

VDI

VDI Verein Deutscher Ingenieure e.V.

VDI-Platz 1
40468 Düsseldorf

Phone: +49 211 6214-0
Fax: +49 211 6214-575
Internet: www.vdi.eu
Email: vdi@vdi.de

VDI - The Association of
German Engineers
Fit For The Networked Future



Catrin Moritz | VDI



Ansgar M. van Treeck

Engineers are the driving force of technological developments. Their contribution is indispensable for economic growth, the future-oriented energy supply, the digital transformation as well as trendsetting mobility concepts and resource efficient solutions in order to secure Germany as a center for technological innovation. In other words, they possess crucial competences and have a vital role in solving society's future challenges.

Engineers need a strong network that supports, advances and represents them in their work. That is exactly the task that we in VDI - The Association of German Engineers take on. We have been reliably supporting engineers for more than 160 years. We provide them with a professional base and maintain a lively network at regional, national and international levels.

We would like to use this brochure to enhance your understanding of our passion for technology and our commitment to engineers. We hope you will enjoy reading it!

Dr.-Ing. Volker Kefer,
President of VDI

Dipl.-Wirtsch.-Ing. Ralph C. Appel,
Executive Director of VDI

We are the leading network

- Our passion for technology 5
- Our presence on-site 6

We design the future

- We set standards 9
- We are the think tank for technology 10
- We take responsibility 14

We are VDI

- VDI Group 16
- VDI in figures 18

We are the leading network

Thomas Ernsting

Our passion for technology

We are engineers from all disciplines in all professional functions. Our network includes students of engineering sciences as well as academics from other disciplines, in particular informatics, natural sciences and mathematics. We work across generations, connecting practical knowledge with future concepts.

Our 150,000 personal members are linked by the fascination for and with technology which has the potential to change the world for the better. In our role as the voice of engineers and technology, we actively shape the future. Every year, more than 12,000 honorary experts develop the latest insights to promote Germany as a hub for technology. As a recognized knowledge and competence platform, we are the driving force for new technologies and technical solutions for an increased quality of life, a better environment and more prosperity.

We are Germany's largest technical-scientific network. With our activities we promote general conditions within which the great innovation potential of engineers can realize its full potential. Our goal is to positively influence the development of technology and Germany as a place for innovation - and we have been doing that since 1856.

We are the leading network

Our passion for technology



Our presence on-site

Technology only works with and for people. The same applies to VDI. That is why we strive to maintain a lively network at regional, national and international levels.

VDI State Representative Offices

Our 15 VDI State Representative Offices coordinate and represent the interests of engineers at the federal state level. They advise politicians regarding technical questions, point out problems and solutions and raise awareness for the latest technical developments. On top of that, they work together with schools and universities to promote enthusiasm for technology with young people and to strengthen the understanding for natural-science interrelationships.

VDI Regional Associations

Our 45 VDI Regional Associations facilitate our members' exchange of experiences and personal contact at the regional level. During a total of more than 5,000 events per year, the regional associations impart technical information on technical-scientific and professional-political topics. On-site the volunteers promote young talent and hold technical days for students or organize visits to companies.

VDI Chapters abroad

About 5,000 VDI members live abroad around the world. With our global engineers network we want to give the support to our members abroad that they are used to in Germany. The central nodes are our VDI Chapters in Argentina, Australia, Brazil, France, Italy, North America, the Republic of South Africa, Romania and Spain.

International networking

We look after the interests of German engineers even beyond national borders. As one of the 36 members of the European Federation of National Engineering Associations (FEANI), we aim to facilitate the mutual recognition of engineering qualifications in Europe and to strengthen the position, role and responsibility of engineers in society. The accreditation of the engineering programs constitutes one of our core interests. For that reason we are member of the European Network for Accreditation of Engineering Education (ENAE) and are authorized to grant the "EUR-ACE-Label", a faculty label for engineering study programs.



