



Introduction to



NIPPON SHARYO

Corporate Profile (March, 2011)

Head Office:	Nagoya, Aichi, Japan
Established:	September 1896
Paid-in capital:	US\$ 131 million (11.8 billion yen)
Sales:	US\$ 1.1 billion (94.8 billion yen)
Employees:	Approx. 2,000



ISO Certification

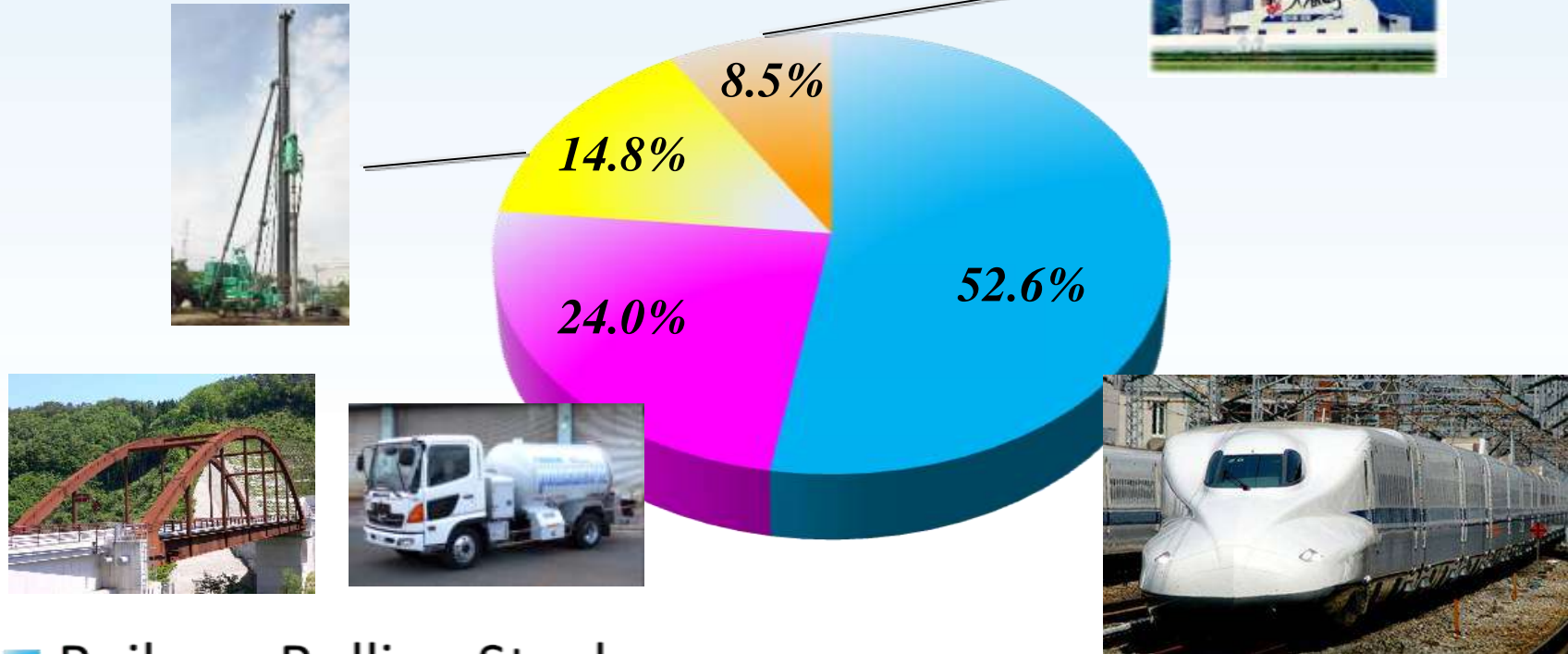


ISO9001




ISO14001

Sales from Each Division



 Railway Rolling Stock

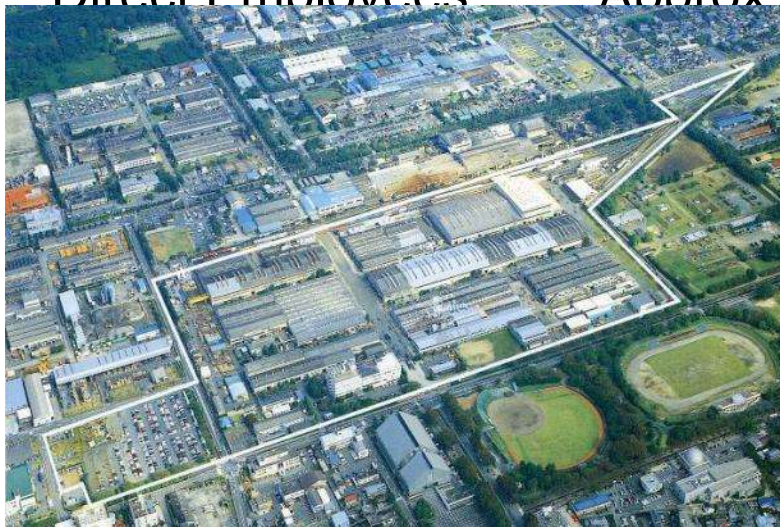
 Transportation Equipment, Bridge Steel Structure

 Construction Equipment

 Railway Inspection Cars, Agricultural / Ecological Plants, etc.

Overview of the Toyokawa Rolling Stock Plant

- Main Products: Rolling Stock
(EMU including High Speed Rail, DMU, LRV, Locomotives)
- Plant Opening: April, 1964
- Total Land Area: 77.5 Acres (314,000 m²)
- Area of Building: 1,307,000 Sq. Ft. (101,000 m²)
- Manufacturing Capability: Max. 600 Cars / Year
(As of March 2011)
- Direct Employees: Approx 1,100



Toyokawa Rolling Stock Plant

Profile

- Administration
- Design
- Engineering
- Carbody and Truck Production
- Final Assembly
- Quality Assurance
- Purchasing
- Material Storage
(all types of material including stainless steel, aluminum, mild and HTLA steel sheets and plates)
- Test and Inspection
(including watertightness test facility, inspection pits, climatic test chamber for complete vehicle)
- Test Track: 0.5 mile (800 m)



Rolling Stock Plant of Nippon Sharyo

High Speed Rail

1964



Series 0
(130mph)

1986



Series 100
(143mph)

1997



Series E2
(171mph)

1999



Series 700
(177mph)

2005 Taiwan



Series 700T
(186 mph)

1982



Series 200
(137mph)

1992



Series 300
(168mph)

1997



Series 500
(186mph)

2007



Series N700 (186mph)

