

Industrial Components  
for the Railway Industry



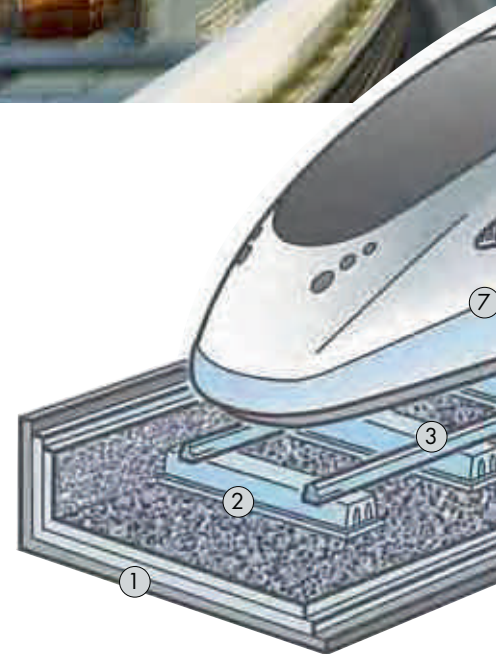
Visit us at the leading international trade fair  
**InnoTrans 2012**  
18-21 September in Berlin, Germany



Angst + Pfister – Your Partner for Railway Expertise and Components

**Ensuring Smooth Operation on the Tracks and in the Carriages**

Since 1953, Angst + Pfister has served the leading manufacturers and operators within the railway industry by supplying them 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.



**APSOvib®  
Antivibration Technology**

Features a broad product line specifically designed to dampen vibrations and minimize noise emissions not only on the tracks, but also in the carriages.



① Sylomer® Sub Balast Mats



③ Sylomer® Rail Groove Fillers



⑤ Round Buffer



② Sylomer® Sleeper Pads



④ Sylomer® Bearings for Buildings



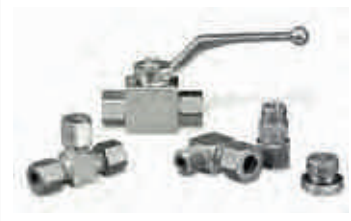
⑥ Gas Springs

**APSOfluid®  
Fluid Handling Technology**

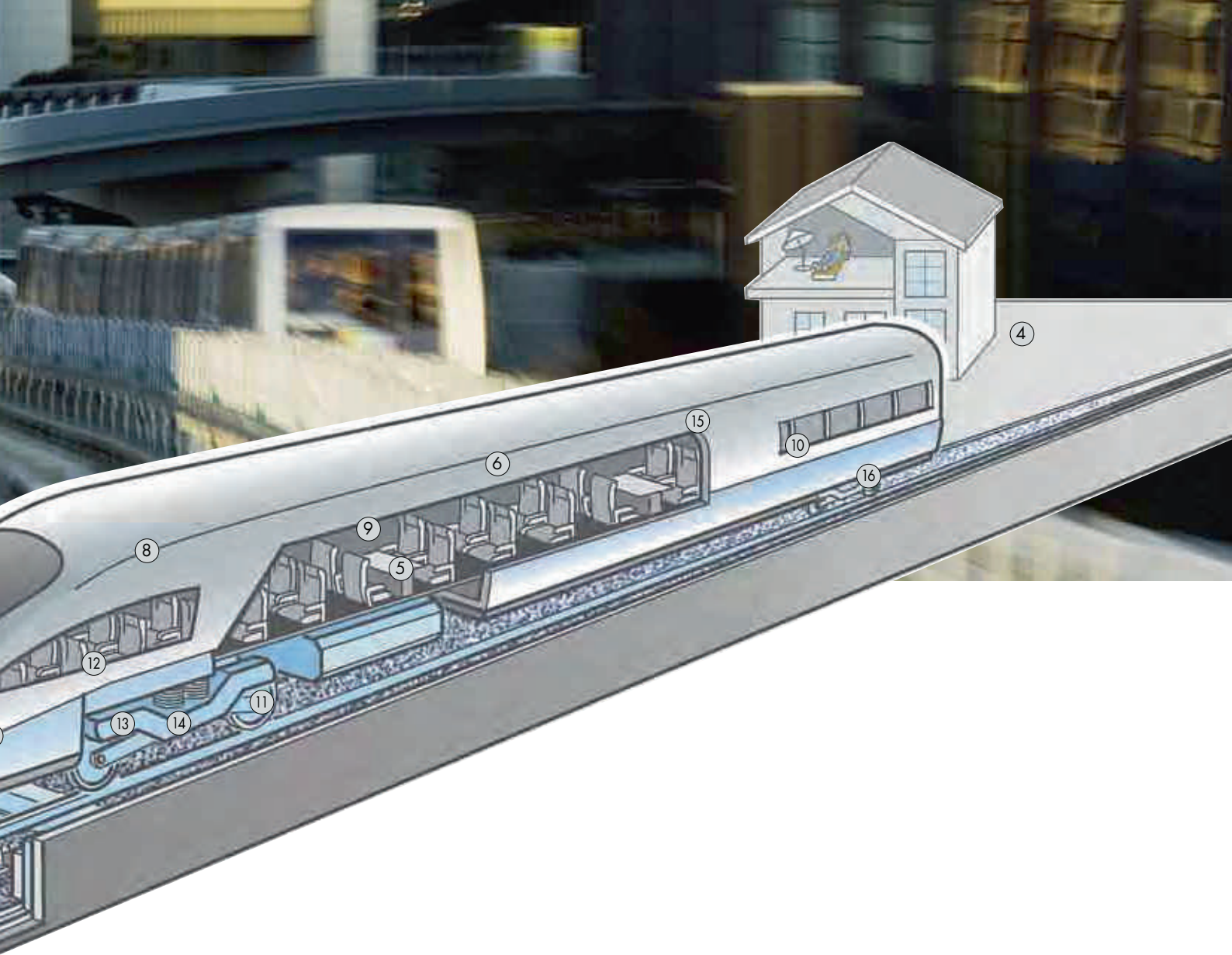
High-quality engineering solutions for all the hoses and fittings required in the engines.



