WE ARE WABTEC

Leading global provider of equipment, systems, digital solutions and value-added services

Drawing on over 150 years of experience, we are leading the way in safety, efficiency, reliability, innovation, and productivity.
Our history was built on foundation of three industrial giants
Shaping industrial revolutions for two centuries

1st Industrial Revolution
- **Steam Power**: Shift from manual to mechanical production

2nd Industrial Revolution
- **Electrification**: Introduction of the assembly line and advances in transportation

3rd Industrial Revolution
- **Automation**: Automation of production and computerization

4th Industrial Revolution
- **Digitalization**: Combining the physical and digital across transportation sector
Strategic areas of focus

TECHNOLOGY WITH PURPOSE
CUSTOMER IMPACT
EMPOWERED PEOPLE
GROWTH MINDSET
Wabtec has been a valued partner in rail innovation

<table>
<thead>
<tr>
<th>FREIGHT SEGMENT</th>
<th>TRANSIT SEGMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EQUIPMENT</strong></td>
<td><strong>TRANSPORT</strong></td>
</tr>
<tr>
<td>~20%</td>
<td>&gt;90%</td>
</tr>
<tr>
<td>Of the world’s rail freight is moved by a Wabtec locomotive</td>
<td>Provide equipment to nearly every major transit system in the world*</td>
</tr>
<tr>
<td><strong>SERVICES</strong></td>
<td><strong>TRANSPORT</strong></td>
</tr>
<tr>
<td>~1.5B</td>
<td>&gt;90%</td>
</tr>
<tr>
<td>Miles traveled by Wabtec’s fleet of locomotives per year</td>
<td>Of fuel savings achieved through Wabtec’s digital solutions</td>
</tr>
<tr>
<td><strong>COMPONENTS</strong></td>
<td><strong>TRANSPORT</strong></td>
</tr>
<tr>
<td>~20%</td>
<td>&gt;90%</td>
</tr>
<tr>
<td>Of global freight cars have Wabtec products on them</td>
<td>Of fuel savings achieved through Wabtec’s digital solutions</td>
</tr>
<tr>
<td><strong>DIGITAL ELECTRONICS</strong></td>
<td><strong>TRANSPORT</strong></td>
</tr>
<tr>
<td>$1.3B</td>
<td>&gt;90%</td>
</tr>
<tr>
<td>Of fuel savings achieved through Wabtec’s digital solutions</td>
<td>Of fuel savings achieved through Wabtec’s digital solutions</td>
</tr>
</tbody>
</table>

* In accessible transit markets

Source: Internal Wabtec data
Wabtec operates its business in two segments:

- **FREIGHT: 67%**
  - 31% Services
  - 17% Equipment
  - 11% Components
  - 8% Digital Intelligence

- **TRANSIT: 33%**
  - 33% Transit

**Portfolio**

$8.4B

2022 Revenue

**Global Leader in Freight and Transit Rail Technologies**

- 50+ Countries
- ~25k Employees
Industry-leading scale across major rail segments

Market Leader in Freight Locomotives

Broaderest Transit Product Portfolio in Industry

First Heavy-Haul Battery-Electric Locomotive

Rail Supplier to Car Builders

Leader in Fuel Efficiency and Energy Management

Leader in Loco Modernizations

Leader in Friction Products
Strong global industrial portfolio with track record of innovation and significant recurring revenue

**ATTRACTIVE END MARKETS**
- Freight: 34%
- Transit: 16%
- All Other (Industrial and Mining): 50%

**ROBUST AFTERMARKET PORTFOLIO**
- Aftermarket: 58%
- OE: 42%

**BROAD SCALE IN GLOBAL MARKETS**
- Americas (42% in U.S.): 29%
- EMEA: 53%
- APAC: 18%

**STRONG MIX OF RECURRING REVENUES**
- Non-Recurring: 41%
- Recurring: 59%

* 2021 FY results
Strong operational rigor underpins all we do.
Proven leadership team
OUR PURPOSE IS CLEAR

Move and improve the world
We’re committed to creating a more sustainable future

**SUSTAINABILITY PRINCIPLES**

**Innovating with Purpose**
We are committed to developing responsible and sustainable products that minimize the impact on the planet.

