

DWA WorldwideInternational DWA Activities



Clear concepts. Clean environment.

Shaping the future with DWA.

The German Association for Water, Wastewater and Waste is the technical-scientific professional association which brings together the specialists and managers of the water and waste management sector from municipalities, universities, engineering offices, government agencies and companies under one roof. DWA formulates technical standards, contributes to standardization work, supports research, promotes training and further training, and advises politics, science and the economy. DWA was established in 1948. It is nationally and internationally active.





DWA TRAINING

Events and competitions

Continuous vocational qualification and targeted youth development are important offers by DWA. Conferences, seminars and further professional events keep engineers and operating personnel up to date. Professional competitions for aspiring academics and specialist staff motivate and draw the attention of employers to good employees.

International activities

DWA cooperates with state development cooperation organisations. It trains multipliers, develops curricula and compiles teaching materials in order to qualify the operating staff of water management plants abroad, thereby improving the environmental, social and occupational safety standards and organizes Technical Safety Management (STM).



Visit DWA at the international IFAT editions!

DWA participates in IFAT trade fairs worldwide with a diverse program.

Firstly, expert lectures within the Technical Scientific Conference. Secondly, Products in Practice (PiP) sessions, which provide a perfect mix of theoretical knowledge and on-site live demonstrations by different companies. Furthermore.



IFAT Africa

IFAT Africa was first launched in 2015 and takes place every two years in Johannesburg.

www.dwa.de/ifat-africa

IFAT Munich

IFAT Munich was first launched in 1966 and takes place every two years in Munich.

www.dwa.de/ifat-en

IFAT Eurasia

IFAT Eurasia was first launched in 2015 and takes place every two years in Istanbul.

www.dwa.de/ifat-eurasia

To find out more about international DWA-activities and offers, please go to: en.dwa.de

or reach out to Roland Knitschky at knitschky@dwa.de



in order to support the international engineers of tomorrow, DWA implemented the UNIVERSITY CHALLENGES and WATER SKILLS, Lastly, DWA helps represent the German water sector on behalf of the Federal Ministry for Economic Affairs and Energy at the German Pavilion.

IE expo China

IFAT expo China was first launched in 2004 and takes place every year in Shanghai. Two other expos are held in Guangzhou and Chengdu.

www.dwa.de/ie-expo

In 2018 with 3,305 exhibitors spread across 18 halls and the outdoor area, the IFAT Munich was fully booked despite the increase in space and brought together 142,472 visitors and decision makers from 162 countries on the exhibition grounds

IFAT India

IFAT India was first launched in 2013 and takes place every year in Mumbai.

www.dwa.de/ifat-india

















WATER SKILLS

The established concept of the DWA competition of professions, which takes place at IFAT Munich since 2010, was expanded and now takes place with a new name on an international level. With the launch of the competition at IFAT India in 2017 and its new name "WATER SKILLS", DWA began to bring its competitions to international platforms, thus promoting the profession of the specialist in water technology worldwide.

It is important to promote the trade "wastewater technology expert", in order to win and inspire young and clever potential staff.

The day-to-day activities of sewage experts are not very familiar to the general public. Safety and health protection are of high importance and DWA strongly supports the strict follow-up of safety and health procedures.

Since 2010, the WATER SKILLS GERMANY, the competition for trainees of the vocational training Sewage Engineering Technician takes place. DWA determines the most talented participants to then prove their skills at WorldSkills, which are next going to take place 2019 in Kazan, August 22 - 27. Patron is the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety.







For further information or to stay updated on upcoming dates, please visit www.dwa.de/water-skills-en or reach out to Ann-Kathrin Bräunig

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WORLDSKILLS - DEMONSTRATION SKILL "WATER TECHNOLOGY"

Improving the World with the Power of Skills

WorldSkills showcase the value of skills and increases the recognition of skilled professionals worldwide. The competition is held every other year and is the biggest vocational education and skills excellence event in the world, reflecting the global industry.

The competitors represent the best of their peers and are selected from skill competitions in WorldSkills member countries and regions. They are all under the age of 23 years (with small exceptions). They demonstrate technical abilities, both individually and collectively, to execute specific tasks for which they study and/or perform in their workplace. During the demonstration skill Water Technology, the daily work of a sewage engineering technician and water supply engineering technician is being demonstrated.

