# **Valve World Expo** & Conference 2024





## Where Valve Innovators Meet

December 3 - 5 2024 | Messe Düsseldorf, Germany

Discover, Innovate, and Shape the Future at the 13th International Valve World Expo & Conference

# **ADVANCE CONFERENCE PROGRAM**















## Valve World Expo & Conference 2024

## Word from the chairman:

### Bruno Martin, Technip Energies

Join us at the 13<sup>th</sup> International Valve World Expo & Conference, December 3-5, 2024 in Düsseldorf, where the most experienced professionals in our industry will shape the future of flow control.

In a constantly changing industry landscape, we must adapt, innovate, and collaborate to stay competitive. The Valve World Conference is the premier platform for manufacturers, suppliers, maintenance experts, and end users to engage with thought leaders, share knowledge, and discover transformative practices.

This year's focus: energy transition, digitalisation, and standardisation. Be inspired by keynote speakers, challenge yourself in panel discussions, and gain insights through expertled workshops. Leave with practical knowledge, meaningful connections, and fresh ideas to implement in your work.

Experience the latest valve technology firsthand, work with experts to solve your challenges, and build lasting relationships with leaders and decision-makers from around the world. We also support the next generation of valve professionals with a dedicated track for young engineers.



"At Valve World 2024, we're excited to give attendees a firsthand look at the most advanced testing equipment in action. Seeing these cutting-edge tools and techniques will spark ideas and conversations that drive our industry forward." - Bruno Martin, Chairman

## VALVE WORLD CONFERENCE 2024 STEERING COMMITTEE

The Steering Committee plays a crucial role in shaping the conference agenda and ensuring its success.

- Bruno Martin, Technip Energies, Chairman
- · David M. Anderson, Score
- Mike Austin, University College London
- · Sieuwert Blommaert, Ineos
- Aylin Çelik, Messe Düsseldorf
- Paul Clements, BP
- · Carlo de Bernardi, ConocoPhillips
- · Claire Dwyer, Fluor Enterprises Inc.
- Jun Hu, Hefei General Machinery Research Institute
- Tomoharu Ishii, KITZ Corporation
- Bader Al-Jarallah, Saudi Aramco
- · Ville Kahkonen, Valmet
- · Gobind Khiani, Enbridge Inc
- Ayo Kilani, Nigeria LNG Limited
- Ron Merrick, formerly Fluor Enterprises Inc.
- Thijs van Munster, MRC Global
- Carl J.P. Neeskens, Ineos
- · Masayuki Ono, JGC Corporation
- · Bronson Pate, MagDrive Technologies
- · Laurent Pefferkorn, Velan
- Muktiadi Rahardjo, Shell Nederland Raffinaderij BV
- · Knut Riegel, Emerson
- · Rodney Roth, PILLAR America
- · Alberto Seveso, Neway
- · Marc Simoëns, Dow Benelux
- · Tony Smart, Neway
- Anthony Vangasse, Rotork
- · Thomas Wagner, Framatome
- · Wojciech Zmudzinski, bp America Inc.

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### **General information:**



### **VALVE WORLD DINNER & PARTY**

Get ready for the ultimate highlight of the Valve World Expo & Conference – the unforgettable dinner and party on Wednesday, December 4th. After an eventful day at the conference, unwind, socialise, and let your hair down at this evening of pure enjoyment and fun. Strengthen existing relationships, create new connections, and explore exciting business opportunities in a relaxed setting. With a fabulous dinner and a fun-filled party, this is an evening you won't want to miss.

### **COFFEE BREAKS AND LUNCHES**

Refresh, refuel, and discover more than just coffee and lunch during the breaks at Valve World Expo & Conference. These intervals are the perfect opportunity to explore the expo floor, uncover the latest innovations, and engage in informal discussions with presenters, session chairs, and moderators. Gain valuable insights, expand your knowledge, and network with industry professionals - all while recharging your batteries.



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### **EXPO FORUM**

An extension of the Valve World Conference, featuring several short presentations on the exhibition floor given by valve manufacturers.

