

MC100-1

Road-rail 10-t freight car



Features The largest class road-rail freight car

- The highest loading capacity among road-rail freight car.
- Long body capable of loading lengthy cargo
- Provided with an emergency engine unit, which ensures traveling even in case of trouble with the main engine.
- Applicable to standard gauge (1,435 mm) and narrow gauge (1,067 mm)
* Changeable to other gauges.
- All models are provided with back monitors.



Examples of work





Principal specifications

Item	MC100-1
Specifications	
Base vehicle	Isuzu Model PJ-CYZ51Q6
Body specifications	Flat body
Weight of vehicle (kg)	14,740
Max. loading capacity (kg)	7,100
Total weight of vehicle (kg)	21,950
Riding capacity (persons)	2
Fuel tank (L)	200
Dimensions	
Overall length (mm)	9,980
Overall width (mm)	2,490
Overall height (in normal state) (mm)	2,829
Overall height (on track) (mm)	3,075
Wheel base (mm)	5,150
Tread (front) (mm)	2,065
Tread (rear) (mm)	1,850
Min. road clearance (mm)	280
Internal length of loading platform (mm)	6,880
Internal width of loading platform (mm)	2,390
Internal height of loading platform (mm)	400
Loading height (mm)	1,370
Min. turning radius (mm)	7,800
Track running performance	
Max. speed (km/h)	1st gear: 15 km/hr 2nd gear: 30 km/hr
Max. gradient at which vehicle can start	35/1,000
Counterbalance braking distance (m)	In fine weather: 18 m In wet weather: 25 m
Braking distance (m)	In fine weather: 10 m In wet weather: 14 m

Major units

Item	MC100-1
Engine	
Model	Isuzu Model 6WF1
Type	4-cycle water-cooled inline direct injection type, inter-cooler turbo
Total displacement (cc)	14,250
Max. output (PS/rpm)	365/1,750
Max. torque (kg·m/rpm)	178/1,400
Hydraulic unit	
Type and quantity of hydraulic pumps	Triple gear pump
Hydraulic pump discharge (L/min)	154.3×2+120
Max. set pressure (kgf/cm ²)	210
Hydraulic oil tank capacity (L)	350
Operation method	Solenoid valve
Track running equipment	
Wheel	Diameter: 460mm Width: 125mm, wheel back to back gauge: 990mm (narrow gauge), 1,360mm (standard gauge), 4 insulated wheels
Axle	2 axles (diameter 100 mm) Distance between axles: 4,570mm
Motive power source	Hydraulic motor with counterbalance valve (output 144 kW, torque 2,296 N.m)
Drive	Chain driving system for each axle
Brake	Hydraulic disc brake for each axle (braking torque: 0.87 t·m) + counterbalance valve for each axle, with parking braking system and escape lash prevention device
Safety devices in track	
Emergency engine	Air-cooled 4-cycle single cylinder diesel engine (406 cc, 10 ps)
Other safety devices	Driving force release clutch, hydraulic motor free valve, Brake release valve, Electromagnetic/manual control valve, front and rear lamps, flasher, connecting hole, coupling rod and back monitor

Major dimensions