Each competitor has its own "water office", in which the following tasks need to be completed:

- process control work and documentation
- sampling and lab work
- workshop and outdoor work

Supported by: FESTO · ADIRO · WATER SKILLS GERMANY



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UNIVERSITY CHALLENGE

It is important to support the international engineers of tomorrow. Qualified youngsters should be connected with experts and decision-makers of relevant companies.

To help support this, DWA offers the UNIVERSITY CHALLENGES. During the competition, young talents have the chance to compete against students from other universities and apply their skills. The challenges take place globally at various IFAT trade fairs.

It was first executed in 2015 in Shanghai (China) and Mumbai (India), shortly followed by Munich (Germany) in 2016. In 2017, the first UNIVERSITY CHALLENGE took place in IFAT Eurasia and Africa. Since that time students teams from all over the world compete every 2 years for the WORLD UNIVERSITY CHALLENGE at IFAT Munich. Patron is the German Academic Exchange Service (DAAD).



For further information or to stay updated on upcoming dates, please visit **www.dwa.de/university-challenge** or reach out to **Himani Karjala**

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THE GERMAN WATER SECTOR - LEARN FROM EXPERIENCE

The German water sector is very progressive and its current state of research and learnings can well be adapted to the water industry worldwide. In order to help experts to get a full understanding of its setup, with all its complexity in structure, laws, facts and figures, stakeholders, as well as the administrative setup, DWA implemented the seminar "Introduction to the German Water Sector - Learn from Experience", which takes place twice per year. Next to the overall information on the German water sector, the seminar in summer focusses on river basin management, whereas the winter seminar deals with water supply and wastewater management in particular. To help the lecturers touch-upon practice-oriented topics, attendees can provide a project factsheet prior to the seminar. The presentation language is English.

For further information or to stay updated on upcoming dates, please visit **www.dwa.de/gws** or reach out to **Himani Karjala**

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DIGITAL LEARNING

Brainvoo

- Pumps and pumping stations
 Self-learning material with nearly 200 questions and answers on
 pumps and pumping stations, the
 maintainance of pumps, as well as
 health and safety in pumping stations
- Fit in Wastewater Technology?
 Self-learning material with more than 400 questions dealing with municipal sewerage, private sewerage, sewerage systems, wastewater treatment plants, biological wastewater treatment, mechanical wastewater treatment, sludge treatment, small sewage works and water bodies

en.dwa.de/en/dwalearning-apps.html

E-Learning

Self-learning is an important addition to the DWA educational offers. Therefore, check out the 6 training modules à 30 hours on the work plattform UNITRACC. All classes provide self-regulated learning with tutorial support for a period of four weeks time.

Example: Utility Tunnelling

The seminar deals with the most important techniques of trenchless technology by focusing on microtunnelling and pipe jacking. Furthermore, a configuration of jacking stations for different geological situations will be developed.

Other topics are the construction and creation of starting and target shafts by particularly taken into account groundwater problems as well as the selection corrosion aspects.

en.dwa.de/en/E-Learning.html

For further information please reach out to **Roland Knitschky** phone: +49 2242 872-214 · fax: +49 2242 872-135 · email: knitschky@dwa.de



DWA PUBLICATIONS

Set of Rules

DWA experts formulate new findings as well as proven technical procedures in standards and guidelines and thus make an important contribution to the protection of the environment and material goods. They transform legal requirements into practical recommendations for action. Since 1956, more than 16,000 pages of knowledge wer written down.

Journals, software, books

The journals KA - Korrespondenz Abwasser and KW - Korrespondenz Wasserwirtschaft, software for the application of technical rules, specialist books, summary reports, dictionaries and brochures provide target-group-specific information and support engineers, operating staff and municipalities in their everyday work.

Russian

DWA offers products in the following languages:

Arabic Italian

Bulgarian Polish Chinese Portuguese/

Brazilian Croatian

Romanian Czech

English Serbian French

Spanish German

Turkish Hungarian



DWA Set of Rules

English Version on CD-ROM

The technical standards combined on this CD-ROM present technical solutions with the background of German legislation. Taking into account the respective national laws, the DWA Set of Rules offers the user operating abroad comprehensive information on and approaches to solutions which can be applied to local conditions according to local circumstances.