The Valve World Expo Forum is an opportunity to sample the conference atmosphere in the exhibition hall, where you can gather information and network with others. It is open to all and there is no need to register for the Valve World Expo Forum. Feel free to join and listen to the presentations.

### **TRAVELING TO VALVE WORLD 2024**

With Düsseldorf's unrivaled connectivity, getting to Valve World 2024 is a breeze. Choose from over 180 global destinations via more than 80 airlines or take advantage of the city's proximity to the central railway station. Visit http://www.valveworldexpo.com for comprehensive travel information. For personalized assistance with travel arrangements or hotel bookings, contact Düsseldorf Marketing & Tourism at +49 (0) 211 17 202 867 or email info@duesseldorf-tourismus.de.



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#### CONTACT THE ORGANISERS

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Visit https://valve-world-conference.com for more event details.

exhibiting companies

expert speakers

attendees

## Valve World Expo & Conference 2024

### **DAY ONE - 3 DECEMBER > ENERGY TRANSITIONS**

MORNING PROGRAM	KEYNOTE					
9:15 - 9:30	OPENING ADDRESS CHAIRMAN, Bruno Martin, Technip Energies					
9:30 - 10:15	KEYNOTE 1: Valve preservation challenges, Roberto Muscarà / Salam Alsowaidan, Saudi Aramco					
10:15 - 10:45	COFFEE BREAK					
10.45 - 11.15	KEYNOTE 2: The move toward "green" valves for the oil & gas industries, with a certified & low carbon footprint, Alfred Kruijer, Shell					
11.15 - 12.00	KEYNOTE 3: API specification for valves for hydrogen gas service, Jonathan Geleijns, SLB					
12.00 - 13.30	LUNCH BREAK					
AFTERNOON PROGRAM	ROOM 14	ROOM 15	ROOM 16			
13.30 - 15.10	Technical session / INNOVATIONS	Technical session / MATERIALS	Workshop / FUTURE			
	Moderator: Dave Anderson, Score	Moderator: Ron Merrick, Fluor	Moderator: Gobind Khiani, Enbridge Inc			
13:30 - 13:55	The technical development of valves for liquefied hydrogen, <i>Mitsuru Hosokawa, KITZ Corporation</i>	Hydrogen effects on polymeric materials, Simona Macchi, Effeciemme Componenti srl	Valves for future energy – Riding the hydrogen wave, Sumith S, Venkatesh NR, L&T Valves Limited			
13:55 - 14:20	Valves for CCUS applications: addressing challenges of CO <sub>2</sub> service with costeffective solutions, <i>Marco Sparisci, DAFRAM S.p.A.</i>	Optimizing protection: Coating selection for molten salt valves using FactSage™, Fadila Khelfaoui, Velan Inc	Next-gen pipeline maintenance: The move to pig ball valve technology, Zahra Farrokhi / Neşe Yayla, Batu Valve Türkiye			
14:20 - 14:45	The new control valve era towards the energy transition. Advantages of the DDV against the traditional control valves, <i>Leire Colomo Zulaika</i> , <i>Ampo Poyam Valves</i>	Cryogenic paek polymers for LNG and LH2, Christian Salvatori, Victrex Europa	CheFEM 3: Al-Enhanced computer simulated rapid gas decompression damage of seals, Sijmon van der Wal, Composite Analytica			
14:45-15:10	Automated detection & minimisation of flaring & venting, <i>Dave Anderson, Score</i>	Empowering net-zero ambitions with precision sealing & material solutions, <i>Hirotaka Sato</i> , <i>H</i> <sub>2</sub> <i>Application Engineer, Omniseal Solutions</i>				
15.10 - 15.30	COFFEE BREAK					
15:30 - 16:45	Technical session / DESIGN	Technical session / EMISSIONS	Workshop / HYDROGEN			
	Moderator: Alberto Seveso, Neway	Moderator: Muktiadi Rahardjo, Shell	Moderator: Knut Riegel, Emerson			
15:30 - 15:55	Isolation valve designs for electrolyser applications, <i>Rene van der Gaag, Emerson</i>	Comparative analysis of packing materials and geometries in high-pressure needle valves for hydrogen applications at 700 Bar, Enric Palau Forte, Redfluid & Universitat Rovira i Virgili	Fugitive emissions of a valve with gaseous hydrogen: tests on seals and tests on valve, Emmanuel Sauger, Cetim  Getting ready for liquid hydrogen, Emiel Lechevallier, Ventil Test Equipment  Fugitive emission sealing of hydrogen for flanges and valve stems, Ralf Vogel, European Sealing Association			
15:55 - 16:20	Cryogenic high performance valve for hydrogen aircraft, Nozomi Matsumura, KITZ Corporation	Magnetic applications for severe services, <i>Nick</i> Runyon, MagDrive Technologies				
16:20 - 16:45	Challenges in torque reduction and lifecycle time increase for quarter turn trunnion ball valve, <i>Luca Paggi, Flowserve</i>	Emissions Low E Valves – 20 years in the making, Paul Heald, Bonney Forge / Rodney Roth, PILLAR America				
16:45	NETWORKING ON THE EXHIBITION FLO	OD.	ı			

