

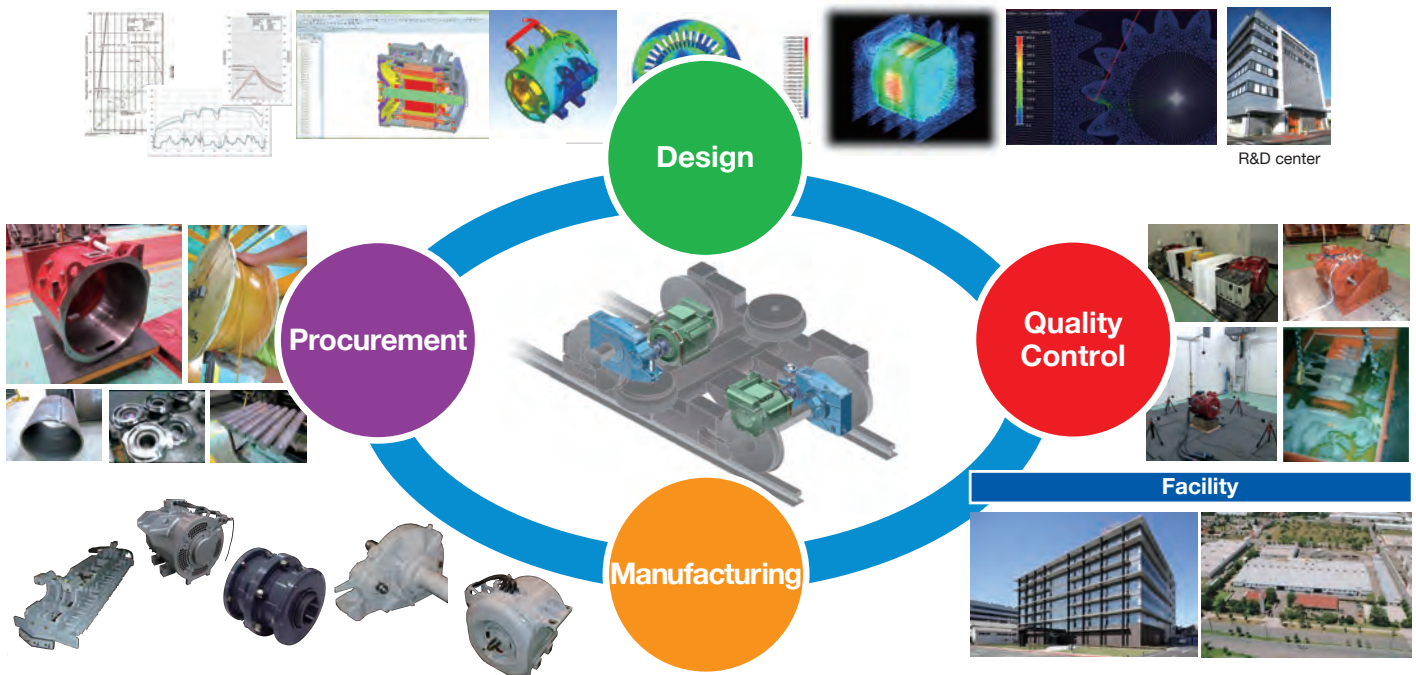
# Integrated Traction System

## - Traction Motor, Gear Coupling, Gear Unit -

### Mitsubishi Electric handles the interface design of the “Traction System”.

Mitsubishi Electric provides an integrated “Traction System” that consists of Traction Motor, Gear Coupling and Gear Unit, based on the required performance and bogie interface. The customer will benefit from:

- Minimum design time for a custom “Traction System”
- Refined validation and performance



### Optimized reliable traction equipment

#### Traction motor

- Over 70,000 units worldwide
- Broad experience with Shinkansen (Japanese bullet train)
- Various types of induction motors:



Open type self-ventilated



Open type forced-ventilation



Totally enclosed type



Linear induction motor

#### Gear Unit

- Optimum gear ratio
- Single / Double reduction gear
- Minimum interface design with traction motor
- Broad experience with Locomotives / EMU
- Low acoustic noise

