
High Speed Rail Seminar in California

**Kawasaki's High Speed Train Technology
and Contributions to the US Society**

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1.Kawasaki Company Profile

1.1 Company Profile

Established: October 15, 1896
Capital: USD \$3,042 million (as of March 31, 2010)
Net Sales: USD \$12.6 billion (FY ending March 31, 2010)
Employees: 32,297 (as of March 31, 2010)



1.2 Chronicle of High Speed Train Development

Kawasaki's involvement in development of all Shinkansen trains



Kawasaki supplied and is going to supply: 3,075(up to now)

1.3 Export Model High Speed Trains

Taiwan High Speed Rail Corp. 700T Series



- Award/Service Commencement : 2000/2007
- Max. operating speed :186 mph(300km/h)
- Fully dedicated newly constructed track
- System-wide Contract
- Contractor: Taiwan Shinkansen Corporation
- **Kawasaki supplied 360 cars**

Ministry of Railway, People's Republic of China CRH2



- Award/ Service Commencement : 2004/2007
- 125mph(200km/h) EMU for upgraded existing lines with partially newly constructed tracks
- 186mph(300km/h) class EMU for newly constructed dedicated passenger lines
- **Kawasaki provided CRH2 with local partner Sifang:**
 - 125mph(200km/h) EMU 960 cars
(including berth type)
 - 186mph(300km/h) class EMU 480 cars

2.Kawasaki's Contributions to the US Society

2.1 Kawasaki Built Rail Cars in the US



MTA New York City Transit R160



Port Authority Trans-Hudson Corp. PA-5



MTA Metro-North Railroad M-8



MTA New York City Transit R142A



Port Authority Trans-Hudson Corp. PA-4



Massachusetts Bay Transportation Authority



WMATA Washington Metropolitan Area Transit Authority Series 7000



MTA Long Island Rail Road C-3
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Maryland Mass Transit Administration MARCIII
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2.2 Kawasaki Business Operation for the US

Rolling Stock Business Operation

Organization	Rail Car Operation	Staff
Kawasaki Heavy Industries, Ltd., Hyogo Works	Since 1906	2,300
Kawasaki Rail Car, Inc., Yonkers Plant	Since 1986	502
Kawasaki Motors Manufacturing Corp., U.S.A., Lincoln Railcar Plant	Since 2001	440 (RC Plant only)

Kawasaki's basic philosophy is to provide "Made in the U.S.A." rail cars built by and for the American people.

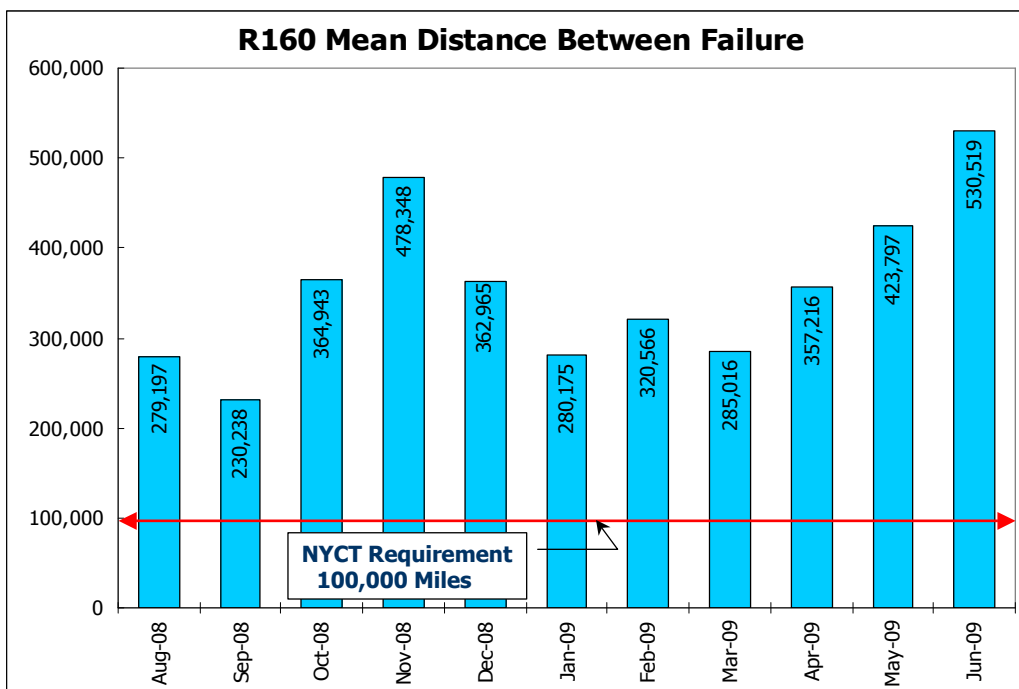
Kawasaki Motors Manufacturing Corp., U.S.A., Lincoln Railcar Plant



