

## efACE Standard Railcar

Achieves energy and resource savings through relentless pursuit of recycling and reuse, and thorough weight reduction

The railcar uses stainless steel as a structural material and aluminum composite plates in the interior panels, both recyclable materials, and promotes use of monoalloys in the aluminum structure.

Reduced weight decreases electricity consumption.

Friction stir welding (FSW), which requires less heat than MIG welding, is applied during manufacture.

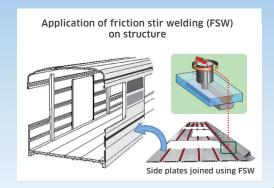
This standard commuter railcar is a clean form of mass transport from

the perspectives of energy saving and reduced environmental impact.

Its core concepts are "flexibility" supporting both stainless-steel and

aluminum cars: "rationality" of quality and price; and "added value"

of comfort and environmental performance.





Initial registration: 2017



Kawasaki Heavy Industries, Ltd.

- Adoption of recyclable stainless-steel structure and interior panels
- Adoption of "harmonica" construction in the aluminum structure and twist bolts in the SUS structure makes the body easy to update, including changing the seating and equipment layout
- Weight reduction achieved through adoption of aluminum composite plates and chamberless ducts