### **DAY TWO - 4 DECEMBER > DIGITALISATION**

MORNING PROGRAM	KEYNOTE		
9:10 - 9:15	OPENING ADDRESS CHAIRMAN, Recap 1st day and outlook 2nd day, Bruno Martin, Technip Energies		
9:15 - 9:45	KEYNOTE 1: Why RBI is a critical element of your digitalisation efforts, Dave Anderson, Score		
9:45 - 10.15	KEYNOTE 2: Global fugitive emissions reductions with a total cost of ownership (TCO) view, Bronson Pate, MagDrive Technologies		
10.15- 10:45	COFFEE BREAK		
10.45 - 12.00	PANEL DISCUSSION  The advancements, challenges, and future prospects in the digitalization of valves. How digital technologies are transforming valve design, manufacturing, operation, maintenance, and overall efficiency.  Moderator: Ron Merrick, Fluor Panellists: Mike Austin (UCL University College London), David Heiny (SimScale), Michael Howells (Emerson), Scott Moreland (Quadax Inc.), Wojciech Zmudzinski (bp America Inc.)	Young Engineer Program (10:30-12:00) Introduction to valves Moderator: David Anderson, Score  After the presentation the participants will be divided into groups and visit stands on the Expo floor. Each group will be led by an experienced valve specialist.	
12.00 - 13.30	LUNCH BREAK		

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### **DAY TWO - 4 DECEMBER > DIGITALISATION**