We design the future

Thomas Ernsting

We set standards

As the third largest technical standardization body in Germany, we have developed one of the most important technical rule bases with our VDI Standards. More than 200 new or revised VDI Standards based on the latest technical developments are published by VDI's technical divisions every year. We have systematically built up a set of technical regulations, which contains more than 2,100 valid VDI Standards, extensively covering a broad field of technology subjects. They all follow the process described in the standard VDI 1000: consensusbased and with a public objection process. The topics range from securing loads on road vehicles to testing optical fibers up to biomimetics and monitoring the effects of genetically modified organisms.

With the VDI Standards we transfer technical knowledge. Their value stands in high regard even far beyond Germany's borders. Being bilingual, VDI Standards open up opportunities for collaboration, not only within Europe. They are acknowledged throughout the world and play a very important role as precursors for international standardization. Accessible to all market participants, they allow savings by reducing information and controlling costs for adjustment and trading. Standards thereby facilitate contractual arrangements, commercial transactions and serve to reduce technical trade barriers.

We design the future

We set standards



Fabian Stürtz | VDI

We are the think tank for technology

Nearly all subject areas worked on by engineers and natural scientists find their home in one of our twelve VDI technical societies with their 55 technical divisions and more than 600 committees. The technical societies form the core component of VDI and combine technology and science, as well as theory and industrial practice. Here, the interdisciplinary cooperation of 12,000 honorary experts from science, public administration and industry enable highly competent and universally valid results.

VDI Society Production and Logistics

Manufacturing companies have always been the backbone of the German economy. Logistic services are tightly meshed with production and are just as indispensable for commercial success. That is why the VDI Society Production and Logistics has set itself the task of being the pacemaker for new solutions in production and logistics. It is the network of experts from large-scale industry and

mid-sized companies to be able to turn innovative ideas into reality and simultaneously guarantees contact with the market requirements and customer demands.

VDI Society Materials Engineering

Current issues with a high degree of industrial and societal interest are also being pursued by the VDI Society Materials Engineering. It unifies the engineering disciplines in the area of all material classes such as plastics, metals, nanomaterials and composites along the entire engineering chain. The goal is to continually drive methods and technical processes forward.

VDI Society Product and Process Design

The VDI Society Product and Process Design provides secured knowledge for all sectors regarding the design of products and processes and their optimization in terms of quality, time and the cost/benefit ratio. It covers the entire product life cycle from the product idea up to product development, marketing and service through recycling while using optimized methods, tools and systems including the necessary information technology.

VDI/VDE Society Microelectronics, Microsystem and Precision Engineering

The VDI/VDE Society Microelectronics, Microsystem and Precision Engineering is entrusted with conceptually supporting the scientific and technical development of microelectronics, microsystem and nanoscale engineering along with micromechanics and promoting their wide application. To accomplish this, the society initiates dialog between manufacturers, users and science. It is a joint expert association of the VDI and the Association of Electrical, Electronic & Information Technologies (VDE).



Fabian Stürtz | VDI

VDI/VDE Society Measurement and Automatic Control

The same is true of the VDI/VDE Society Measurement and Automatic Control. The expert body ensures acceptance for measurement and automation application technology as well as optical technologies in society and politics, and represents Germany in the international umbrella organization for automation application technology. After all, measurement technology, automation technology and optical technologies provide better and new solutions for the challenges faced by society – on a national and global scale.



Fabian Stürtz | VDI

VDI Society Technologies of Life Sciences

Engineers, scientists and physicians cooperate closely in this society. Current fields of activity and interfaces are filled by intensive interdisciplinary work which goes beyond the boundaries of the technical divisions. This is also reflected by the VDI Society Technologies of Life Sciences' five technical divisions: agriculture, biotechnology, biomimetics, biodiversity and medical technology.

VDI Society Chemical and Process Engineering

Within the fields of the chemical industry and physical technologies, process engineering is applied. The VDI Society Chemical and Process Engineering deals with questions on process engineering and chemical engineering throughout the areas of science and technology, industry and public life.



