



TCM

CONTAINER HANDLER

FOR CONTAINER TERMINAL



CONTAINER HANDLER

TCM offers a wide range of container handling equipment that provides handling solutions for container yards.

Every day, an enormous number of containers are moved and stacked at ports around the world. TCM, a leading manufacturer of container terminal equipment, is committed to the development of new products to meet container handling needs for speedy operation, efficient space utilization and labor savings.



The full range of TCM's Container Handling Equipment

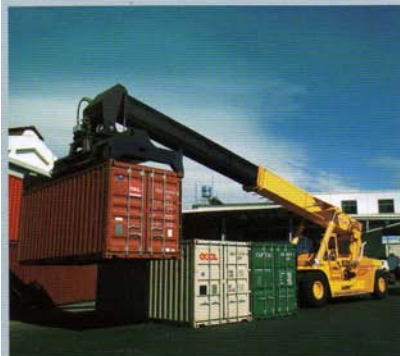
TCM's full line of container handling equipment meets a wide variety of container handling needs:



TRANSFER CRANE



CONTAINER CARRIER



REACH STACKER



HEAVY-DUTY FORKLIFT TRUCK



EMPTY-CONTAINER HANDLER



TRANSFER CRANE

RTG (Rubber Tired Gantry Crane: 8-wheel and 16-wheel models)



CT5



CT4



RMG

TRANSFER CRANE

RMG (Rail Mounted Gantry Crane)

Features:

1. High productivity

- High-performance anti-sway system
- Standard cycle time: 55 seconds

2. Added safety and operator comfort

- Quiet operating cab with a low (64 dB(A)) noise level at the operator's ear
- Excellent downward visibility, thanks to the industry's first seamless glass pane floor (with electric defogger).

3. Improved durability

- Sturdy construction enabling to withstand a load five times as heavy as the rated load (40.6 tons).

Specifications

| | RMG |
|------------------------------|---------------|
| Stacking capacity | 6 |
| Rated load | 40.6 tons |
| Hoisting speed, loaded/empty | 35/70 m/min |
| Trolley speed | 125 m/min |
| Gantry speed | 100 m/min |
| Power supply | External |
| Drive system | 4-wheel drive |
| Control system | Inverter |



HYBRID TRANSFER CRANE

HYBRID RTG (Rubber Tired Gantry Crane)



CT4H

TCM's Hybrid Transfer Crane consumes less fuel, emits less CO₂ and makes much less noise during loading and unloading operations at the terminal.

Features:

1. Less fuel and lower CO₂ emissions

- A small diesel engine generates power to operate the crane to reduce CO₂
- Energy generated when lowering containers is saved in a super-capacitor and reused during lifting

2. Enhanced safe operation

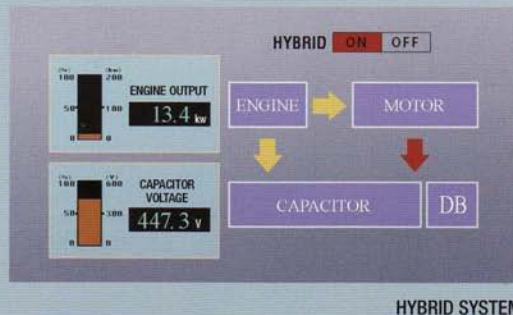
- The container positioning system assures safe operation
- Rigid frames with less deflection
- Smooth trolley travel and safe braking

3. Super-capacitor

- Longer cycle lift at discharging electricity
- Possible for faster and longer volume electricity charging/discharging
- Higher electricity charging/discharging (more than 95%)

Specifications

| | CT4 | CT5 | CT6 |
|--|--------|-----------|-------|
| Stacking capacity | 4 | 5 | 6 |
| Rated load | | 40.6 tons | |
| Max. lifting height (under the spreader) | 15.24m | 18.1m | 21.2m |
| Hoisting speed (using only the spreader) | | 54m/min | |
| (with spreader and a 40.6 ton load) | | 23m/min | |
| Max. gantry speed | | 135m/min | |
| Trolley speed | | 70m/min | |



CONTAINER CARRIER

S3E

The diesel-electric powered container carrier



S3E

Features:

1. High productivity

- Diesel-electric drive shortened the time to reach the top speed, 27km/h
- Quiet, clean and smooth operation with electric-powered wire ropes

2. Cost reduction

- Engine-life improved when used at the rated revolution speed
- Using durable wire ropes reduced the replacement cost

3. Enhanced stability

- Improved the vehicle's stability by fitting heavy parts (engines, generators, electric rooms) at the lower frame, which lowers the gravity center.