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2.3 Kawasaki's Advantages (1)

-Delivers reliable cars, with quality built-in



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2.4 Kawasaki's Advantages (2)

- **Provides “Made in the USA” product**

The only manufacturer in the US to mass produce heavy rail/subway cars from scratch.

- **Expertise and resource capability**

Kawasaki, as a group, maintains its own technical research and development institute. Flexible mobilization according to the world market demands.

- **Design flexibility**

Design development considering the customer's operating condition.

- **Customer oriented business philosophy**

Problem solving is our first priority.

3. Kawasaki's Solutions for US High Speed Projects

3.1 Kawasaki's Solutions (1) US Economy Enhancement

- **Increase of Production Line in KMM/KRC**
 - ➔ Employment of additional people
- **Utilization of Automobile Parts Supplier**
 - ➔ Restructuring of Automobile Industry
- **Promotion of Technology Transfer**
 - ➔ Growing American Rolling Stock Business
 - ➔ Compliance with “Buy American”
- **Final Assembly at HSR Site**
(Utilization of Depot facility)
 - ➔ Pre-training of Maintenance Staff

3.2 Economic Benefits for California

Kawasaki is considering the following proposals.

- 1) **Prior Technology Transfer** to the firms in CA, who wish to make HSR train parts for Kawasaki.
- 2) **Final Assembly** at HSR Site.
(Utilization of CHSR Depot facility to be)

3.3 High Speed Train – efSET (1)

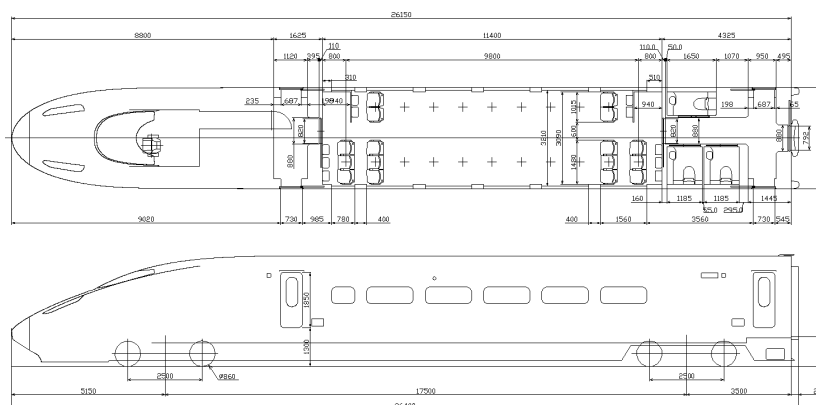


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3.3 High Speed Train – efSET (2)

- Kawasaki’s original High Speed Train for International Market
- Maximum Operating Speed: 220 mph (350km/h)
- Complies with FRA Requirements



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3.3 High Speed Train – efSET (3)

- Expected Merits of “efSET” for US high speed operations
 - (1) Safety
 - Crashworthiness, Fire Precaution, etc.
 - (2) Reliability
 - (3) Environmentally Friendliness
 - Energy Saving, Reduction of wayside noise
 - (4) Good Ride Quality
 - Less vibration, Reduction of interior noise
 - (5) Good Maintainability

4. Conclusion

4.1 Kawasaki's Wish to Participate in California HSR Project

**Kawasaki wishes to take a leading role
in California High Speed Rail Project.**

4.2 Response to Expectations in the US

**Job Creation and
Reduction of Greenhouse Gas Emission**

1. By Kawasaki's Strategy

Revive railway related industry and encourage new job opportunities in the United States.

2. By Kawasaki's Technology

Contribute to the significant reduction of greenhouse gas emission in the United States.



**Kawasaki can contribute to the US society
through the high speed rail projects!**