Fabian Stürtz | VDI

VDI Society for Vehicle and Traffic Technologies

One of our largest technical societies is the VDI Society for Vehicle and Traffic Technologies. This shows the importance of the German car industry in the national economy and the world market. The technical society handles the areas of traffic technology, vehicle-related technical components and methods, road vehicles, railway technology, aerospace technology and marine engineering.

VDI Society Civil Engineering and Building Services

The VDI Society Civil Engineering and Building Services unifies architects, civil engineers, technical building services engineers and facility managers. Its goal is to implement innovative and sustainable solutions that cover the entire life cycle from planning and execution through operating to the repurposing and recycling of structures.

VDI Society Energy and Environment

Sustainability is also a topic in the VDI Society Energy and Environment. It ensures practical, forward-looking and financeable solutions for the environmentally friendly mining and consumption of raw materials and fossil energy sources, the prevention and disposal of wastes and looks after noise reduction as well as

keeping the air and soil clean. This technical division also provides expertises and analyses, covering the entire range of different forms of energy conversion and application.

VDI/DIN Commission on Air Pollution Prevention - Standards Committee

Air pollution prevention in the area of environmental protection techniques, environmental meteorology, environmental quality and environmental measurement techniques are the topics that concern the Commission on Air Pollution Prevention of VDI and DIN - Standards Committee. It works on behalf of the government and is financially supported by the German Federal Government. The Commission is also responsible for standards at European and international levels.

DIN/VDI Standards Committee Acoustics, Noise Control and Vibration Engineering

The Acoustics, Noise Control and Vibration Engineering Standards Committee of DIN and VDI is responsible for developing national technical rules and standards relating to acoustics, noise control and vibration engineering. In these areas the committee also actively participates in the standardization at European and international levels.

We take responsibility...

We assume responsibility for humans, nature, the environment and society. We initiate dialogs in society about the chances and risks of technological developments, thus decisively contributing to an open and informed attitude towards technology, since the quality of life and the environment, prosperity and our ability to master the challenges of the future crucially depend on technical competence and technical innovations.

We are the spokesperson of the engineers and represent their interests when dealing with public policy and society. We evaluate innovations and technology independent of political and commercial interests. As an acknowledged advisor we shape the formation of opinions on technology, the economy, politics and society – in particular in the topic areas of energy, environment, traffic, educational and innovation policies as well as in the matter of securing the next technical-scientific generation.