AFTERNOON PROGRAM	ROOM 14	ROOM 15	ROOM 16	
13.30 - 15.10	Technical session / MAINTENANCE	Technical session / ADDITIVE MANUFACTURING	Young Engineer Program (13:30-14:45) Interactive discussion	
	Moderator: Ayo Kilani, Nigeria LNG Limite	Moderator: Mohanned Tarabzouni, Saudi Aramco	Moderator: Muktiadi Rahardjo, Shell	
13:30 - 13:55	Combining process anomaly detection with continuous valve diagnostics, <i>Jules Oudmans</i> , <i>UReason / Perry Jaspers</i> , <i>Yara International</i>	Zirconium 705C valve development by laser powder bed fusion, <i>Alexandre</i> <i>Bois-Brochu, CMQ – Centre de métallurgie</i> <i>du Québec</i>	- Expo visit highlights - Case studies / debates  Create teams and conduct debates on current challenges and future trends in the valve industry. This engaging activity will encourage critical thinking, problemsolving and the exchange of ideas among participants.	
13:55 - 14:20	ENKI: Remote planning and management system of plant turnaround with focus on industrial valves maintenance, <i>Tiago Remedio, Axpr Valve Science</i>	Challenges in the development of new valve designs with additive manufacturing, Steve Freitas, IMI CCI		
14:20 - 14:45	Plantweb Insight™ Valve Health Application - A Valve Reliability Suite™ solution, <i>Andrea Tarantino, Emerson</i>	Optimizing titanium valve production: E-PBF for small batches, reduced inven- tory, and fast delivery, <i>Simon Blomé, AIM</i> <i>Sweden AB</i>		
14:45 - 15:00	COFFEE BREAK			
15:00 - 16:40	Technical session / DESIGN / NEW TECHNOLOGY	Technical session / MATERIALS	Live demonstrations	
	Moderator: Gobind Khiani, Enbridge Inc.	Moderator: Claire Dwyer, Fluor	Moderator: Tony Smart, Neway	
15:00 - 15:25	Data-driven computational fluid dynamics models and their applications, <i>Justin Bernard, Bray International</i>	The digital approach to better castings, Mike Austin, UCL University College London / Kevin Smith, Digital Manufacturing Technologies Ltd.	Live demo 1 (15:00-15:30): A practical guide to helium and forming gas for fugitive emission testing, <i>Emiel Lechevallier</i> , <i>Ventil</i>	
15:25 - 15:50	Hole chamfer effects on cavitation and pressure dissipation in perforated plates, Stefano Malavasi, Politecnico di Milano University	Evolution thanks to technology, Klaus Schiebel and Michael Piller, SCHIEBEL Antriebstechnik	Live demo 2 (15:30-16:00): Optimize valve health: Practical techniques for data- enhanced monitoring, <i>Nicolas Spiegl /</i> Florian Zurfluh, Ureason	
15:50 - 16:15	Cavitation risk assessment in valves - Method for predicting Incipient cavitation index and FL using single-phase CFD simulations, Praveen Kumar Ramachandran, Centre for Computational Technologies	Embracing digital connectivity for proactive maintenance, <i>Dave Godfrey,</i> Rotork	Live demo 3 (16:00 - 16:30) Smart valve monitoring solutions with SIPLUG-C, <i>Ulrich Diehl, Framatome</i>	
16:15 - 16:40	Digital platform for valve manufacturers: 3D design, AR, customization, and machine learning for predicting control valve flow coefficient (cv), Rohit Chavan, Centre For Computational Technology	Hybrid seat design enabling high-g shock resistance floating ball valves, Jill Lawton, Flowserve	Live demo 4 (16:30 - 17:00): A complete digital foundry, Mike Austin, UCL University College London / Kevin Smith, Digital Manufacturing Technologies Ltd.	
17.00	NETWORKING ON THE EXHIBITION FLOOR			

