

Asociace podniků českého železničního průmyslu Association of Czech Railway Industry

The present successful development of the railway transport was enabled thanks to more than 200 years of traditional development of the Czech railway industry. The former CKD or SKODA wagon plants together with a wide range of other producers had always been at the top of their professions.

The quality of Czech railway products can be shown through a large export to all over the world. This long-standing tradition is successfully linked up with the present representatives of the Czech railway industry, who invest significantly into the development of new and innovative products.



ACRI - Association of Czech Railway Industry Pobřežní 224/20, CZ 186 00 Praha 8

www.acri.cz

ACRI is representing Czech rail manufacturing industry since 1995. ACRI is representing the joint interests of the railway supply industry towards the Czech Institutions, rail operators, rail infrastructure managers and via its membership in UNIFE also towards the EU institutions.

ACRI is the unique Centre of Technical Standardization acting in the railway sector, involved in European technical standards transfer to the Czech national standards system.

Association gathers 50 Czech companies, significant producers and suppliers of products and services for railway transport. It represents engineering, design, manufacture, maintenance and refurbishment of rolling stock, infrastructure, signalling and other services. ACRI members currently employ more than 21.000 people in the Czech Republic and their annual turnover is more than EUR 3,5 billion, of which exports account for more than 56%.

Members of the delegation:

rolling stock manufacturer: SKODA TRANSPORTATION components producers: BONATRANS, BORCAD, ZKL

infrastructure producers: DT VYHYBKARNA A STROJIRNA, BRENS NA, LEVEL SYSTEMS

research institutes: VUKV, VZU Plzen



ŠKODA TRANSPORTATION

Tylova 1/57, CZ 301 28 Plzeň www.skoda.cz

Skoda Transportation (Skoda) is one of the biggest European's foremost manufactures of rolling stock. Skoda production range includes all types of low-floor streetcars and LRVs, commuter trains and heavy rail cars, subway coaches and high speed electric locomotives for all possible supply systems. Besides of all kinds of rolling stock manufactured in several subsidiaries located in Czech, Germany, Finland, Hungary and Russia there is also production of electrical components as for instance traction motors and propulsion equipment within Skoda Transportation Group.

Skoda as a seasoned supplier also manufactured first modern US streetcar vehicles delivered to North America to Portland, OR and Tacoma, WA. The vehicles have been under reliable and successful revenue operation in these cities for more than 15 years and for over 1 million miles. Recently Skoda Transportation has decided to enter decisively North America rolling stock market having at the moment plans mainly for possible supply of streetcars, light rail vehicles, subway cars and electric multiply units.



ELECTRIC BUS WITH
STANDARD CHARGING



TROLLEYBUS 31 TR



ELECTRIC BUS WITH FAST CHARGING



TROLLEYBUSES WITH ŠKODA EQUIPMENT



TROLLEYBUS 26 TR





BONATRANS GROUP a.s.

Revoluční 1234, CZ 735 94 Bohumín www.bonatrans.com

BONATRANS GROUP is the Premium Supplier of wheelsets for rail bound transportation worldwide. It has a strong R&D department with decades of experience in development and homologation of tailored made solutions. It cares for all stages of the products' life cycle – from design, optimization and validation, to in-service monitoring and LCC management.

The group GHH-BONATRANS manufactures wheelsets, independent wheel axles, and parts thereof – wheels, axles, tyres, centres, etc. for all types of rolling stock (high speed trains, EMU/DMU, metro

cars, trams, locomotives, freight wagons). It is a reliable partner of national and private railways, city transport agencies, OEM manufacturers and repair shops in over 80 countries at 5 continents.





BORCAD CZ

Fryčovice 673, 739 45 Fryčovice www.borcad.cz

We are developing and producing our passenger train seats at the foothills of Beskydy Mountains. Our staff count is 150 and owing to our unique design and original structural solutions we are among the most innovative companies in the industry. We are flexible and we all share a single goal – a satisfied customer.



We are a leader in the segment of luxury seats for tourist trains! This contract proofs it. Since 2012 when we introduced our first electrically controlled seats, we delivered several exceptional projects. However, one of them is exceptional with its prestige and size. It is the Rocky Mountaineer project for a Canadian operator of luxury panoramic trains travelling across the Rocky Mountains.

It has been 4 years since the delivery of the first seats and until now we have delivered this seat also to other customers, but the Rocky Mountaineer project is still in our hearts and the

seats retained the name. Simply, it is a seat of which we are proud and like to show off. Apart from refurbishment of 16 double-deck cars for the luxurious GoldLeaf Class, we are now delivering also the same seats for the new cars of the same class produced by Stadler Pankow. In total, seats will be installed in 26 GoldLeaf Class cars.





ZKL - Výzkum a vývoj, a.s. Jedovnická 8, 628 00 Brno <u>www.zkl.cz</u>

ZKL Group is the European Bearing manufacturer from the Czech Republic with 70 years' tradition providing research, development, manufacturing and sales of ZKL bearings.

In the field of rail transport, the ZKL is focused on both the production of bearings for final customers and the supply of bearings to the spare consumption. These are in particular bearings for the car bogies of the electric multiple units, passenger coaches, freight coaches and tramways or bearings for seating of components in drive unit. The development and manufacture of ZKL railway axle bearings meet the requirements of the EN 12080 standard. The internal design is optimized to higher mileage, long service interval and higher operational reliability with low loss of energy. The ZKL offer all types of rolling bearings, mainly axle box cylindrical roller bearings, compact cylindrical roller units, compact tapered bearing units and the bearings for traction motors.

