



AN INTRODUCTION TO BOMBARDIER TRANSPORTATION ZEFIRO

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BOMBARDIER
the evolution of mobility

BOMBARDIER

Overview









Bombardier is the world's only manufacturer of both planes and trains, with a worldwide workforce of 71,700* people.

Bombardier is headquartered in Montréal, Canada. Our shares are traded on the Toronto Stock Exchange (BBD) and we are listed on the Dow Jones Sustainability World and North America indexes. In the fiscal year ended December 31, 2012, we posted revenues of \$16.8 billion USD.

* as at December 31, 2012 (includes 200 employees at our corporate office in Canada)

BOMBARDIER

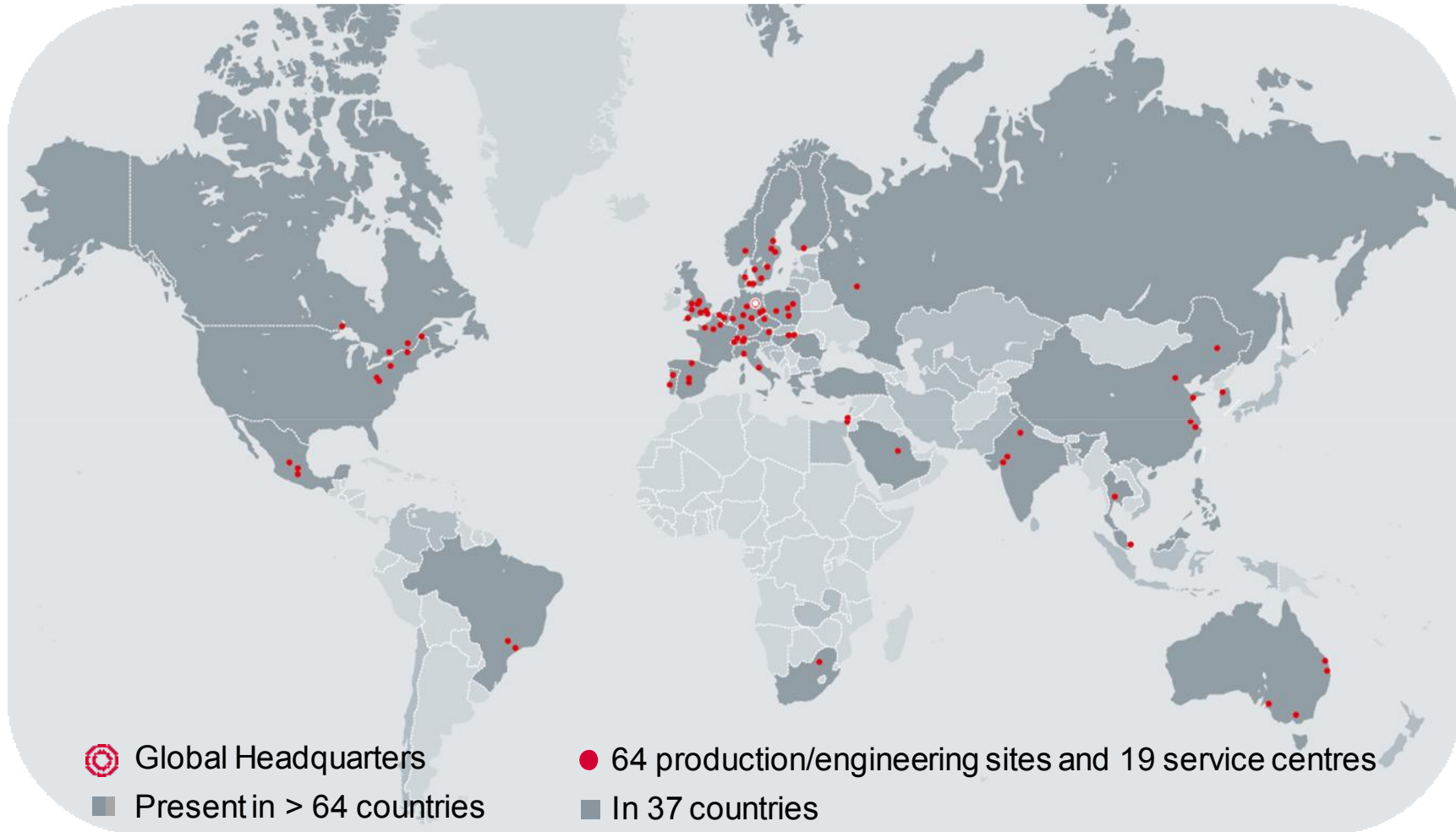
Our evolution

1942-1973	1974-1985	1986-1993	Strategic Acquisitions	1993-2003	2003-
 <ul style="list-style-type: none"> ▪ Company start-up ▪ Development of passenger and personal snowmobiles ▪ Vertical integration ▪ Energy crisis provoked market collapse 	 <ul style="list-style-type: none"> ▪ Diversification into mass transit market ▪ Learning of new industry ▪ 1982 New York metro contract secured strong position in American market 	 <ul style="list-style-type: none"> ▪ Entry into aerospace through Canadair acquisition ▪ Consolidation of North American mass transit position and reinforcement of presence in Europe 	 <ul style="list-style-type: none"> ▪ Aerospace: Short Brothers (UK), Learjet (US), de Havilland (CA) ▪ Transportation: BN (BE), ANF (FR), Deutsche Waggonbau (DE), Conccarril (MX), Talbot (DE), Adtranz (DE) 	 <ul style="list-style-type: none"> ▪ CRJ Series, Global Express, Challenger 300 ▪ Tilting train, AGC (Autorail Grande Capacité) ▪ Sale of Recreational products business unit 	 <ul style="list-style-type: none"> ▪ CRJ NextGen family, Learjet 85, Q400 NextGen, CSeries, Global 7000, Global 8000 ▪ Hybrid AGC, ZEFIRO, ECO4 ▪ Transportation's expansion into emerging markets