### **DAY THREE - 5 DECEMBER > STANDARDISATION**

MORNING PROGRAM	Room 14	Room 15	Room 16	
9:30 - 10:45	Technical session / SEALING	Technical session /	Technical session / ACTUATION	
	Moderator: Sieuwert Blommaert, Ineos	FUGITIVE EMISSIONS Moderator: Tony Smart, Neway	Moderator: Anthony Vangasse, Rotork	
9:30 - 9:55	Impact of adhesives on functional reliability of TOSV, Michael Balcerek, IDT Industrie- und Dichtungstechnik	2024 Updates for all API Fugitive Emission Test Standards, <i>Simon Weiler, amtec North</i> <i>America, Inc.</i>	API 6DX: Overview and implementation, Girish Dalbhanjan, Emerson	
9:55 - 10:20	Application of graphite seals in the field of valves, Tony (Ming) Sun, Neway Valve	Sustainable fugitive emission testing, Emiel Lechevallier, Ventil Test Equipment	ESG reconciliation and pipeline electrification utilizing engineered gear operators, <i>Tim Chicoine, WedgeRock Engineered Solutions</i>	
10:20 - 10:45	Next-generation valve sealing solutions: Evolution of high-performance PFAS-free gland packing in response to market trends and environmental regulations, <i>Masashi Tachibana, PILLAR</i>	The importance of packing installation in maintaining valve reliability, <i>Hans Dekker, A.W. Chesterton Co.</i>	The importance of electric actuation in Carbon Capture and Storage, <i>Daryl Stothard, Rotork</i>	
10:45 - 11:15	COFFEE BREAK			
11:15 - 12:55	Technical session / COATING	Technical session / DESIGN	Technical session / TESTING	
	Moderator: Wojciech Zmudzinski, bp America Inc.	Moderator: Bronson Pate, MagDrive Technologies	Moderator: Thomas Wagner, Framatome	
11:15 - 11:40	Low temperature surface hardened stainless steels in pumps and valve applications, Susanne Gerritsen, Bodycote Specialist Technologies	Anti-cavitation butterfly valve, <i>Hiroki</i> Okuda, KITZ Corporation	ISO 23632: Design validation testing to enhance safety, reliability, and environmental impact, <i>Luc Vernhes, Velan / Colin Zegers, ITIS</i>	
11:40 - 12:05	Sustainable surface hardening solutions for valves: A comparative analysis of expanite vs. hard chroming, Per Wennersten, Ramén Valves AB / Holger Selg, Expanite GmbH	Pushing the limits of segmented ball valves into severe energy transition applications, <i>Mathew Varghese / Prasad Kumar, Bray International</i>	Full explosion proof ball valves innovation engineering for critical service, <i>Zhang Guohong, FR Valve</i>	
12:05-12:30	Advanced surface modifications: Extending the life of HPAL valves, Evelyn Ng, Callidus Process Solutions	Design valves for hydrogen fluoride (HF) alkylation service, <i>Paul Heald, Bonney</i> Forge	Overcoming the challenges faced in valve gas testing, Sugumar Sampath, L&T Valves Limited	
12:30 - 12:55	Low-friction, anti-galling, coke-repellent, and sulfidation-resistant coating to mitigate fouling in resid upgrading environments, <i>Luc Vernhes / Fadila Khelfaoui, Velan</i>	Standardization of valve production datasheet (PDS), Owen Gu, Neway Valve	Evaluating lubricated plug valve sealant compatibility in hydrogen gas service, Ochuko Ifie, Flowserve	
12:55-13:00	CONFERENCE CONCLUSION			

## Valve World Expo & Conference 2024

# SHAPING THE FUTURE OF VALVES: INNOVATE, DIGITALISE, STANDARDISE



### **THREE THEMES FOR 2024**

- Energy transitions: Discover innovative valve solutions driving sustainability, including lowemission technologies and renewable energy applications.
- **2. Digitalisation:** Explore the power of automation, data intelligence, and predictive maintenance to revolutionize the valve industry.
- **3. Standardisation:** Stay ahead of new regulations and end-user requirements shaping valve selection, testing, and performance.



### **LIVE DEMONSTRATIONS**

- Witness **cutting-edge valve technologies** in action and explore their real-world applications on 4 December.
- Engage with industry experts and gain valuable insights into the **latest innovations**.
- Acquire hands-on knowledge and discover new solutions tailored to your specific challenges.
- Immerse yourself in interactive sessions and shape the future of valve technology.



### YOUNG ENGINEER PROGRAM

- Participate in tailored sessions, mentorship, and networking events designed to empower the future leaders of our industry on 4 December.
- Gain a comprehensive overview of valve industry trends, advancements, and your pivotal role within the industry.
- Receive career development support, guidance on setting goals, and advice on accessing further education or certifications.

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# Sponsors at Valve World 2024

### EMERSON

As a global leader in automation technology, Emerson offers intelligent field devices, control systems, and industrial software with a clear purpose: driving innovation that makes the world healthier, safer, smarter and more sustainable.

Participating as a dedicated sponsor at Valve World presents a valuable opportunity to collaborate with a global community of end users, EPCs, and technology providers. Together, we can address the diverse challenges facing the process industry, including diversification, digitalization, and decarbonization. At our stand #1C52, we will showcase the latest product innovations and services for valves, actuators, and regulators, with a strong emphasis on sustainable solutions and demanding chemicals applications. This event also allows us to highlight our ongoing investments in the

### KITZ

KITZ introduced their industry solutions to support our future society's Sustainable Development Goals (SDG) at Valve World

Visit our exhibition stand to learn how we have met the challenges of supporting H<sub>2</sub> stations and LNG processes, which are keywords for the future of clean energy infrastructure. We will also introduce our activities contributing to semiconductors and functional chemistry, which are industries that support the future, and inform visitors about a service that prevents valve problems by using predictive detection of valve malfunction.

