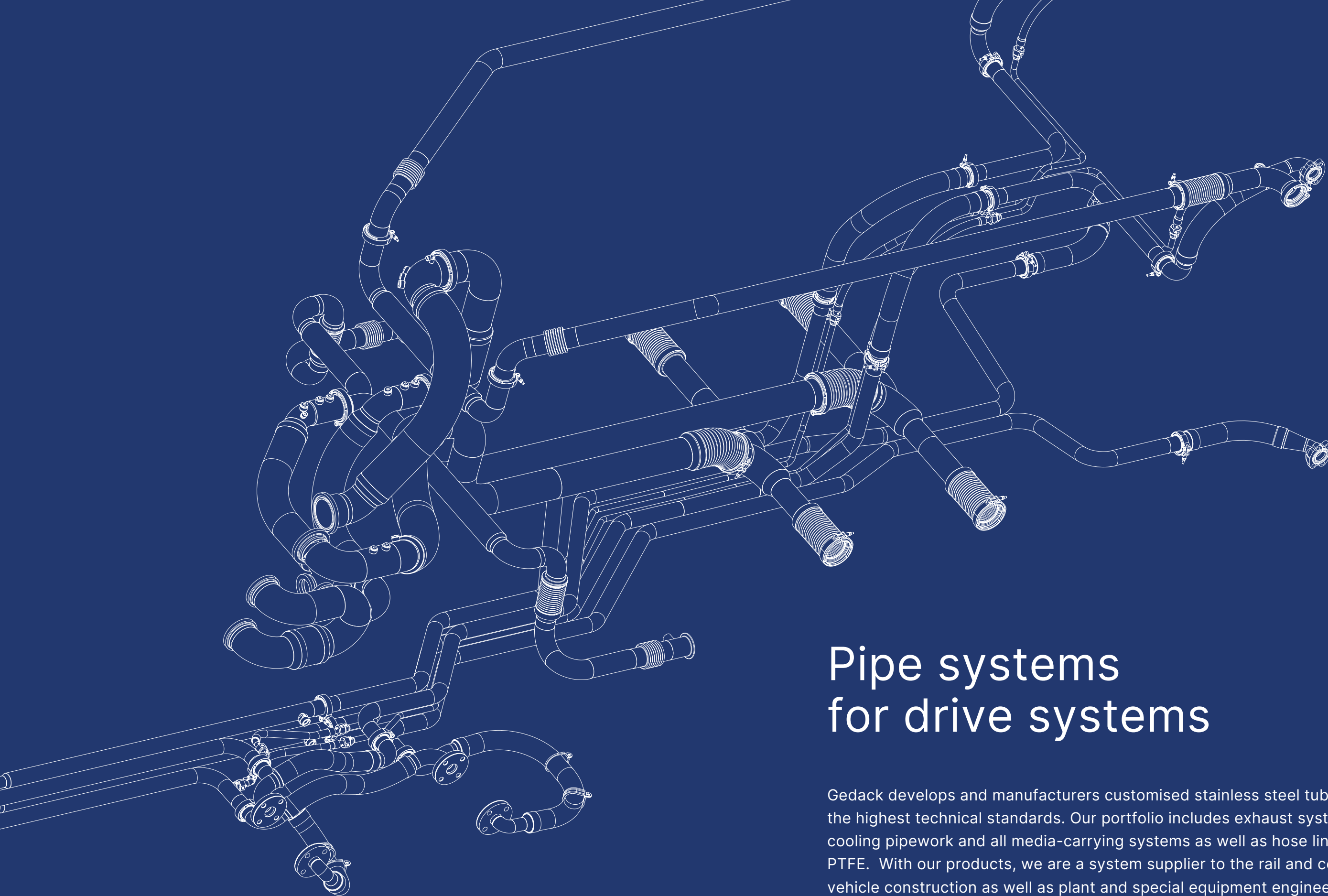




Pipe systems
for drive systems





Pipe systems for drive systems

Gedack develops and manufactures customised stainless steel tube systems at the highest technical standards. Our portfolio includes exhaust systems, water cooling pipework and all media-carrying systems as well as hose lines made of PTFE. With our products, we are a system supplier to the rail and commercial vehicle construction as well as plant and special equipment engineering. We offer comprehensive customer support and the provision of holistic solutions, especially for complex problems.