Japan

Over 3,200 cars completed as of Dec. 2011

Express Trains in Japan



Series 683 EMU
for JR West



Series E351 Tilting EMU
for JR East



Series KIHA-281 Tilting DMU
for JR Hokkaido



Series 2000, 2200 Airport Express EMU
for Meitetsu



Type 50000 EMU (Articulated)
for Odakyu

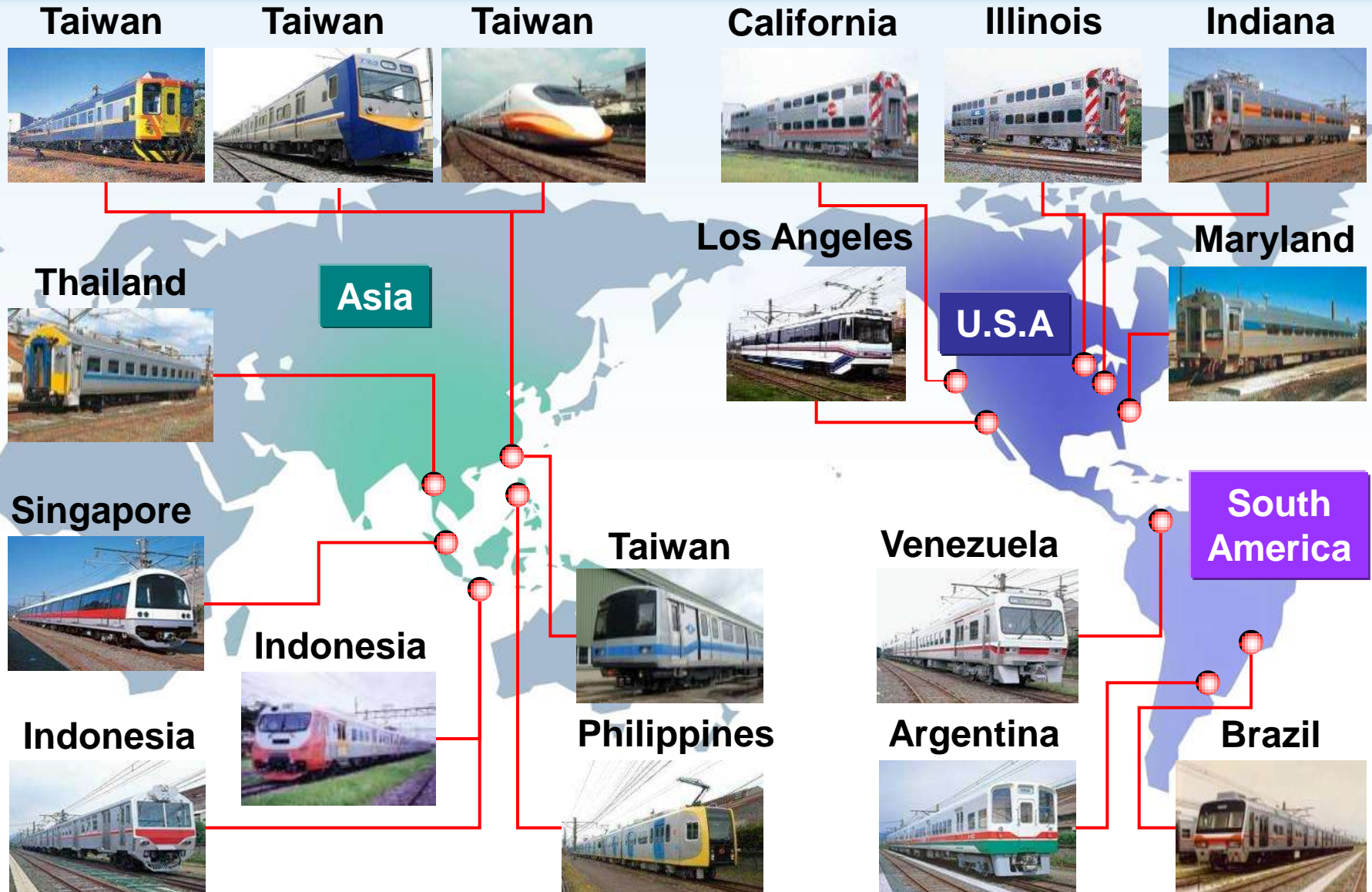


Series 285 Double Deck Sleeper EMU
for JR Central and West



Series 383 Tilting EMU
for JR Central

Global Experience



Supply Record in North America

1982 - 2000 (71)



NICTD
EMU
Indiana

1985 - 1992 (63)



MARC
Coach
Maryland

1993 - 2005 (479)



METRA
Gallery Coach
Illinois

2007 - 2009 (71)



VRE
Gallery Coach
Virginia

1984 - 1999 (93)



CALTRANS
Gallery Coach
California

1989 - 1992 (69)



LACMTA
LRV
California

2005 (26)



METRA
Gallery EMU
Illinois

2008 (14)



NICTD
Gallery EMU
Indiana

All 886 cars have been delivered on time, on budget.

Corporate Profile

- Headquarters: Arlington Heights, IL

9 miles from O'Hare Airport

- Established: May 1982

Organization (Reorganized October 2010):

Nippon Sharyo U.S.A., Inc.

Nippon Sharyo Engineering & Marketing, LLC

Strategic Planning, Marketing Activities, Engineering, and General Customer Relations

Nippon Sharyo Manufacturing, LLC

Project Administration, Procurement, Manufacturing, Quality Control and Warranty Service