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BOMBARDIER TRANSPORTATION

Global expertise – local presence









Bombardier Transportation is headquartered in Berlin, Germany with products or services in more than 60 countries. It has an installed base of over 100,000 vehicles worldwide.

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OUR PRODUCTS AND SERVICES

The broadest portfolio in the rail industry

Rail Vehicles	Transportation Systems	Services	Rail Control Solutions	Propulsion & Controls	Bogies
 <ul style="list-style-type: none"> ▪ Light rail vehicles ▪ Metros ▪ Commuter trains ▪ Regional trains ▪ Intercity trains ▪ High speed trains ▪ Locomotives 	 <ul style="list-style-type: none"> ▪ Driverless Systems: Monorails, Metros, People Movers ▪ Light rail systems ▪ Metro Systems ▪ Intercity Systems ▪ E-mobility Solutions ▪ Operations and Maintenance 	 <ul style="list-style-type: none"> ▪ Fleet Management ▪ Asset Life Management ▪ Material Solutions ▪ Component re-engineering and overhaul 	 <ul style="list-style-type: none"> ▪ Integrated control systems ▪ Automatic train protection and operation ▪ Interlocking systems ▪ Wayside equipment ▪ Services 	 <ul style="list-style-type: none"> ▪ Traction converters ▪ Auxiliary converters ▪ Traction drives ▪ Control and communication 	 <ul style="list-style-type: none"> ▪ Portfolio to match entire range of rail vehicles ▪ Full scope of service over the lifetime of a bogie

OUR PRODUCTS AND SERVICES

Superior experience in high speed rail

Responsible for over 1,000 trains and vehicles for high speed applications worldwide. As sole supplier or in partnership.