About us

Innovation and progress for over 30 years

In 1991, Ernst Gedack founded „Gedack Metallschlauchservice“ in Gevelsberg. The owner-managed family business is meanwhile in its second generation and is now based in the Bauhaus city of Dessau-Rosslau. Over the years the product portfolio has considerably expanded. Gedack is a leading supplier of system components and a provider of engineering services for rail and commercial vehicle manufacturers all over the world.

Through continuous investment in research and development along with close co-operation with our customers, Gedack has become an important partner to leading companies in the rail and commercial vehicle industry. We have always focussed on the highest quality standards and efficient production methods, to meet the increasing demands of the global market. The values of quality, reliability and customer satisfaction take centre stage at Gedack. This philosophy has contributed significantly to the success of the company and will continue to secure our position on the international market in the future.



FIND OUR INNOVATIVE SOLUTIONS APPLICATION IN:

- technically demanding systems such as combustion engines, coolers and heaters, cooling lines of power converters and transformers
- the assembly of expansion joints, hoses and pipe assemblies to pipe systems
- very tight installation conditions in vehicles
- the optimization of assembly and maintenance

OUR PIPE SYSTEMS FULFILL THE HIGHEST DEMANDS IN TERMS OF:

- Tightness for gases or liquids
- decoupling of vibrations
- thermal insulation
- Compensation of construction tolerances and relative movements
- Corrosion resistance against aggressive media
- Resistance to external influences
- Fire protection regulations
- Quality, durability and life cycle costs

Our production processes are certified according to EN ISO 9001-2015. We hold the certificate of suitability for welding in accordance with DIN EN 15085 CL1 "Welding of railway vehicles and vehicle parts" and fire protection certificates in accordance with EN 45545 "Fire protection in rail vehicles".

Gedack V-band-systems

In-house development

In our self-developed Gedack V-band system, expansion joints and metal hoses are built with preformed ends that can be connected directly to motors, aggregates or other pipelines with V-band clamps. Gedack V-band connections are compared to conventional flange connectors significantly lighter and more cost-effective. Due to the low space requirement, even in tight installation conditions, simple assembly is guaranteed.