...also for our next generation

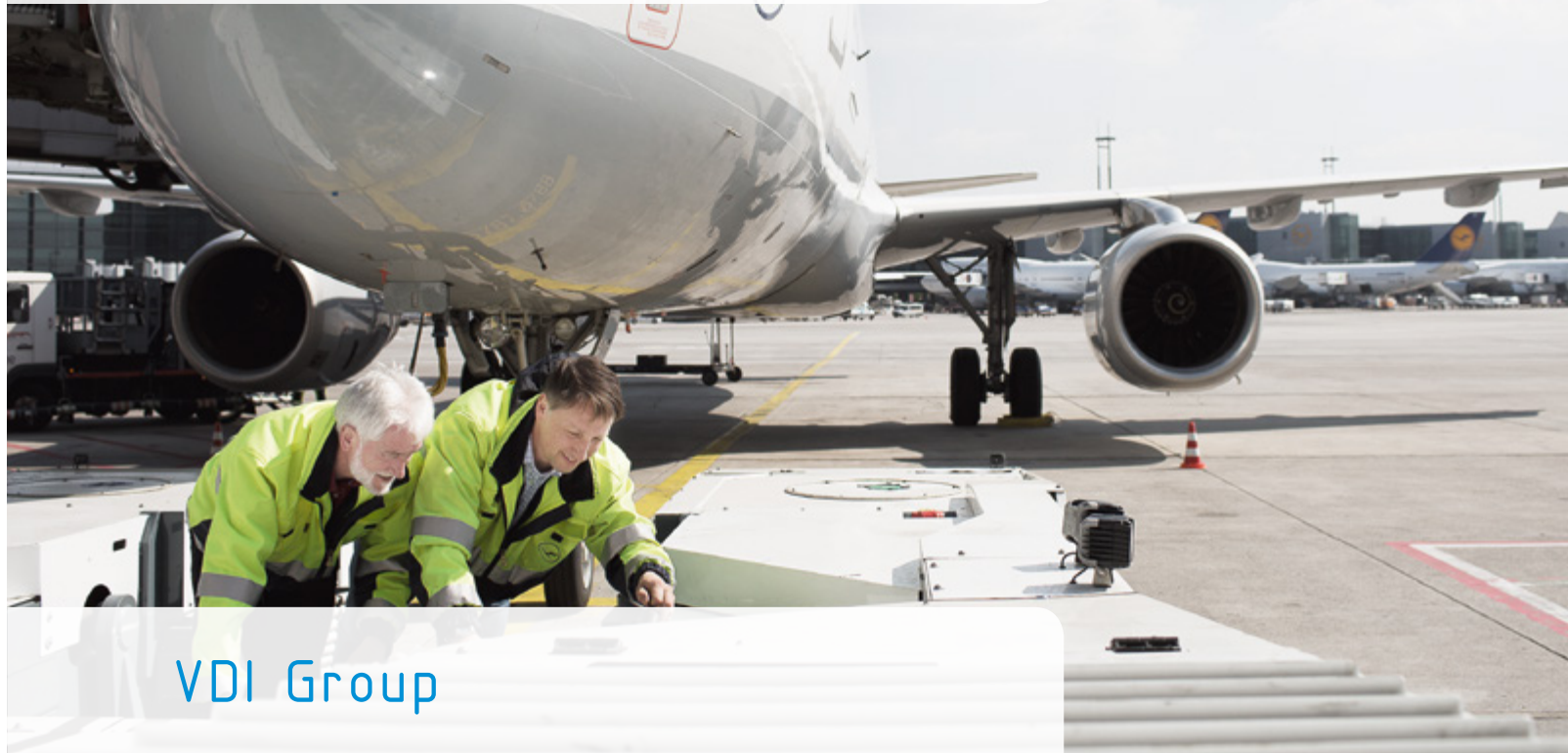
In a country without natural resources, the most important thing is bright minds. That is why we are committed to a solid technical education. If children and adolescents are to be fit when dealing with technology, they have to grapple with it as early as possible – in school, and also in other areas. With diverse projects and offers we promote technical general education, nurture young talents and impart skills for dealing constructively with technology.

To inspire for technology in a playful but challenging manner – that is what our VDI Club stands for. More than 50 clubs throughout Germany and thousands of children aged four to twelve prove the great success of our youth projects. In our VDI – Zukunftspiloten youth club, adolescents from 13 to 18 face the challenges of the future during club meetings. Through teamwork they develop approaches towards how technology can be applied to make the world a bit better. Nationwide there are also about 80 teams of students and young engineers in the universities and higher education institutions in VDI. We support the young members who are in the middle of a course of studies or just entered professional life with tailor-made offers.

The brand “German Engineering” and the “Made in Germany” seal of quality stand for innovation, quality and reliability around the world. One key driver of success for this is our highly trained technical professional and managerial staff, especially the engineers. Every day we live up to our ambition that the high quality of the engineering education is also secured for the future.

We are VDI

Fabian Stürtz | VDI



VDI Group

The VDI comprises VDI e.V., which orients itself on non-profit and technical-scientific community work, and its subsidiaries which operate in various sectors. With its activities, the VDI directly strengthens Germany as an innovation and technical hub.

VDI Verlag GmbH and VDI Fachmedien GmbH & Co. KG

VDI Publishing House uses its range to proficiently support engineers, technical specialists and managers in their professional activities and the management of their careers, for instance with Germany's leading recruiting fair for

engineers. Moreover, the publishing house produces VDI nachrichten, the weekly newspaper for technology, business and society. On top of that, VDI Business Media offers a range of technical journals in the areas of production, technical safety, construction, logistics, energy and the environment.