English translations of significant publications of the DWA Set of Rules, 49 DWA Standards and Guidelines, 4 DWA Topics and various brochures in pdf format



298,00 €/238,40 €*

April 2018 ISBN 978-3-88721-632-0

Update (only for customers of the April 2016 version) 129,00 €/103,20 €*

The prices include the VAT plus shipping. Prices are subject to alteration and no responsibility is accepted for errors.

* Reduced Price for DWA Corporate Members.

For further information **or to place an order, please visit www.dwa.de/shop** or reach out to the **customer service**.



DWA Topics

Non-Potable Water Reuse – Development, Technologies and International Framework for Agricultural, Urban and Industrial Uses

The report provides an overview regarding relevant regulations and guidelines of water reuse, continues to describe the various aspects of risk management involved in water reuse, and also highlights the various technologies that are applied for water reuse. It does not provide numerical recommendations, which must be derived from site and country specific conditions and assessments.

The report is structured into ten chapters, covering the relevance of water reuse, regulations and compliance, development of water reuse projects, health risk management, socio-cultural aspects and public perception, ecological and agricultural aspects, energy requirements, economics, as well as an assessment matrix regarding various treatment processes. An additional compilation of case studies provides valuable experiences from full-scale water reuse projects in the Middle East, Africa, China, Central and South America, and Europe.



June 2019, 99 pages, A4, ISBN Print: 978-3-88721-834-8 ISBN E-Book: 978-3-88721-835-5

The prices include the VAT plus shipping. Prices are subject to alteration and no responsibility is accepted for errors.

* 20 % discount for DWA Corporate members

For further information **or to place an order, please visit www.dwa.de/shop** or reach out to the **customer service**.



DWA Topics

Design of wastewater treatment plants in hot and cold climates

The design of wastewater treatment plants under deviating wastewater and climatic conditions in other countries requires an internationally applicable approach. Target regions of this topic are hot and cold climates, frequently comprising developing, emerging and transition economies. Apart from the extension and adaptation of the design specifications to the special conditions in an international context, the design algorithms in this topic were all converted for the treatment target of carbon reduction to the chemical oxygen uptake (COD) which, among others, allows the balancing of sludge formation. Additionally, practicable model computations were compiled for all processes.



58.00 €/46.40 €*

Corrected version May 2019, 304 pages, A4 ISBN Print: 978-3-88721-615-3 ISBN E-Book: 978-3-88721-616-0

The prices include the VAT plus shipping. Prices are subject to alteration and no responsibility is accepted for errors.

Reduced Price for DWA Corporate Members.

For further information **or to place an order, please visit www.dwa.de/shop** or reach out to the **customer service**.



Standard DWA-A 161E

Static Calculation of Jacking Pipes

This Standard applies to the structural calculation of pipes with a circular cross-section which are installed according to the pipe jacking method in a straight or bending direction in non-cohesive or cohesive soils (loose soils as per DIN 18319) with static force in accordance with Standard DWA-A 125/DVGW GW 304. This Standard can be applied analogously to pipes that are driven with dynamic energy. Unless otherwise mentioned in this Standard, it also applies to pipe jacking using related methods with the appropriate adjustments.

The content of the Standard DWA-A 161 and the DVGW code of practice GW 312 is identical.

Software Statics Expert Pipe Jackin available.



83.00 €/66.40 €*

March 2014, corrected version October 2017, 99 pages, A4 ISBN 978-3-88721-245-2

The prices include the VAT plus shipping. Prices are subject to alteration and no responsibility is accepted for errors.

* Reduced Price for DWA Corporate Members.

For further information or to place an order, please visit www.dwa.de/shop or reach out to the customer service.



Standard DWA-A 216E

Energy Check and Energy Analysis – Instruments to Optimise the Energy Usage of Wastewater Systems

The present Standard introduces the energy check and energy analysis as instruments for energy optimisation of wastewater systems and formulates requirements for their execution. The scope of application of this Standard covers wastewater treatment plants and wastewater collecting. Analogue to pumping stations in wastewater treatment plants, pumping stations in the field of wastewater collecting are open to an energetic assessment by means of the presented approaches.