ZKL is also able to provide engineering services including application engineering, technical consultancy, mechanical design, damage analysis, FEM calculations, material analysis, bearing durability tests, etc. We are interested in meeting with rolling stock manufacturers, representatives of transport companies – passenger, freight, metro and trams, representatives of vehicle repair companies and distributors of spare parts for rolling stock.





Research, development and testing of railway rolling stock

VÚKV a.s. Bucharova 1314/8, CZ-158 00 Praha 5 www.vukv.cz

VUKV offers complex project solutions up to the best current technological standards with satisfied customers and users at the end of the chain.

The company deals with development and testing of railway vehicles, their parts and other components from the area of transport engineering. The company also offers advisory and consultancy service in these areas. These activities are performed by a team of highly qualified and experienced in-house experts applying the most up-to-date methods, procedures and equipment.

The key clients of the company include domestic and foreign manufacturers of railway rolling stock and transport technology, repair plants, infrastructure administrators and operators. The company follows the tradition of Ringhoffer works and contributes to a number of major projects with practical applicability. Products actively developed and launched by the VÚKV a.s. or with the company contribution, can be encountered not only in the Czech Republic but also in many countries of the world.





Výzkumný a zkušební ústav Plzeň s.r.o.

Tylova 1581/46, 301 00 Plzeň www.vzuplzen.cz

The company with more than 100 years tradition offers a wide range of services in the field of accredited testing, research and development for manufacturers of transportation vehicles, energy industry.

Main areas of our competences: accredited testing of strength and fatigue life, material diagnostics, strength and thermodynamic computer modelling, measurement of noise and vibrations, application and development of thermally sprayed coatings.

Transportation vehicles

Services for manufacturers of transportation vehicles:

- Dynamic Laboratory Tests and simulation of real operational loading
- Strength and fatigue life tests of rail and road vehicles or components
- Fatigue life tests of bogie frames
- Noise and vibration measurement
- Accredited material mechanical testing
- Measurement and analysis of the operational loading
- Accredited metallography tests
- Computer simulations of vehicles construction dynamic strength
- Strength, fatigue and crash calculations
- Calculations of fluid and thermodynamics
- Numerical simulations of vehicle external aerodynamics, HVAC systems

Energy sector

Services for manufacturers and operators of energy facilities:

- Vibrodiagnostics and balancing of rotating machines (turbines, generators, pumps)
- Vibration tests to check the dynamic properties of concrete foundations
- Noise and vibration measurements and identification of its sources including design of noise and vibration reduction
- Material inspections for residual life assessment
- Accredited material mechanical testing
- Accredited metallography tests

Thermal straying

Industrial scale application, development and testing of functional thermally sprayed surfaces:

 Industrial scale application of protective coating using thermal spraying methods (HVOF, APS, ARC, FS)















DT - Výhybkárna a strojírna, a.s. Dolní 3137/100, 796 01 Prostějov

https://www.dtvs.cz/en

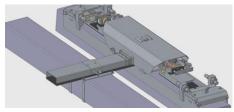
DT - Výhybkárna a strojírna, a.s. is an important European producer of railway and tramway turnout constructions. We specialize in R&D, design, manufacture, installation and regeneration of railway and tramway turnout constructions. We provide full accessories for turnouts and apply our own system of monitoring. We are the service partner for projecting and putting into operation and for turnout trackwork full operation.

We focus on turnout development, especially the application of new materials and technologies, which enhance the product quality and extend its operational life. All designs are made in accordance with international standards, or according to special requirements of our customers. All products are processed from every accessible rail sections, in all designs of crossings, track gauges, layout lengths, way of fastenings and so on.

We take part in the Czech Railways network development, which with its density belongs to the most extensive in Europe. The new generation turnout deliveries designed for the Czech Railway corridors are the most prestigious part of our production portfolio. The important part of our business activities is export. Our company supply turnout constructions into Europe, North and South America, Australia and Asia.







RAILWAY TURNOUTS

TRAMWAY TURNOUTS

SMART TECHNOLOGY



Brens North America Toronto, Ontario

https://www.brens-na.com/

Brens North America (Brens NA) is a specialized rail and transit solutions provider that develops unique, off the shelf products to enhance the urban rail environment by addressing climate change to reduce noise and air pollution and improve the liveability of our cities.

For every car manufactured in the world, approximately 3-5kg of synthetic fiber waste is produced. This includes excess material from the production of car seats, floor mats, and dashboards. The waste typically goes to a landfill, where it sits idle and does not decompose.

Brens NA is able to take that waste and through a proprietary system, re-purpose it into an extraordinary new product designed for the modern world.









Level Systems Plhovská 1997, 547 01, Náchod https://www.level.systems/

Level Systems develops and manufactures the most advanced GPS monitoring solutions on the market. Headquartered in Nachod, CZ, Positrex has been supplying the industry with innovative products for over 25 years. From a flexible and seamless system interface to manage its fleet, to robust, cost effective hardware that services various industries including; leisure, cars, trucks, and rail.

Level Systems has just developed a revolutionary rail product with advanced monitoring that can detect positioning as well as track conditions in real time. Its self-powered unit can be easily installed and can be left in place for the life of the vehicle.