⑦ Assiwell® Hose Lines



⑧ Fittings

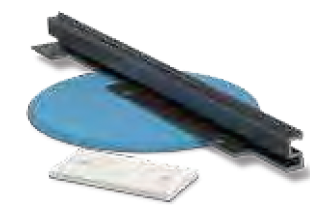


**APSOplast®  
Engineering Plastics Technology**

High-tech products made from materials that meet all of the relevant railway industry standards.



⑨ Semifinished Products



⑩ Finished Products (i.e. Plastic Disks)

**APSOseal®  
Sealing Technology**

Highest dependability with quality O-rings, rotary shaft seals, profiles and flat gaskets that are used not only in the engines, but also in brake systems.



⑪ O-Rings/Round Cords



⑬ Translational & Rotational Seals



⑫ Profiles



⑭ Punched Flat Gaskets

**APSOdrive®  
Drive Technology**

Mechanical and electrical drive solutions for smooth operation in the carriages.



⑮ Belt Drives



⑯ Actuators

## Angst + Pfister Service Competencies



### Engineering Assessment and Design-in

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 tailor-made 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

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



### APSOsys – System Supply Management

Systematic supply chain integration that customizes solutions to reduce procurement costs, enhance R&D productivity and lower your working capital. Our extremely flexible modular toolbox setup enables us to easily adjust our service offering to perfectly fit your business's requirements. Our system supply management provides you with holistic cost optimization through:

- global sourcing with primary and secondary suppliers to ensure availability and best market prices
- a deep and wide product assortment of more than 150,000 standard items for efficient one-stop shopping
- integrated electronic order-processing solutions (EDI, APSOparts) for efficient procurement
- assured global supply security



### Logistics and Quality Assurance

We coordinate logistics and distribution to precisely match your demands so that all of our products reach you at the right place at the right time. Through cooperation with our partners, it is possible to implement kanban and just-in-time (JIT) solutions that reduce your working capital.

- State-of-the-art logistics center with more than 150,000 different stock-keeping units
- High product availability for both standard and custom-engineered items
- Workshop services: CNC machining, high-tech welding, prototyping and subassembly
- Fast delivery times
- Just-in-time, kanban, supply management
- ISO 9001:2008-certified complete quality assurance system



## Angst + Pfister – Your Supply and Solutions Partner

We help our manufacturing clients to save hundreds of thousands of euros every year by providing custom-engineered components, a massive product range comprising more than 200,000 standard items and comprehensive supply-chain solutions.

The Angst+Pfister Group serves its customers internationally with uncompromisingly high-quality products and comprehensive solutions. Our global supplier and distribution platform enables us

to guarantee the same product quality and price regardless of whether you are manufacturing across Europe or Asia. The breadth of our standard product assortment makes us a one-stop shop that not only simplifies your search, but also enables you to consolidate suppliers. Our engineering solutions are designed to seamlessly interface with your R&D in ways that save you research time and money in the product development stage.

### Our Core Product Divisions



**APSoplast® Engineering Plastics Technology**



**APSOseal® Sealing Technology**



**APSOfluid® Fluid Handling Technology**



**APSOdrive® Drive Technology**



**APSOvib® Antivibration Technology**

### Meeting the Highest Industry Standards

Upon customer request, Angst+Pfister will provide the necessary Quality Documentation such as "Fire Prevention Norms" (i.e. DIN 5510-2) or "Welding Certificates" (i.e. DIN EN 15085-2). Based on requirements, we can also guarantee compliance with relevant railway industry standards.

### Our Customers Include



Ninety Years of Being There for You



Since its founding 90 years ago, the Angst + Pfister Group has continually grown and currently employs more than 750 personnel in various locations in Switzerland, Germany, Austria, Italy, France, Belgium, the Netherlands, the Czech Republic and China.

The Angst + Pfister Group is headquartered in Switzerland. As an internationally networked group of companies, the Angst + Pfister Group supplies a worldwide customer base of more than 75,000 companies in varying industries.

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