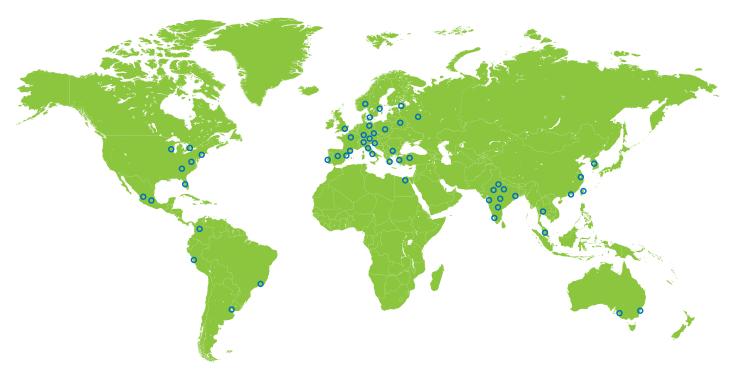






Reliable Metro solutions for the world

Regardless which application and requirement, GHH-BONATRANS can provide tailor-made solutions to any metro system across the world. Nowadays, our products are being applied on five continents and are present major metropolitan areas. We pay special attention to the issue of noise reduction. The substantial noise-reducing effect of **BONA**SILENCE® is achieved through the application of special noise absorbers mounted on the inner side of wheel rim. Our wheels with **BONA**SILENCE® have reached up to 30 db(A) lower noise levels compared to wheels without noise absorbers.



The following cities and metropolitan areas run their metro systems on GHH-BONATRANS wheels:

Adelaide, Ankara, Athens, Bangkok, Barcelona, Bengaluru, Berlin, Boston, Buenos Aires, Cairo, Chicago, Copenhagen, Delhi, Guadalajara, Hong Kong, Hyderabad, Incheon, Izmnir, Jaipur, Kochi, Kolkata, Kuala Lumpur, Lima, Lisbon, London, Lucknow, Madrid, Medellin, Mexico City, Milan, Minsk, Moscow, Mumbai, Munich, Nanjing City, New York, Newcastle, Nuernberg, Oslo, Paris, Prague, Rio de Janeiro, Rome, Shanghai, Sidney, Sofia, St. Petersburg, Stuttgart, Stockholm, Taipei, Toronto, Valencia, Vienna and Warsaw.















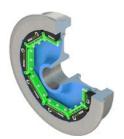




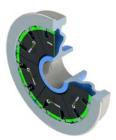
Noise absorber solutions

GHH-BONATRANS pays close attention to the issue of noise. Our research and development department has developed a number of solutions reducing noise caused by railway wheel operation. GHH-BONATRANS achieves a reduction of the vibration (and thus also noise) of wheels in operation by application of specially developed noise absorbers mounted on the wheels.

Noise absorbers **BONA** SILENCE® are able to significantly reduce rolling noise of wheels up to 8 dB(A), and reduce squealing noise in curves up to 30 dB(A). GHH-BONATRANS delivers complete systems specifically designed for different markets such as urban, suburban and passenger transportation as well as for high-speed trains.



Multi-segment dampers BONASILENCE®M



Leaf
dampers
BONASILENCE®D

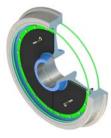


Plate and ring dampers BONASILENCE®PR

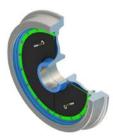
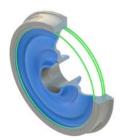


Plate dampers BONASILENCE®P



Ring dampers BONASILENCE®R BONASILENCE®R+

Czech Republic

BONATRANS GROUP a.s. Revoluční 1234 735 94 Bohumín Czech Republic

India

Bonatrans India Private Limited Plot No. A – 119 Shendra Five Star Industrial Area Shendra MIDC, Aurangabad – 431 154 Maharashtra, India

Germany

Gutehoffnungshütte Radsatz GmbH Gartenstrasse 40 D-46145 Oberhausen Germany

Hong Kong

Bonatrans Asia Limited Rooms 2103–4, 21/F., Wing On Centre 111 Connaught Road, Central Hong Kong

