Faiveley Transport
BRAKES & COUPLERS

give you the security, safety, simplicity and reliability that tomorrow’s market demands

Our dedicated design engineering team spearheads this global experience, giving you a fully customised system solution using refined & proven design procedures.

WHEREVER YOU ARE
The worldwide network of member companies ensures a maximum of local expertise and input, simplifying installation and maintenance and helps optimise total cost of ownership. This unrivalled experience ensures the perfect integration of Faiveley systems, whatever the operating conditions.

MORE THAN JUST A SUPPLIER
Faiveley is a practical, long-term partner through every stage of your project: from system definition, design, manufacture, commissioning to lifetime warranty… including retrofit.

THE ROOTS OF OUR EXPERTISE
Faiveley, supplying reliable, innovative systems that cover all aspects of the railway rolling stock industry for over a century. This enviable experience provides a solid base for innovation, and helps provide rigorously tested, state of the art technology to meet tomorrow’s needs.

Faiveley simplifies the
- Design: dedicated design teams allow customised solutions to meet all your needs
- Installation: Faiveley flexibility allows installation where you need it
- Maintenance: intelligent maintenance systems with easy access save time
- Future: supplying complete, customised solutions, Faiveley is committed to taking full responsibility for the brake function.

“...because milliseconds count”

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COMPLETE SYSTEMS
FROM THE DRIVER’S HANDS TO THE WHEELS

keeping trains moving, with greater safety, availability & cost control.

MANIPULATOR
Because braking precision starts at the driver’s hand, Faiveley offers very accurate drivers’ brake valves as well as traction-brake controllers for all types of regional and suburban trains. We take particular care of local habits to ensure perfect reaction of the machine to the driver’s order:
- Accuracy - instant reaction
- user friendly

AIR GENERATION AND TREATMENT
Using state of the art technologies, Faiveley provides both screw lubricated and oil free piston compressors - fully integrated with air treatment and control systems - from 800 to 3000 ltr/min air delivery. Our unique oil free BURAN technology gives the lowest cost of ownership of the industry.
- Lowest life cycle cost
- easy maintenance - built for life

COUPLING
Faiveley Transport owns a wide coupler portfolio thus giving the group very strong knowledge of this highly demanding field. Automatic Compact and Propact as well as semi-permanent couplers interconnect trains and cars simply, quickly and safely. Associating mechanical, electrical (including data transmission, e.g. ethernet), pneumatic and even optical connection, our couplers provide high energy absorption, ensure efficiency and time saving while securing passenger safety & comfort plus improved vehicle integrity.
- Efficiency - safety - reliability

SANDING
Using the unequalled experience gained over the years, Faiveley Transport provides fit-for-purpose sanding solutions to enhance adhesion between the vehicle and rails during critical braking actions. The unique design allows easy integration onto the vehicle while the patented sand dosage delivers the exact quantity of sand needed, under every condition.
- Precision - easy integration - customised performance

MAGNETIC TRACK BRAKES
Highly solicited during safety and emergency situations, UIC qualified Magnetic Track Brakes are essential to train safety. Faiveley’s electromagnetic brakes provide additional braking power up to 84 kN per meter. The modularity in material, length and design facilitates integration on bogies while preserving high braking performance. Faiveley also offers permanent magnet solutions for clamping force up to 64KN per meter.
- Safety - reliability – reduced maintenance

BOGIE BRAKE STATIONS
With a full portfolio of very robust and compact disc brake solutions, facilitating integration on tight bogies and easy maintenance, while ensuring optimised stress absorption even during the most demanding operating conditions. The compact C3 disc brake units are compatible with both axle mounted and wheel mounted discs. Faiveley Transport is at the leading edge for friction pair solutions with high performance discs and sintered metal pads.
- Compact - light - robust

SMART BRAKE CONTROL
Faiveley deploys all its expertise to provide smart control of the complete braking system, from the brake manipulator to the energy management associated to the friction pairs at each bogie. Offering three different levels of pneumatic layout associated to certified electronic BCU technology, Faiveley’s brake control solutions provide the highest level of availability combining service brake plus software-free safety brake.
- Smart braking management - availability - safety

SOLUTIONS
The Class 395 (Javelin) is a high-speed train that operates in the southeast of England on HS1 track (formally CTRL). In 2005 a 29 train contract was awarded to HITACHI for the supply of 225 km/h trains. Class 395 was the first major contract awarded to a Japanese train manufacturer for the UK. It was therefore essential that this contract was delivered on time. Hitachi chose Faiveley for the supply of the complete brake system and other equipment on these trains. For this project, various companies in the Faiveley group were involved – UK, Asia as well as Faiveley centres of competence. Faiveley fully supported Hitachi to enable the trains to be commissioned according to the initial schedule.

Further to this first success, Hitachi has been selected by the UK Department for Transport (DfT) for the Intercity Express Programme (IEP).

With over a century of service to the transport industry, who better than Faiveley Transport to maintain your investment?

Constant and extensive feedback on the performance of on-board equipment over the century gives unequalled experience. As early as the design stage, this information helps make the equipment easier to maintain and brings greater availability, reliability and safety, significantly optimising the life cycle cost. It leads directly to easier access, reduced maintenance times, tools for troubleshooting and finally faster return to revenue service.

Wheel Slide Protection is essential to the efficiency of the braking system

With the leading edge, certified WSP algorithm using inputs from high precision speed sensors, Faiveley’s smart solution gives perfect control of the adhesion - whatever - the climate and environmental conditions (ice or snow, autumn leaves on the rail, rain). With Faiveley WSP performance, the full operating speed can be maintained and flats on wheels are avoided.

**EPAC for articulated trains**
- Electronic brake control
- Blending management
- Integrated wheel slide protection

**IBU SMART MODULES**
- EPM (Electro-Pneumatic Module) with VCAV (Variable Load valve)
- Dump valves fitted on the module or close to the bogie
- Additional optional modules upon requirements (Magnetic Track brakes, VACMA, Pneumatic insulation and filtration, etc.)
- Smart fit for purpose modules
- Best pneumatic integration in challenging train installation conditions

**REFERENCES**

Smart braking management is essential to ensure the performance of the train in all operating conditions. World specialist in pneumatronic solutions, Faiveley Transport offers three different levels of integration. This approach gives a very high modularity for any type of regional or suburban train - whatever the configuration. Moreover, each of these three options can fulfil all UIC requirements.

**Behind every reference is a story of Faiveley flexibility**