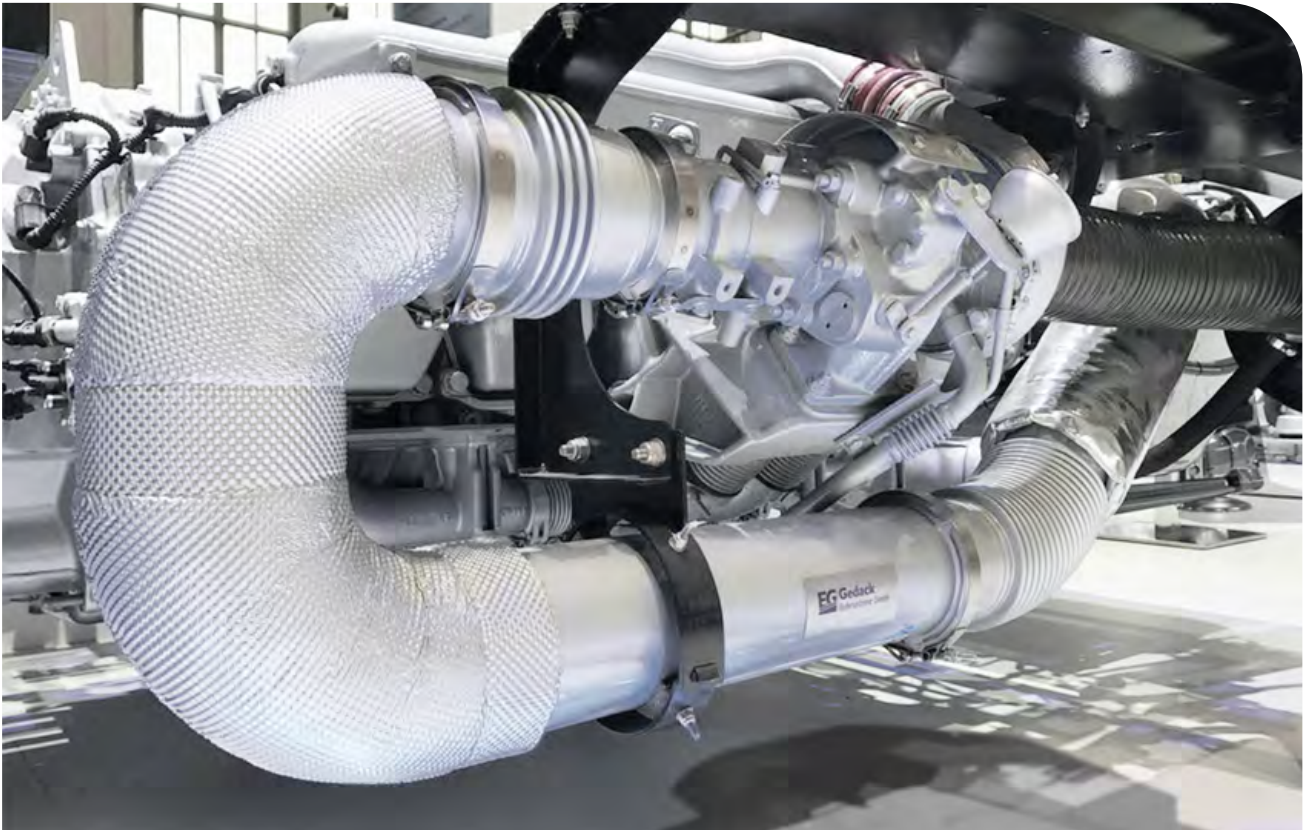


above: Gedack v-band system
right: Comparison of a Gedack V-band connection (pipe-to-pipe) with a conventional flange connector in terms of dimensions and weight.

Gedack V-band-systems			
Material 1.4301			
Ø A mm	Ø B mm	H1 mm	Gewicht
40,0	38,0	74,0	0,33 kg
50,0	47,0	84,0	0,50 kg
63,5	60,3	102,0	0,66 kg
80,0	78,0	123,0	1,03 kg
101,6	97,6	139,0	1,10 kg

Conventional flange connector				
SAE flange connector ND 40/500 PSI, type DFC				
Material 1.4404				
Ø A mm	Ø B mm	D mm	F mm	Gewicht
42,5	34,0	79,0	68,0	1,24 kg
61,0	53,0	102,0	90,0	2,36 kg
77,0	64,0	114,0	105,0	2,88 kg
90,0	80,0	134,0	124,0	5,00 kg
103,0	93,0	152,0	136,0	6,00 kg

Metal gaskets



Metal gaskets for applications in the high temperature range

Our metal gaskets reliably fulfil the highest standards of tightness, corrosion resistance and service life. The maintenance effort for metal seals is extremely low. There is no wear on sealing cords. Likewise, sealing pastes or similar are not required.



System components

Metal hoses, expansion joints, PTFE and insulation

METAL HOSES

The hoses are designed according to the operating conditions and ranges from simple designs to high-quality hoses with multi-layer braiding or special design of the inner wall.

We manufacture metal hoses

- in nominal dimensions DN 6 to DN 250 (larger nominal diameters on request)
- for pressures up to PN 400 - with all commercially available connections or connections according to your requirements
- with formed ends for direct connection to aggregates or other pipe runs

COMPENSATORS

Our expansion joints are manufactured with the assistance of precise calculation methods for an optimal design in the corresponding application.

Axial expansion joints

- single- and double-walled design in nominal diameters DN 16 to DN 300, for pressures up to PN 16
- multi-walled design in nominal sizes DN 40 to DN 2000, for pressures up to PN 25 with flared flanges, for pressures up to PN 400 with weld ends or fixed flanges

Angular/lateral expansion joints

- in nominal diameters DN 40 to DN 2000, for pressures up to PN 100, multi-walled design with welded ends or flanges Metal hoses, expansion joints, PTFE and insulations



PTFE CORRUGATED HOSES

Polytetrafluoroethylene (PTFE) corrugated hoses are easy to install due to their flexibility and meet the highest standards of operational safety.

