

## Angst + Pfister – Your Partner for Railway Expertise and Components



### Engineering, standards and certifications

Angst + Pfister's engineering team patents every year new products specifically designed for railway industry in the Antivibration, Sealing and Hosing product areas. Our solutions for railway are all compliant to the most advanced and updated standards, such as DIN EN 45-545 or other nation-specific Smoke and Fire Standards. Our representatives take part in various Standards Committees to ensure our readiness for any upcoming technical requirement.

Our customers benefit from these competitive advantages through a solid partnership with Angst + Pfister which proves time and again that co-design projects are the best solutions to reduce Time-To-Market.



SNCF laboratories, TU Munich, LAPI and LNE: We test and certify our innovations at laboratories which are recognized globally for their expertise. Furthermore, we are proud of our Quality Management process, making Angst + Pfister a market leader in product conformity within the railway industry.

### Meeting the highest industry standards

#### Fire protection

**DIN** DIN EN 45545-2  
DIN 5510-2

**UNI** UNI CEI 11170

**afnor** NF F 16-101

#### Design & process approvals

**DIN** DIN 6701-2

**TUV** DIN EN 15085-2 CL1

**ISO** TS 16949  
ISO 9001

#### Drinking water

**kiwa**

**FDA**

### Our customers include



## Services from Angst + Pfister Group

### Angst + Pfister – Your supply and solutions partner

The Angst + Pfister Group is a leading international technical manufacturer and service provider for high-end industrial components. As a supply and solutions partner for engineering plastics, sealing, fluid handling, drive, and antivibration technology as well as

sensors, Angst + Pfister combines efficient logistics concept with comprehensive product application engineering services. Besides providing customer-specific parts, the Group offers a product range consisting of approximately 100,000 standard items.

### Our core product divisions



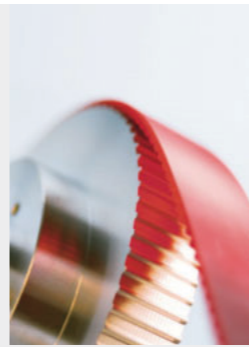
APSOplast®  
Engineering Plastics  
Technology



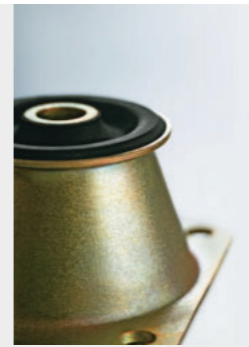
APSOseal®  
Sealing  
Technology



APSOfluid®  
Fluid Handling  
Technology



APSOdrive®  
Drive  
Technology



APSOvib®  
Antivibration  
Technology

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Technical Solutions  
for Rolling Stock



## Angst + Pfister – One Partner Producing Technical Components in Multiple Rolling Stock Applications

### Ensuring smooth operation on the tracks and in the carriages

Since 1953, Angst+Pfister has supplied the railway industry's leading manufacturers and operators with uncompromisingly high quality products and comprehensive engineering solutions. Railway manufacturers, maintenance organizations and track installers all benefit from our long-standing industry experience and our engineering expertise. Industry leaders rely on Angst+Pfister for standard as well as custom-designed components that meet the highest technical specifications and railway norms. Let Angst+Pfister bundle all the components you need and ship them just-in-time to your international manufacturing facilities.

<p><b>Floors and interiors</b> 1</p> <ul style="list-style-type: none"> <li>Plastic Finished Products</li> <li>Gas Springs</li> <li>Sound Absorption Mats</li> </ul>	<p><b>Floating floors</b> 2</p> <ul style="list-style-type: none"> <li>Antivibration Supports</li> <li>APSOPUR®/ ECOVIB® Damping Mats</li> </ul>	<p><b>Bathrooms and fixtures</b> 3</p> <ul style="list-style-type: none"> <li>APSOfluid® Water Hose Lines</li> <li>Silicone Hose Lines</li> <li>Couplings</li> </ul>	<p><b>Windows and doors</b> 4</p> <ul style="list-style-type: none"> <li>Plastic Finished Products</li> <li>Elastomeric Profiles</li> </ul>	<p><b>Train junctions</b> 9</p> <ul style="list-style-type: none"> <li>Elastomeric Profiles</li> <li>Plastic Finished Products</li> </ul>	<p><b>HVAC</b> 10</p> <ul style="list-style-type: none"> <li>O-Rings/Round Cords</li> <li>Cone Mounts and Shear Mounts</li> <li>Elastomeric Profiles</li> </ul>	<p><b>Doors opening systems</b> 11</p> <ul style="list-style-type: none"> <li>Belt Drives</li> <li>Elastomeric Profiles</li> </ul>	<p><b>Pantographs</b> 12</p> <ul style="list-style-type: none"> <li>Air Bellows</li> </ul>
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<p><b>Bogies</b> 5</p> <ul style="list-style-type: none"> <li>Primary Buffers</li> <li>HYDROFLEX® Hose Lines</li> <li>Punched Flat Gaskets</li> <li>Layer Springs</li> </ul>	<p><b>Power converters/ Transformers</b> 6</p> <ul style="list-style-type: none"> <li>ASSIWELL® Hose Lines</li> <li>Couplings</li> <li>Elastomeric Profiles</li> </ul>	<p><b>Brake system</b> 7</p> <ul style="list-style-type: none"> <li>Translational &amp; Rotational Seals</li> <li>O-Rings/Round Cords</li> <li>Punched Flat Gaskets</li> </ul>	<p><b>Brake compressor</b> 8</p> <ul style="list-style-type: none"> <li>Cone Mounts</li> <li>Round Buffers</li> </ul>
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## From Standard Products to Customer-specific Solutions

Over the years, Angst+Pfister has built up a comprehensive team of highly qualified application engineers who have amassed expertise across a broad range of industries. Under the APSO (Angst+Pfister Solutions) brand, our engineering specialists develop customized solutions for practically any application within our five core product areas. Let our railway application engineers serve you with tailor-made solutions in the areas of Antivibration Technology, Fluid Handling Technology, Sealing Technology, Engineering Plastics Technology and Drive Technology.



### Engineering services: Expertise all along the line

Technical industry expertise from around the globe that benefits our local customers:

- design-in and development support (CAD, CAE)
- experimental validation and virtual design
- material and compound specification
- industry approvals and certifications
- technical seminars and training courses



### The perfect global production platform: High-quality components for the highest requirements

Angst+Pfister has production facilities in 15 countries worldwide. This global orientation provides our customers with the most cost-effective production environment – even before considering our competitive ability to meet quantity, logistic and quality requirements. Being a company that is certified according to ISO-9001:2000, we make every effort to completely meet the quality requirements of our customers.



### Reliable logistics and customer focus worldwide

A comprehensive logistics infrastructure ensures that the right products are getting to their destination when and where they are required. Highly efficient processes, supported by an electronic order processing system, characterize the Angst+Pfister Logistics Center. Thanks to our extraordinary international network, a "just-in-time" delivery is supplied to all our customers, no matter the location.