Nippon Sharyo Manufacturing, LLC

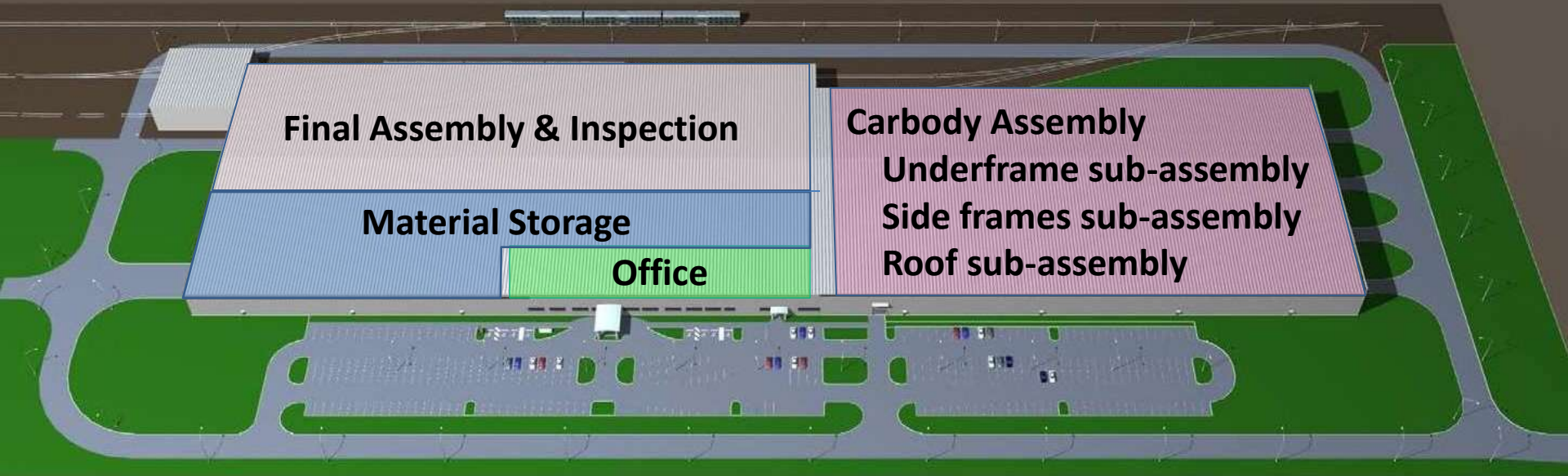
Rochelle Rolling Stock Plant (new)

Location:	Rochelle, IL
Start of Operation:	3 rd Quarter 2012 (scheduled)
Employees:	120 by the end of 2012, 250 by mid 2014
Capacity:	120 Passenger Cars / Year
Size:	463,000 sq. ft. on 35 acres



Production Facility in Rochelle

Test Track 2,300 feet



■ Opportunities with NS

METRA 160 EMU

(Chicago, IL)

Production 3Q 2012 – 2Q 2015

SMART 12 DMU (option 146 cars)

(Sonoma and Marin County, CA)

Production 2Q 2013 – 1Q 2014

Metrolinx 16 DMU

(Toronto, Canada)

Production 2Q 2013 – 1Q 2014,
2Q 2015



The NIPPON SHARYO TEAM'S Philosophy



Our new rail cars are products of the input and cooperation of over 200 suppliers. Our suppliers gain valuable experience when they support our achievement of these 3 fundamental goals. (And we've been successful every time!)

Supplier Requirements

Quality

- Demonstrate quality to Nippon Sharyo and the end customer.
- Comply with the Customer Quality Plan.
- Produce consistent and accurate parts.

QUALITY ASSURANCE	
20.8.3 Requirements.	
The following requirements shall apply to each FAI:	
a. An FAI package shall be submitted to VRE in advance of the FAI to provide the following:	
1) Schedule, Location and Agenda of Inspection	
2) Vendor	
3) Vendor Address	
4) Vendor Phone Number	
5) Vendor Contact	
6) Component List with Drawing Numbers, Revision and Latest Status	
7) Contractor Inspection Plan.	
b. A complete set of approved or conditionally approved drawings and software documentation (with VRE comments) for the item to be inspected.	
c. For purchased items, a copy of the Vendor's purchase order with cost information removed or excluded.	
d. Completed Vendor inspection forms that control and document acceptance of in-process work.	
e. Completed Vendor and Contractor final inspection reports.	
f. Completed test documents that reflect that the test has successfully completed all tests.	
g. Inspection work space that provides the proper environment for inspection of the piece part or subassembly.	
h. When appropriate, display of the inspection article on a stand or table in a well-lit workspace with all necessary inspection tools, go/no-go gauges, plug gauges, and handing aids.	
i. Correct tools and labor to take mechanical or electrical measurements and the current calibration certifications for the measurement tools and devices.	
j. Tools and labor for disassembly and removal of covers.	
k. Material Certifications, Mill and Laboratory Reports, and Vendor Certifications as appropriate.	
l. Performance of functional testing.	