- We always use pure PTFE fine powder without any material from recycling processes. Material selection and hose production are subject to the strictest quality controls.
- Material variants PTFE white and PTFE black (antistatic and electrically conductive) Flexflon® corrugated PTFE hoses are available equipped with a braid made of stainless-steel wire or PBT if required

Flexflon® PTFE corrugated hoses can be fitted with a stainless steel wire or PBT braid if required.

INSULATION

Design and supply of application-specific insulation in the sector of exhaust gas and cooling water piping.

- Calculation of the heat transfer
- Calculation of the theoretical surface temperature and radiant heat
- Certification in accordance with EN 45545
- Insulating sleeves
- Integral insulation
- Partially pre-assembled on customer request

References



SIEMENS MOBILITY GMBH
 Vectron Dual Mode mainline and shunting locomotive
 Development, design, FEM calculation and production of the complete exhaust system,
 for the Cummins QST30 engine with SCR catalytic converter
 Photo: Siemens Mobility GmbH



LIEBHERR-MINING EQUIPMENT COLMAR SAS
 Mining excavator
 Piping of exhaust gas, charge air,
 cooling water and oil
 Photo: Liebherr-Mining Equipment Colmar SAS



VOSSLOH LOCOMOTIVES GMBH
 Shunting and mainline locomotive DE18 with Stage III B- & V-MTU
 Engine Development, design and production of the cooling water and exhaust piping for the MTU engine and the cooling water piping of the power converter
 Photo: Vossloh Locomotives GmbH

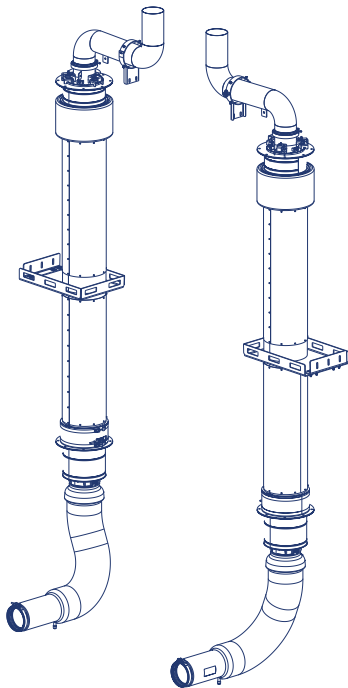


LIEBHERR-WERKE NENZING AND ROSTOCK
 Mobile harbor cranes
 Design and manufacture of the exhaust gas piping in the engine room
 Photo: Liebherr MCCtec Rostock GmbH

References



ALSTOM FERROVIARIA MÉXICO
Tren Maya
 Design, development, construction and production of the entire exhaust gas piping
 Photo: ALSTOM Ferroviaria México



WINDHOFF BAHN- UND ANLAGENTECHNIK GMBH
WINDHOFF MPV® VentuS® BaneNor LT18
 Development and production of the cooling water and exhaust gas piping
 Photo: Windhoff Bahn- und Anlagentechnik GmbH