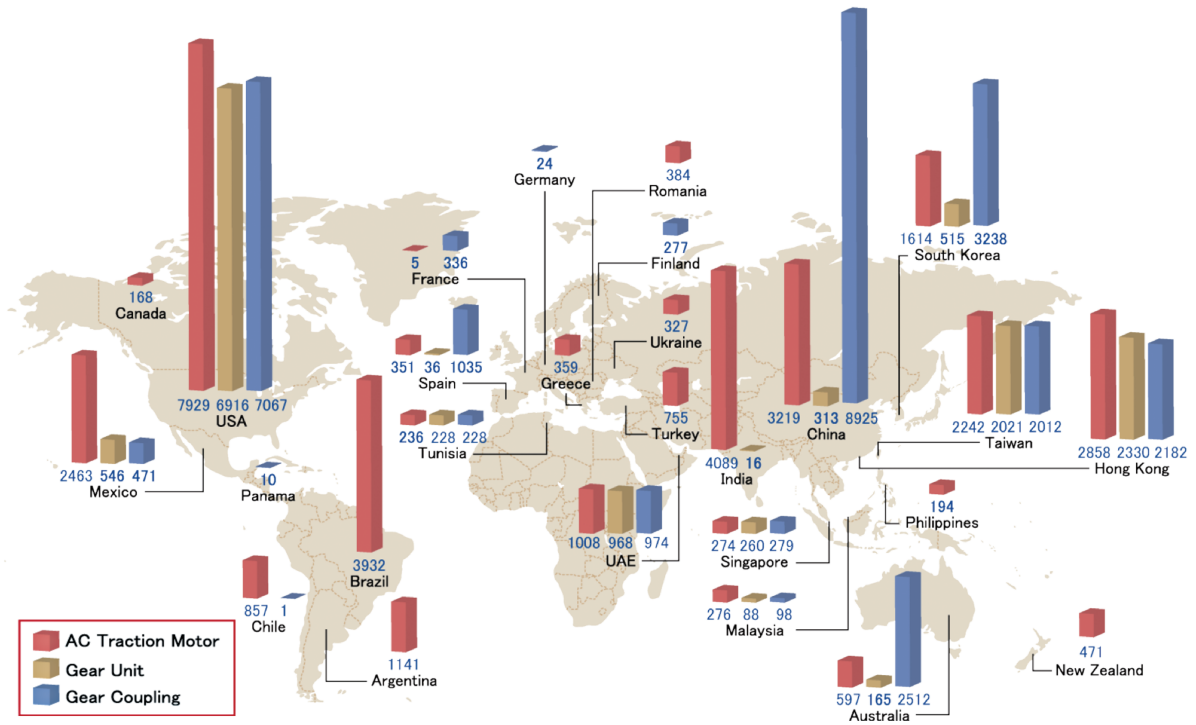


#### Gear Coupling

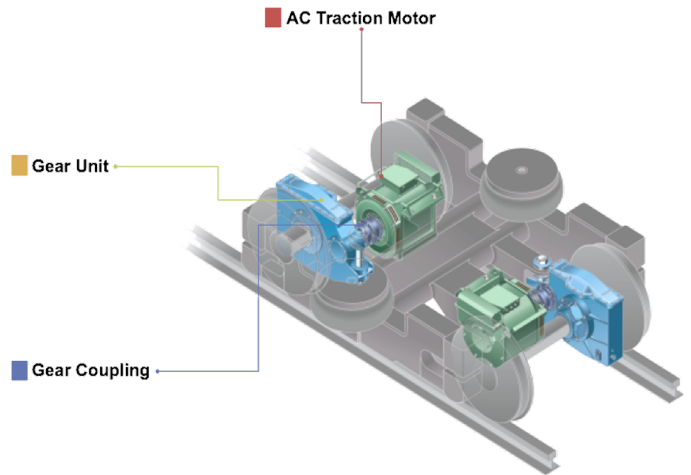
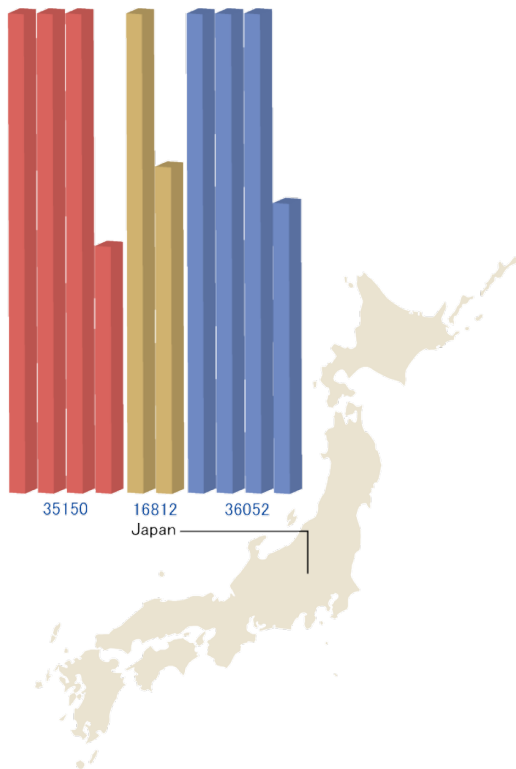
- Large tolerance for shaft misalignment with small coupling dimensions
- Low acoustic noise
- Broad experience with Locomotives / EMU / Shinkansen



# Manufacturing Record (World)



# Manufacturing Record (Japan)



**MITSUBISHI ELECTRIC CORPORATION**

<http://www.MitsubishiElectric.com>