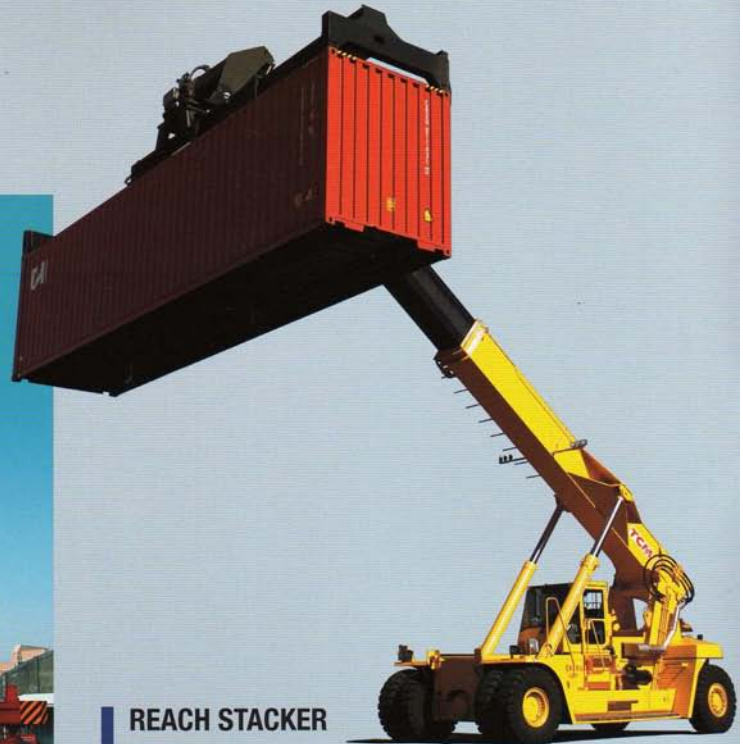
4. Superior safety

- Safety device installed to prevent overload
- Full-hydraulic brake with dual-completed system



Specifications

| | S3E |
|---|-------------|
| Stacking capacity | 3 |
| Rated load | 40tons |
| Max. traveling speed (without load/with load) | 27/23mm/h |
| Lifting speed (without load/with load) | 400/260mm/s |
| Lowering speed (without load/with load) | 400/300mm/s |
| Min. turning radius | 9,800mm |
| Containers to be used | 20ft, 40ft |



REACH STACKER

MR420

MR420

The MR420 has a telescoping boom and rotating spreader, making it a safe, efficient way to handle containers, even those in the second or third row.



Features:

1. Good forward visibility

- The visibility is wide and clear because the vehicle doesn't have an obscuring mast installed.
- Powered sliding cab assures optimum visibility in a variety of operating conditions.

2. Overall height can be as low as 4,500 mm

- The Reach Stacker can carry a container even to places where the overhead clearance is limited.

3. The rotating spreader enables to hold a container lengthwise.

- Operable within the overall width of the vehicle.
- Containers can be carried and handled indoors or in narrow spaces.

Specifications

| | MR420/4 | MR420/5 |
|-----------------------------------|--|--|
| Stacking capacity | 4 | 5 |
| Permissible load / load center | 1st row 42000kg/1990mm 2nd row 25000kg/3840mm 3rd row 11000kg/6340mm | 42000kg/1990mm 30000kg/3840mm 16000kg/6280mm |
| Total service weight | 6600kg | 7100kg |
| Overall length (booms retracted) | 10900mm | 11600mm |
| Overall height (booms horizontal) | 4490mm | 4490mm |
| Overall width | 4180mm | 4180mm |

HEAVY-DUTY FORKLIFT TRUCK

FD100 / FD115 / FD120 / FD135 / FD150S / FD160S / FD180 / FD200 / FD230 / FD300 / FD370 / FD430 / FC70 (EMPTY CONTAINER HANDLER)

For the first time in the industry, FD430 made it possible to stack loaded containers up to five high. The FC70/3-6 has the faster lifting speed in its class, substantially improving work efficiency.



FD300

FD430

FD250

FC70/3-6

| Specifications | FD370 with spreader (3-high) | FD430 with spreader (4-high) |
|--|------------------------------|------------------------------|
| Max. load | 32000kg | 30500kg |
| Weight | 61700kg | 65500kg |
| Overall length | 9700mm | 10400mm |
| Overall width | 4200mm | 4200mm |
| Overall height at mast | 7100mm | 8320mm |
| Min. turning radius (at the outside edge of the truck) | 6900mm | 7950mm |
| Lifting speed (with load) | 240mm/s | 230mm/s |
| Max. traveling speed | 30km/h | 30km/h |

| | FC70/3-6 |
|--|---|
| Max. load / load center | 7000kg/1250mm |
| Max. lifting height (under the spreader) | 2-high 9300mm 3-high 12000mm 4-high 15300mm 5-high 16000mm |
| Tare weight of the FC70H/3 | 38500kg |
| Overall length | 6430mm |
| Overall width | 3800mm |