ACELA USA

ETR500 Italy

THALYS F/D/B/NL

TGV France

EUROSTAR
France/UK

BM71 Norway

REGINA Sweden

X2000 Sweden

XinShisu China

CRH1 China *

ICE-T/TD Germany

ICE3 Germany

ICE1/2 Germany

ICN Switzerland

AVE S-130 Spain

AVE S-102 Spain

ZEFIRO Sleeper China *

V300 ZEFIRO Italy **

ZEFIRO 380 China *

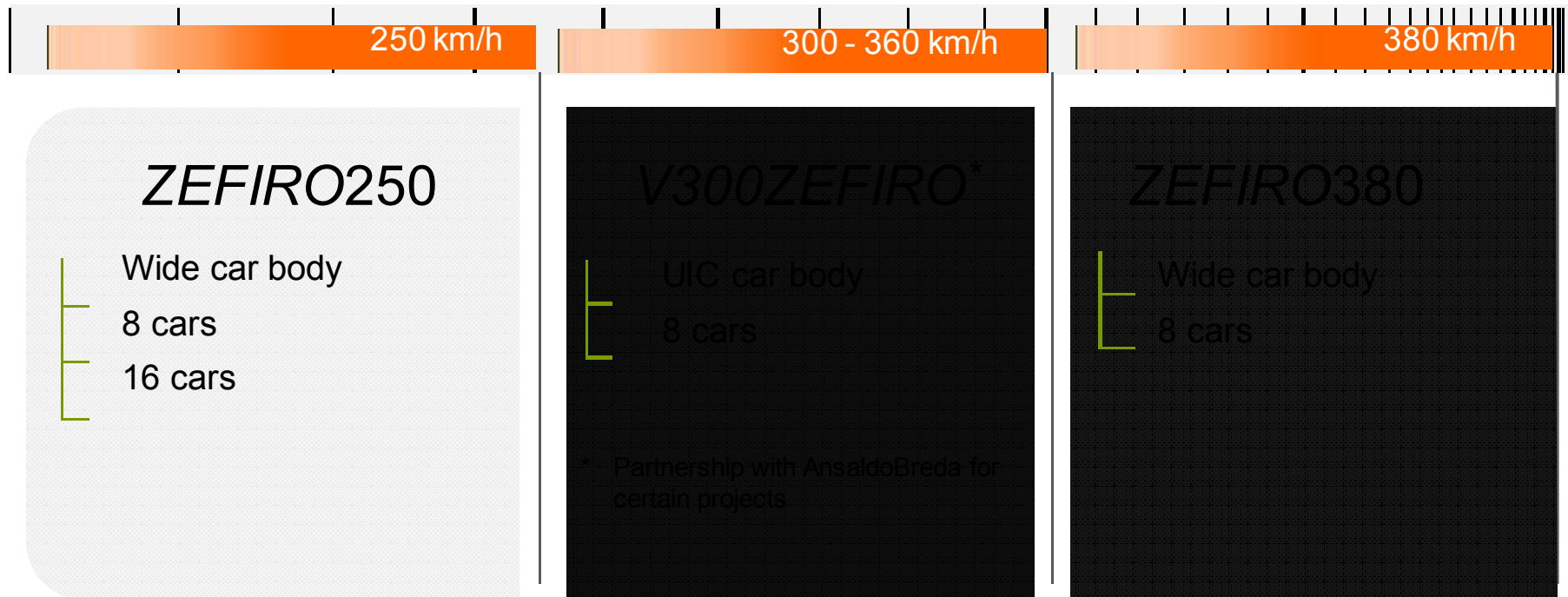
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 * Manufactured by Bombardier Sifang Power (Qingdao) Transportation Ltd.
 ** Manufactured in cooperation with a strategic partner.



High Speed Train family
ZEFIRO

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ZEFIRO high speed train family



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Trains of the ZEFIRO family comply with all the latest trends in the field of high-speed railways around the World.

The fastest in the ZEFIRO family - China



Train ZEFIRO set up the new standards for the modern design



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V300ZEFIRO – design of ETR 1000

High speed train V300ZEFIRO has an optimized design with respect to frontal and side aerodynamic resistances

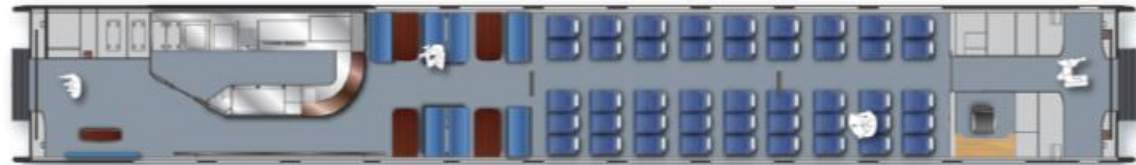


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Interior



1st class



2nd class



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V300ZEFIRO – interior design examples



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High speed train V300Zefiro has different variations interior such as access options depending on the class of service, buffet car and dining cars with modern multimedia systems.

AnsaldoBreda

Aerodynamic efficiency

The ZEFIRO portfolio features the world's most economical and eco-friendly VHS trains. These ultra-modern trains combine the highest capacity in the market with pioneering levels of passenger comfort. Their leading-edge technologies and advanced aerodynamics reduce energy consumption.



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