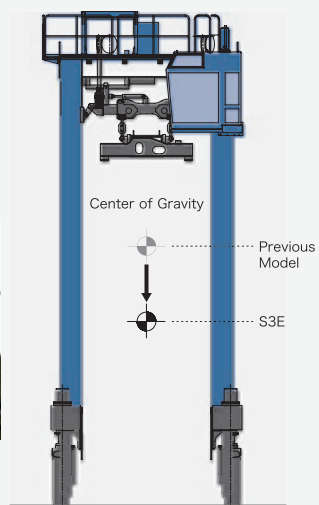
## Less Vibration and Noise

The drum and wire rope hoist system minimizes vibration and noise while lifting and lowering containers.



## Low Center of Gravity

The carrier features a low center of gravity to ensure safe turning around corners.



## ERGONOMICS AND SAFETY

## EASY MAINTENANCE AND SAVING MAINTNANCE COST



### Quiet Cabin and Wide Visibility

The engine is positioned under the frame to offer a substantial reduction of the operating noise inside the cabin. And, a new type of cabin design offers far better front rear visibility than existing models.

#### Low Noise

Operator's cabin: **75dB(A)**

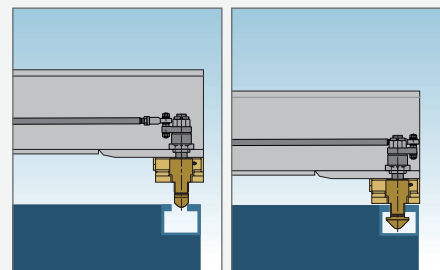
7 meter surrounding machine: **78dB(A)**

### Well-Organized Operating Controls

The operating controls, including the meters, are properly laid out according to the ergonomic principles to ensure safer and more efficient operations.

### Floating Twist Locks

The floating twist locks on the carrier assure safe container handling.



### Full PLC control

A PLC is used for inverter control, fault diagnosis, productivity monitoring and interactive display



### Easy Access to Electric Room, Engine and Generator

Not only the electric room but also engine and generator are positioned on the lower frame for the easier maintenance.

### Easy Access to the Electric Room

The electric room is positioned on the lower frame for easier maintenance.

### Interchangeable Wheels

The driving and driven wheels are interchangeable, for easier serviceability.

### Low Maintenance Costs

- Dramatic fuel saving for Diesel Electric Model.
- Extended overhaul intervals
- Reduced overall maintenance costs.



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- These products and specifications are subject to change without notice.
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- Features and specifications may vary depending on markets.

Manufactured by

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