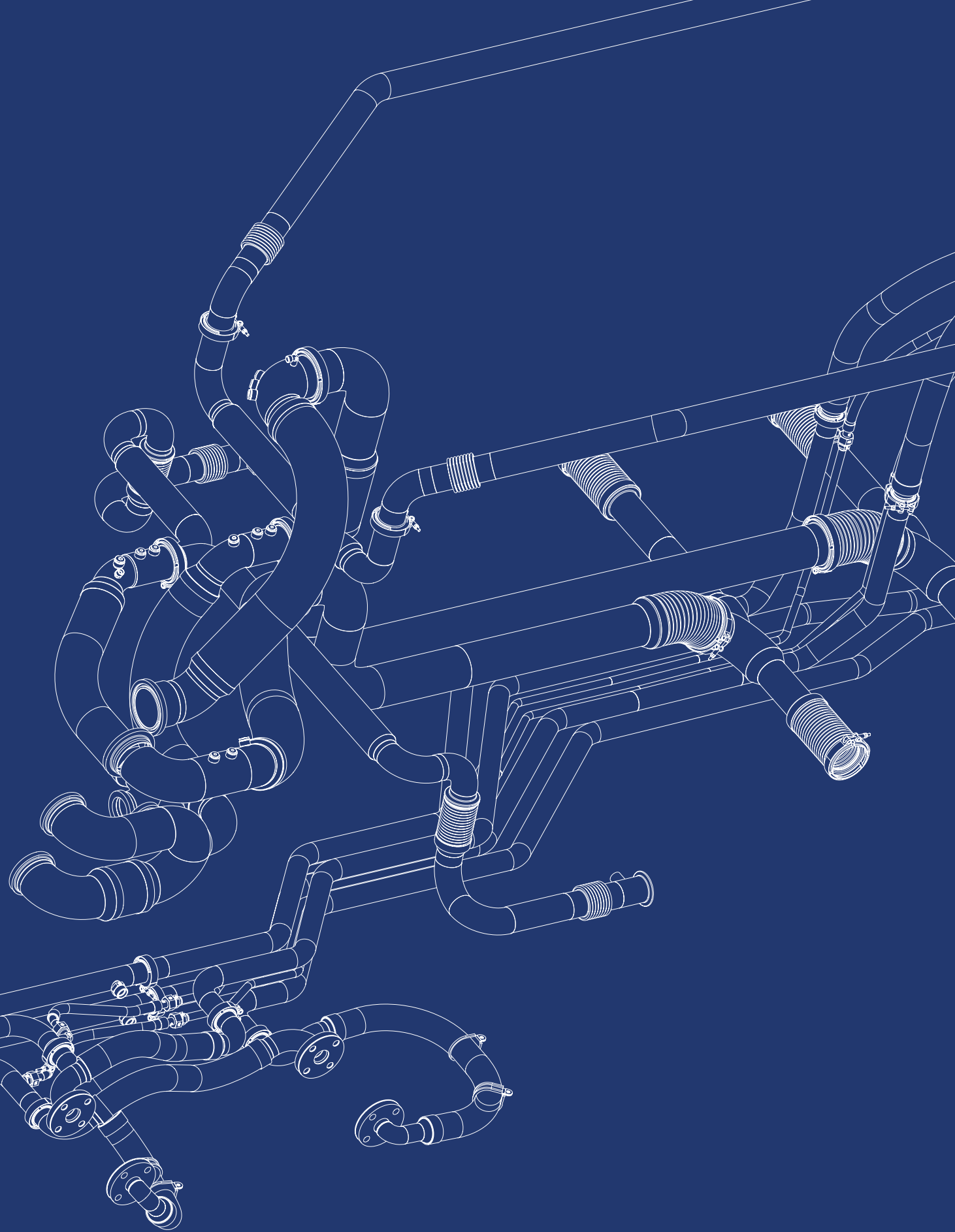
WABTEC CORPORATION
Wabtec FLXdrive locomotive family
 Development, production and assembly of cooling water piping for different battery power variants
 Photo: Wabtec Corporation



WINDHOFF BAHN- UND ANLAGENTECHNIK GMBH
WINDHOFF MPV®VentuS® Type GAF DB
 Design and manufacture of the exhaust gas piping
 Photo: Windhoff Bahn- und Anlagentechnik GmbH

References

ALSTOM	 ArcelorMittal	CAF	 Cummins 
 EMPL	 GEISMAR	MAHLE	 GLEISBAUMECHANIK
HITACHI Inspire the Next	LIEBHERR	 mtu	Plasser & Theurer
SIEMENS	 STADLER <small>Clevere Lösungen auf der Schiene</small>	 VIERTEL MOTOREN <small>TECHNIK · SERVICE · LEIDENSCHAFT</small>	 VINCORION
VOITH	vossloh	 Wabtec CORPORATION	 WINDHOFF
 ZEPPELIN Power Systems 			



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