We are looking forward to meeting and talking with you during the Valve World 2024 exhibition, and during our various presentations.

### **MRC Global**

At its core, MRC Global is a supply-chain solutions company. It connects the world's best PVF manufacturers with the world's best gas utility, energy and industrial companies. Headquartered in Houston, Texas, the company is the largest global distributor of pipe, valve and fittings (PVF) and related products and services to the energy and industrial industries, based on sales. MRC Global supplies these products and services, along with technical expertise, across each of the gas utility, downstream, industrial and energy transition, upstream production, and midstream pipeline sectors.

### WNEWAY

Neway is an international industrial valve manufacturer, committed to R&D, production and sale of industrial valves. Our products include gate, globe, check, ball, butterfly, nuclear, control, subsea, safety valves and well-head equipment, which are widely applied in oil & gas exploration and production, chemical, petrochemical, LNG, offshore, power, pipeline transmission and other fields.

With our own R&D center, forging and casting plants and production & assembling bases, Neway takes responsibility for manage our business in all process, which ensure our stable supply chain, strict quality control, competitive price and delivery time, etc.

Approximately 3500 employees in 9 countries strive to provide high quality products and excellent service to all customers worldwide.

### rotork

Rotork is a market-leading global provider of mission-critical intelligent flow control solutions. Customers rely on us for innovative, high-quality, and dependable solutions for managing the flow of liquids, gases, and powders. We help customers around the world to improve efficiency, reduce emissions, minimise their environmental impact and assure safety. Our product range includes electric, pneumatic, and hydraulic actuators, gearboxes, instruments, and valve accessories. We are a global company with local support, providing assured reliability for critical applications and environments. We are dedicated to "enabling a sustainable future" and are well-positioned to enable a low-carbon economy and to participate in the global energy transition.

### **YELAN**

They say the best inventions start with a sudden flash of illumination. That's exactly what happened when A.K. Velan first came up with the idea for a new steam trap a few months after he arrived in Canada in 1949 from Soviet-dominated Czechoslovakia. More than six decades later, that same innovative and entrepreneurial spirit continues to flourish in a company that has a proven portfolio of top-quality valves installed in industrial applications worldwide.

# **Valve World Conference**



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## **CONFERENCE REGISTRATION**

Join us at Valve World Expo & Conference 2024, the world's premiere global valve event, where industry leaders, innovators, and experts converge to shape the future of valve manufacturing, use and maintenance.

### **WHY ATTEND?**

- Engage in dynamic and interactive sessions focusing on practical, applicable knowledge and cuttingedge topics that will define the industry's future.
- Gain valuable insights from industry experts and expand your skill set through workshops and presentations.
- Network with professionals from across the globe, creating lasting connections and exploring new business opportunities.
- Experience the latest innovations and technologies showcased by leading valve manufacturers and suppliers at the Valve World Expo.

### **Conference Registration 3-Day Access (€995)**

- Participate in all conference sessions and workshops throughout the 3- day event
- Access online conference presentations (password-protected)
- Enjoy unlimited access to all areas of the Valve World Expo & Conference for three days





### **Conference Registration Single Day Access (€495)**

- Attend conference sessions and workshops on your chosen day
- Access online conference presentations (password-protected)
- Explore the Valve World Expo & Conference with unlimited access on your selected day

### Valve World Young Engineer Program (€95)

- Young Engineer Program is tailored to introduce the valve industry to young engineers and students
- Learn from experienced industry figures and interact with companies in the valve industry
- Informative valve lectures, live demos, networking sessions and mentorship



Don't miss this opportunity to be part of the world's largest gathering of valve professionals.

Register now and secure your place at Valve World Expo & Conference 2024!

For more information on registration, pricing, and event details, scan the QR codes or visit www.valve-world-conference.com.