This Standard provides planners, operators and competent authorities with a practice-oriented and scientifically sound working aid for the procedural and energetic optimisation of wastewater systems and a consistent methodology.



80,00 €/64,00 €*

December 2015, 64 pages, A4 ISBN Print: 978-3-88721-570-5 ISBN E-Book: 978-3-88721-571-2

The prices include the VAT plus shipping. Prices are subject to alteration and no responsibility is accepted for errors.

 Reduced Price for DWA Corporate Members.

For further information **or to place an order, please visit www.dwa.de/shop** or reach out to the **customer service**.



Software

Hydraulics Expert Professional – Hydraulic Calculations of Sewer and Special Structures according to DWA-A 110, DWA-A 111, DWA-A 112

The consequent application of the dimensioning principles laid down in the German standards DWA-A 110, -A 111 and -A 112, aid the production of operationally suitable systems and, with this, the minimisation of subsequent costs. In this regard the DWA software Hydraulics Expert is your best professional assistance.



750.00 €/600.00 €*

Your benefits at a glance:

- I rule-compliant results
- technically up-to-date (Windows 7)
- safety by automatic field checks
- secure and efficient calculation
- detailed reports

Version Professional

The prices include the VAT.

Prices are subject to alteration
and no responsibility is accepted for errors.

* Reduced Price for DWA Corporate Members.

For further information or to place an order, please visit www.dwa.de/shop or reach out to the customer service.



Make it Easy to Learn - Use your Hands

Wastewater-Water-Waste-Biogas-Safety

Technical processes – in the truest sense of the word – are comprehensible with our training aids!

Specially designed magnetic cards show the stations of wastewater treatment, the stations of water, waste and energy, the probiogas production or the protection of const-sites





The eye-catchingly depicted cards motivate the trainees to reproduce or simulate techniques and operational arrangements on whiteboard or flip chart. It is hands-on learning and learning by trying out and thus a more successful alternative to the purely passing on of information.

For further information **or to place an order, please visit www.dwa.de/shop** or reach out to the **customer service**.



210,00 €*

128.00 €*

| Modular | Wastewa | ter Training | System |
|---------|---------|--------------|--------|
| | | | |

labelled in German/English.

Road Site Safety Training Cards

like car, signs, traffic cones, ...

or reach out to the customer service

Plastic case with 106 magnets (about 50 mm)

| Plastic case with 66 magnetic cards, 63 flashcards (according to the magnetic cards with additional | |
|---|-----------|
| information) 1 USB stick with approx. | |
| 130 questions (ppt) on wastewater engineering | |
| Magnetic cards, size A6 (105 x 148 mm) | 438,00 €* |
| available in English and Arabic | |
| Learning cards | |
| size A7 (74 x 105 mm), | |
| 63 flashcards cards (delivery period 4 weeks) | 46,50 €* |
| available in English, Spanish and Arabic | |
| Classroomset (learning cards 10 x) | |
| + "Fit in Wastewater Technology" (only available in English) (delivery period 4 weeks) available in Englisch and Arabic | 401,50 €* |
| | 401,50 € |
| Trainers handbook "Fit in Wastewater Technology" available in English and Russian | 29.50 €* |
| Environment Training Cards | 27,000 |
| Water-Waste-Energy | |
| Plastic case with 62 magnetic cards | |
| Magnetic cards, size A6 (105 x 148 mm) | 128,00 €* |
| Biogas Training Cards | |
| Plastic case with 84 round magnets with 14 different | |
| illustrations and 35 magnetic cards A6 (105 x 148 mm) | |
| | |

All prices incl. VAT plus shipping costs. Subject to price changes and errors. * 20 % discount for corporate DWA members

For further information or to place an order, please visit www.dwa.de/shop



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www.dwa.de/waternews

German Association for Water, Wastewater and Waste

Deutsche Vereinigung für Wasserwirtschaft, Abwasser und Abfall e. V. (DWA)

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