QA Audit Report

2006.5.18

1. QA Audit Date: 2006.5.18 & 2006.6.1

2. Plant:

3. Representatives: AA,
MA,
R. Taniguchi
-Nippon Sharyo USA

6.1 Scope of Audit:

- Calibration for Inspection Tools
- Drawing Revision

6.2 Procedure & Results:

- Calibration for Inspection Tools
- Physical Check

Tools used for VRE

Tool Name	ID No.	Calibration Due
Reform Anchor Gauge	AA-250	5/25/07
Patented Operator Gauge	AA-1025A	5/25/06
TBI Mount Rock Gauge	AA-1020	5/25/07
Setting Detector Gauge	M-6	5/25/07

Tools used in June 1 inspection:

Depo No.	Calibration Due
420 AA-1021	5/25/07
8A-1020B 10.819	5/25/06
420 AA-1025A	5/25/06
410 6A-1062	5/25/07
AA-245 1	3/31/07
AA-241-A	5/25/06
AA-140	4/20/06
AA-1020 A	5/25/06
1-6A-655	5/25/06
1-6A-655	5/25/06
AA-238 402	2/28/07

All Articles with sticker were calibrated and current.

Calibration Log Sheet to be attached to PM Report for Tools used in audit calibration studies.

-Drawing Revision

-Physical Check

Drawing presented for VRE Project was current.

(Drawing Revision)

5. Statement of Conclusions:

All tools were calibrated and drawing revision was current.

6. Required Corrective Action:

Not Applicable.



Delivery Requirements



NIPPON SHARYO

On-Schedule Delivery

Parts deliveries are planned and controlled by Nippon Sharyo.
Sample of our Material Delivery Control Sheet:

			VRE 10 cars													
			Delivery control sheet for SS and Subcontractor													
S.N	Vendor name	Po_No.	PART No.	DESCRIPTION	Shop	STN.	DRG. No.	SPECIFICATION	From NMCS	Rec. Total	TOTAL ORDER	UNIT	Scheduled ship date	Receiver#	Due date	Installation date
235		7101	148103	Truck (T2A)	E	0.0			10	10	10	PC	9/16shipped(1)	vs2885(1) vs2892(1) vs2896(1) vs2897(1) vs2919(1) vs2920(1) vs2929(1) vs2930(1) ,vs2935(1) vs2981(1)	27-Jul	17-Aug
236		7101	148104	Truck (T2B)	E	0.0			10	10	10	PC	9/16shipped(1)	vs2885(1) vs2892(1) vs2896(1) vs2897(1) vs2919(1) vs2920(1) vs2929(1) vs2930(1) vs2935(1) vs2981(1)	27-Jul	17-Aug

On-Budget

- Parts delays significantly increase our costs, so be vigilant regarding the schedule.
- Always look for design updates that can take cost out of the product.
- Evaluate new production technologies to determine whether they can provide a cost benefit.

■ NS Supplier Story in America NIPPON SHARYO

- All of our major suppliers have manufacturing or assembly facilities in the US.
- 135 American suppliers supported us on recent orders from Metra, NICTD, and Virginia Railway Express.
- With our recent establishment in the Midwest, we have increased our use of Illinois suppliers, with around 50 being involved in our projects over the last 10 years.
- Nippon Sharyo's total purchasing volume over those years is close to \$500 million with nearly \$200 million of that going to Illinois businesses.
- Economists project that every dollar spent in Illinois on railcar projects generates another \$2 or \$3 to the Illinois economy.
- The total Illinois economic impact of our recent project is close to \$1 billion.
- A number of suppliers received their introduction to the passenger railroad industry from Nippon Sharyo, and have been able to expand their technical capability and market penetration as a result.



Major Suppliers

- Kustom Seating & KPS North America (passenger seating)
- Vapor (door operators, and door controls) - Wabtec
- San Mateo (misc. parts)
- WABCO - Westinghouse Air Brake (braking system) - Wabtec
- R & W Wheel Machining (wheels)
- Clements National (special railroad cables)
- Prime Cast / Atchison Casting (Truck parts and assembly) - Bradken
- TTA (air conditioning units and heating controls)
- Elcon National (doors and side windows) – Faiveley Transit
- Trans-Lite (lighting)
- Ricon (wheelchair lift) – Wabtec
- Alstom Signaling (cab signal system)
- Microphor (toilet) - Wabtec
- Koshii Maxelum America (interior panels)

Happy Customer