VDI Wissensforum GmbH

Since 1957 the VDI Advanced Training Center is the professional training partner for engineers and for technical experts and management. At international

events both at home and abroad, experts from science and real life pass on their knowledge during more than 2,150 conventions, conferences, technical forums, training courses and seminars. 37,000 participants educate and train themselves with the help of the services of the VDI Advanced Training Center.

VDI Technologiezentrum GmbH

In matters of research funding, innovation support and innovation policies in Germany and Europe, VDI Technology Center supports government departments, associations and companies in solving ecological, economic and social challenges. It pursues the aim to drive key technologies forward and to strengthen sustainability, global change and international cooperation.

VDI/VDE Innovation + Technik GmbH

Whenever there are any questions involving innovations and technology, VDI/VDE Innovation + Technik offers competent advice. As a leading service provider VDI/VDE-IT analyses, supports and organizes innovation and technology for clients with political, research, industry and finance backgrounds. For every step in the innovation process the team offers a customized solution.

VDI Zentrum Ressourceneffizienz GmbH

VDI Center for Resource Efficiency works on behalf of the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety. It prepares information on environmental technologies and material and energy efficient processes in a manner that makes it comprehensible to the general public. The goal is to support especially small and mid-sized companies in their efficiency of resource utilization.

VDI Versicherungsdienst GmbH

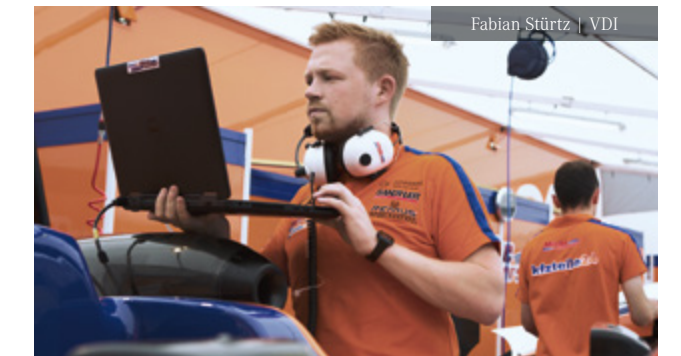
VDI Insurance Services provides advice on private and professional insurance questions for engineers. In addition to neutral insurance consultancy and individual support in case of damage events, VDI Insurance Services offers special conditions by its contractual partners HDI and DKV, tailored to the needs of engineers.

VDI - GaraGe gemeinnützige GmbH

VDI-GaraGe in Leipzig is an innovation and start-up center for youths. Here or in one of the 240 partner companies youths can acquire professional pre-qualifications and skills in the areas of natural science, technology and business. VDI-GaraGe offers teaching and learning materials for in-school and extracurricular school programs with approx. 120 education and training programs and its own media center.

VDI Ingenieurhilfe e.V.

Engineers in need and their surviving relatives get assistance at VDI Engineers' Welfare Organization. Honorary representatives restore their courage, hope and confidence.



Fabian Stürtz | VDI

VDI in figures

30
international
cooperation partners

630
Technical Committees
in VDI

1,060
employees
in VDI Group

1856
Founding year of VDI

1884
Year of publication of the
first VDI Standards on steam
boilers and steam engines

2,100
valid VDI standards

5,300
events put on by VDI State
Representative Offices
and Regional Associations

6,500
members in
VDI Kids Club
(from 4-12 years old)

47,000
students and young
engineers in VDI

150,000
members in VDI

166,000
friends and followers
of VDI pages
on social networks

368,000
weekly 'VDI nachrichten'
readers

Publisher

VDI Verein Deutscher Ingenieure e.V.
VDI-Platz 1
40468 Düsseldorf

Phone: +49 211 6214-0
vdi@vdi.de
www.vdi.eu

Editors

Stephan Berends, Hanna Büddicker,
Dirk-Eike Röckel

Design

ganzgraph gmbh
www.ganzgraph.de