**Driving Responsible Operations**
We are committed to providing safe work environments and products that enable productive and efficient use of resources.

**Empowering People and Communities**
We are committed to driving a diverse and inclusive culture and investing in the communities where our teams live and work.
Vision and Mission

**Vision:** Revolutionize the way the world moves for future generations.

**Mission:** Unlock our customers’ potential by delivering innovative and lasting transportation solutions.
Our Values

**People First**
We care about relationships. Whether it’s for each other or our customers, we do the right thing. People, and their safety, top our list.

**Expand the Possible**
We look for ways to improve what we create and how we do it. We are lifelong learners. We are obsessed with making things better to drive exceptional results.

**Embrace Diversity**
We celebrate a variety of experiences, expertise, and backgrounds, and aspire to create a place where we all belong.

**One Wabtec**
We are one global community that works together to achieve our shared Mission. Wherever we go, we go there together.
Our Values: The behaviors

**People First**
Means that we are: Responsible; Empathetic; Reliable

**Expand the Possible**
Means that we are: Curious; Courageous; Innovative

**Embrace Diversity**
Means that we are: Inclusive; Accepting; Advocating

**One Wabtec**
Means that we are: Collaborative; Transparent; Humble
At Wabtec, we are working to strengthen our position as a sustainable company while improving energy and resource efficiency.

As part of Wabtec’s continuous improvement culture, we launched a lean transformation model that extends across the business and is focused on key value streams. Through these efforts, we are introducing process improvements and management systems to maximize the value produced for the customer, remove waste, empower employees, and optimize the enterprise.
Investing in our people

Wabtec’s success as a global leader in the transportation industry centers on an investment in our people

**LEAD Program** An immersive learning experience designed to build the next generation of leaders

**LinkedIn Learning / Learning Management System** On-demand learning for technical and leadership skill development

**MindGym** Diversity & Inclusion training for all employees and people leaders

**Deep Smarts** Our technology team’s knowledge cascade

**Training by the Numbers**

10,000 courses available to Wabtec employees

230,000 hours of training completed by Wabtec’s global employees

1,000 Wabtec certified technicians globally

7.6 average hours of training Wabtec employees receive
Building a culture of inclusion

Wabtec is nurturing a culture where our people can be their authentic selves and our diverse experiences and inclusive workplace foster greater creativity and innovation that puts us on a path to a better shared future.

Our employee resource groups provide a forum to build strong relationships and allies through networking, sharing, learning, and support.
Why we matter
Decarbonizing global transport

SUSTAINABILITY IS STRATEGICALLY IMPORTANT
WABTEC TECHNOLOGY EFFORTS ARE FOCUSED ON:

- Reduction in fuel emissions
- Network velocity and automation
- Energy management and charging solutions
- Weight reduction
- Dust reduction
Accelerating innovation of scalable technologies

~6–7% target annual organic investment in technology as % of sales

ENHANCE EXISTING PRODUCTS

INVENT, TEST AND SCALE FUTURE TECHNOLOGIES
Rail is well-positioned to tackle world’s freight challenges

**RAIL VS TRUCKS TODAY**

The freight rail network is already considered the largest, safest, and greenest means of transporting goods throughout the world.

**TODAY**

- **CARBON REDUCTION**
  4x less carbon emissions per ton-mile

- **SAFER**
  22x fewer deaths and injuries per year than trucking

- **MORE EFFICIENT**
  4x more fuel efficient than trucking

**50% SHIFT TO RAIL**

- ~5 BILLION gallons of fuel eliminated / year
- ~60 MILLION 5x less carbon emissions per ton-mile
- ~18 MILLION fewer truckload trips / year
- ~14 MILLION fewer injuries or deaths from truck accidents / year
Changing the course on emissions

Wabtec is leading the charge to a low-to zero-emissions rail network with heavy-haul battery-electric locomotives.

