

Mitsubishi Electric

-Introduction of Railway Business-

February, 2013

Mitsubishi Electric India Private Limited

About

Mitsubishi Electric Corporation

Corporate Data

- **Established:** January, 1921
- **Consolidated Net Sales:** JPY 3,639 billion
(US\$ 44,4 billion)
- **Paid-in Capital:** JPY 176 billion
(US\$ 2,1 billion)
- **Employees:** 120,000 employees
- **Global Network:** Offices and factories
in 36 countries



(As of March 31, 2012)

Business Segments

Energy & Electric Systems

Power Generation System



Railway Systems



Industrial & Automation Systems

Automation Equipment



Industrial Products



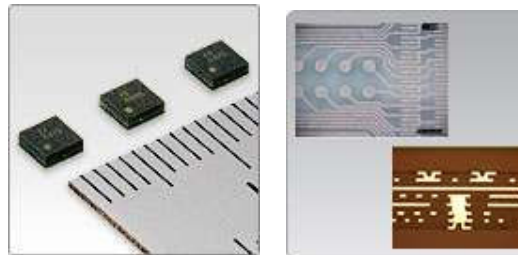
Information & Communication Systems

Communications Satellite



Electronic Devices

Power Devices



Home Appliances

Room Air Conditioners



Activities in India

Strong Presence in India



Mitsubishi Electric India

- Headquarters: Gurgaon, Haryana
- Sales and service businesses
 - Air conditioners systems
 - Factory automation systems
 - **Railway systems**
 - Visual information equipment
 - Power devices

Mitsubishi Electric Automotive India

- Manesar, Haryana
- Automotive electrical equipment production and sales

L&T-MHI Turbine Generators

(10% Mitsubishi Electric investment)

- Hazira, Gujarat
- Generator production and sales

Mitsubishi Elevator ETA India

- Chennai, Tamil Nadu
- Elevators, Escalators sales and service

Mitsubishi Electric Railway systems

On board Products for Rolling stock



Main Transformer



Air Conditioning System



Auxiliary Power Supply



Converter Inverter



Traction Motor



Brake System



Automatic Train Protection



Train Information System

Experiences of SHINKANSEN in Japan

Mitsubishi Electric has been in the Shinkansen Projects from the beginning and has a long experience and deep know-how to realize the high quality and highly reliable products for High Speed Trains.



**First SHINKANSEN
(1964)**



(1997)



(1992)



(2011)



(2007)

**AC Motor Driven SHINKANSEN
(First generation)**

Today

Grobal Supply Experiences of Mitsubishi Electric (Traction System and Air Conditioner)

28 Countries
120,000 Cars

UK 
1,402 Cars

France 
7 Cars

Spain 
2,128 Cars


Italy 
451 Cars

Greece 
126 Cars

Turkey 
315 Cars


Tunisia 
76 Cars

UAE 
413 Cars

India 
1,245 Cars

DMRC RS1	280 Cars
DMRC RS3	196 Cars
DMRC RS4	8 Cars
DMRC RS6	136 Cars
DMRC Airport Metro Express Line	48 Cars
Jaipur Metro	40 Cars
Mumbai Metro	64 Cars
Bangalore Metro	150 Cars
Kolkata Metro	84 Cars
Hyderabad Metro	171 Cars
Chennai Metro	168 Cars
IR	70 Locomotives
DLW	4 Locomotives

Japan 
90,000 Cars

Korea 
1,918 Cars

China 
5,658 Cars

Taiwan 
1,410 Cars

Hong Kong 
718 Cars

Philippine 
237 Cars

Malaysia 
96 Cars

Singapore 
474Cars

Canada 
204 Cars

USA 
4,630 Cars

Mexico 
2,729 Cars

Chile 
288 Cars

Brazil 
1,104 Cars

Australia 
1,928 Cars

New Zealand 
235 Cars

Mitsubishi Electric Railway systems In India

In early 1960s, 70 Electric Locomotives were delivered from Mitsubishi Electric.
This is the **First Railway Export business** from Mitsubishi Electric Japan.



Type BRM-2 Locomotive for Indian Railways

Presence in India

Number of cars order receipt: **1,245 cars**



<Delhi Metro>
RS1, RS3, RS4, RS6,
Delhi Airport Metro
Express Line
Total: 668 cars

<Jaipur Metro>
40 cars

<Mumbai Metro One>
64 cars

<Bangalore Metro>
150 cars

<Kolkata Metro>
East-West Line 84 cars

<Hyderabad Metro>
171 cars

<Chennai Metro>
168 Cars

<Delhi Metro>



(RS1/RS4/RS6)

<Delhi Metro>



(RS3)

<Bangalore Metro>



<Mumbai Metro one>



<Delhi Airport Metro Express Line >





**Delhi Metro is the first urban rail system certified
by the UN for reducing greenhouse gas emission**

Mitsubishi Electric aspire to contribute to the Indian High Speed Railway Projects

- State-of -the art technologies and expertise hard-earned through our long history in the railway systems business including Shinkansen and Indian Metro projects.
- High quality systems & products based on our in-house technologies and components
- Strong customer support from Japan and locally in India for the construction and operation & maintenance

We aspire to be a part of further growth of India's High Speed Railway Systems together with you.

धन्यवाद !!
ありがとうございます!!