1st

100% Battery-Electric Locomotive Worldwide

7MW

More than 7MWh Capacity

30%

Up to 30% Fuel & Emissions Savings Across Train
### WABTEC DIFFERENCE

#### RAIL PURPOSE BATTERY
- **Reliability and serviceability...** designed for heavy haul application
- **Safety...** battery thermal management pack and design
- **Future Proof...** modular design

#### TRAIN PERFORMANCE & AUTOMATION
- **FLX optimizer...** train-level energy management
- **Modular Control Architecture...** next gen micro-processing with over-the-air capability
- **PTC...** #1 train safety

#### FLX360 ECOSYSTEM
- **Up to 40% fuel savings on battery consist...** “zero cost fuel” through regenerative braking
- **Recharging solutions...** smart control interface and moving charging
- **Sustainability...** battery pack remanufacturing, renewable electricity, battery recycling

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**LEVERAGING PORTFOLIO TO DELIVER AN OPTIMIZED TOTAL ENGINEERED SYSTEM**


WABTEC

Unmatched performance and reliability

TIER 4 BY THE NUMBERS

+300 Million
MILES TRAVELED

~5,000
LOCO YEARS

1,100
LOCOS IN SERVICE
Partnering with railroads to extend the life of their fleets

Rolling stock assets and the right maintenance strategy create significant value

**WHY FREIGHT CAR SERVICE MATTERS**

- **>35 Years**
  - Freight car life
- **5 Million +**
  - Global freight cars
- **~7 Million**
  - Global annual ton mileage

**WHY LOCOMOTIVE SERVICE MATTERS**

- **>30 Years**
  - Locomotive life
- **>4 Million**
  - Gallons of fuel used
- **120+**
  - Service events
Helping railroads fulfill their potential

REMOTE MONITORING
50% increase early failure prediction

MODERNIZATIONS
50% more tractive effort; 25% less fuel and emissions; 40% increase in reliability

SMART SHOPPING
40% decrease in dwell time

TECHNICAL SUPPORT
500+ certified technical advisors

GLOBAL LOGISTICS
Guaranteed parts availability and performance

OVERHAUL SOLUTIONS
Global remanufacturing capabilities

WORLD CLASS RELIABILITY
Most reliable fleet in the industry
## Modernizations

Maximize asset value and fleet performance by transforming 20+ year old locomotives to extend life and step-change their performance.

Solutions jointly defined with each customer based on modular technology building blocks.

Enabling structural changes in railroad dispatch strategies.

### Customer Outcomes *

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>50%</td>
<td>More tractive effort</td>
</tr>
<tr>
<td>25%</td>
<td>Less fuel and carbon</td>
</tr>
<tr>
<td>40%</td>
<td>More reliability</td>
</tr>
</tbody>
</table>

* Source: Internal Wabtec data
Leading rail technical innovation
Developing solutions that align with our customers’ desired outcomes, with a focus on operating ratio savings – fuel, asset availability, and labor

PRIME MOVER
T4 engine family with best reliability and no aftertreatment
FDL Advantage offering 5-8% fuel efficiency
Safe batteries and fuel cells

PROPULSION
AC traction
Individual axle control and high tractive effort software
Improved gearcase with no oil leakage

CONTROLS
MCA
Digital suite of solutions

RELIABILITY AND AVAILABILITY
Predictive maintenance
Work scopes customized at asset level; 50% less shop dwell
Locomotive allocation to priority trains
Advancing a circular economy

Wherever possible we strive to:

Reduce 99%  
Reuse 50%  
Rebuild 1/2

In an engine overhaul, 99% of the weight of a locomotive engine is reused, requalified, remanufactured, or recycled.

More than 50% of an approximately 400,000-lb locomotive is reused in Wabtec’s modernization program.

More than half of a locomotive’s critical components will be reused, rebuilt, or remanufactured at least 3x over their life.
Digital solutions help customers meet ESG and productivity commitments

INTEGRATED PRODUCT SUITE

Trip Optimizer Suite
Locotrol Platform
PTC
Network Solutions

FUEL OPTIMIZATION

ESG IMPACT
UP TO ~30%
Reduction in diesel emissions and fuel utilization
CO$_2$/NOx/PM

PRODUCTIVITY IMPACT
Asset utilization
Fuel savings
Crew utilization
Enabling productivity and efficiency for customers

<table>
<thead>
<tr>
<th>Asset Performance</th>
<th>Safety</th>
<th>Network Performance</th>
<th>Supply Chain Visibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>~12K Trip Optimizer units</td>
<td>~22K On-board PTC systems</td>
<td>250 Dispatch desks in service</td>
<td>14 Days advanced visibility</td>
</tr>
<tr>
<td>~22K LOCOTROL systems</td>
<td>~65K Track miles With PTC</td>
<td>~100K Track miles under control</td>
<td>1 Information source</td>
</tr>
<tr>
<td>~10K GoLINC Edge devices</td>
<td>~9K Collision avoidance system</td>
<td></td>
<td>10% Productivity improvement</td>
</tr>
<tr>
<td>~4M Components monitored daily</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Automation will unlock the next generation of productivity

- **Technology Foundation**
  - PTC
  - Trip Optimizer
  - Distributed Power
  - Movement Planner

- **Attended Automation**
  - PTC + Trip Optimizer
  - Zero-to-Zero
  - SmartHPT
  - Pacing

- **Path To Crew Efficiencies**
  - Advanced Dispatch
  - Road RCL-Drone Train
  - Vital Standalone PTC
  - Yard Automation
  - 5G Communication

- **Full Automation**
  - Full Situational Awareness
  - High Availability Systems

Up to:

- **25%** Reduction in Train Delays
- **50%** Potential Productivity Savings
- **75%** Reduction in Accidents due to Human Errors
- **30%** Fuel Efficiency Improvement
Enhancing train performance

LATEST PORTFOLIO OF RAIL TECHNOLOGIES DELIVERS SIGNIFICANT IMPROVEMENTS

12%
PRODUCT WEIGHT REDUCTION...
3 TONS PER TRAIN

20-25%
LIFECYCLE COST REDUCTION

15%
ENERGY REDUCTION

DIGITALIZATION EXPECTED TO REDUCE LIFE CYCLE COSTS BY AN ADDITIONAL 20%

Comparison of the current generation of Brakes, HVAC, Doors, Couplers, and Passenger Information Systems offered vs previous generations. Source, internal analysis based on an illustrative EMU and metro.
Innovations supporting a more attractive commute

**GREEN FRICTION**
Reduce brake dust and emissions by up to 90%

**METROFLEXX & REGIOFLEXX**
Industry’s most advanced braking system ... 50% less weight, 95% recyclability, greater performance

**GREEN AIR**
1st air conditioning system using natural R290 refrigerant

**BLUEFILTER**
Removes more than 99.9% of contaminants in minutes
Redefining braking distance to improve performance, reduce cost and prepare for automation

**PRODUCTIVITY GAINS**

*Wabtec Distance Master*

- Breakthrough braking performance in fall and winter conditions
- 90% reduction in braking distance degradation
- 50% reduction in costs generated by wheel sliding
- Improve train availability, punctuality, and assets utilization for transit operators

**WITH BRAKING DISTANCE REDUCTION**

<table>
<thead>
<tr>
<th></th>
<th>Dry braking distance</th>
<th>Braking distance degradation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current norm max extension (12 axles)</td>
<td>+ 20%</td>
<td></td>
</tr>
<tr>
<td>Standard Wabtec Solution</td>
<td>+ 12%</td>
<td></td>
</tr>
<tr>
<td>Partial Wabtec Distance Master</td>
<td>+ 6%</td>
<td></td>
</tr>
<tr>
<td>Wabtec Distance Master</td>
<td>+0.4%</td>
<td></td>
</tr>
</tbody>
</table>

*Results evaluated in low conditions adhesion (0.05-0.08) according to EN15595