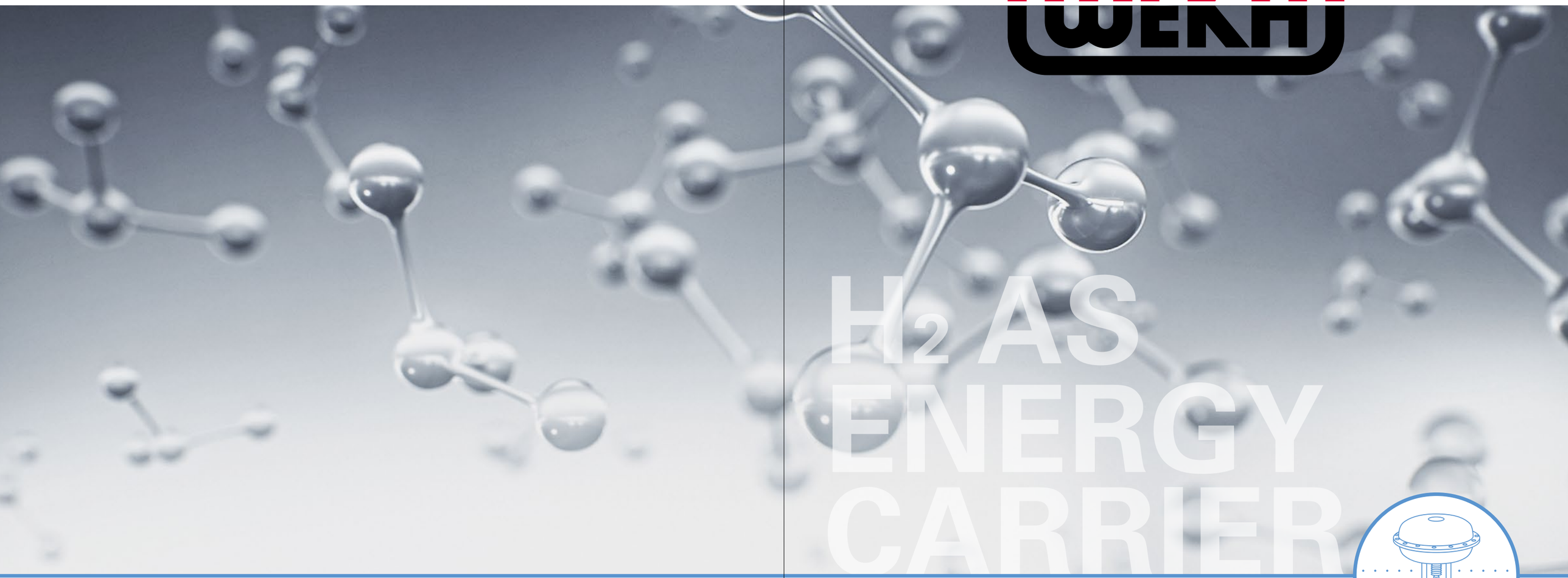
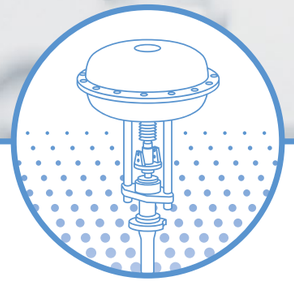


H_2 AS ENERGY CARRIER



WEKA FOR A SAFE AND RELIABLE ENERGY TRANSITION

VALVES AND CRYOGENIC COMPONENTS

HYDROGEN, THE ENERGY OF THE FUTURE!

CHANGE IN THE ENERGY INDUSTRY

The switch to eco-friendly technologies is a urgent global need that is evident in all industries and also in everyday life. This also applies to hydrogen. We are currently witnessing a positive shift from traditional hydrogens to new emission-free green fuels.

With decades of experience in industrial gas and hydrogen applications, WEKA AG is well equipped to help you make the leap to hydrogen.

OUR MISSION

Switzerland – the impressive beauty of nature. For us Swiss, it's not surprising that the environment also plays an essential role in our daily work. However, a look out of the window shows us that this has become an urgent need. Since the turn of the millenium, our glaciers have lost around 17 percent of their volume. The consequences of climate change are not only rapid and severe, they are also clearly visible in our country.

Hydrogen is thus not only another growth market for us, for us the energy transition is personal. That's why we at WEKA are doing everything we can to drive the energy of the future.

WHAT WEKA STANDS FOR

+ proven supplier for cryogenic equipment since the 1970s
+ swiss quality
+ sustainability, ECOVADIS rating gold
+ QM system based on ISO9001
+ highest reliability and lowest maintenance
+ highest product safety in operation
+ flexibility to provide solutions outside standard setups
+ solutions for harsh environmental and service conditions

H_2 – RENEWABLE – ENERGY

OUR EXPERTISE LIES IN THE DEVELOPMENT OF CUSTOMIZED COMPONENTS. WE DESIGN, PROTOTYPE AND MANUFACTURE VALVES AND CRYOGENIC COMPONENTS WITH SWISS PRECISION.

WEKA IN THE H_2 VALUE CHAIN

Regardless of which part of the H_2 value chain you are in, the WEKA product range offers a solution that is ideally suited to your application. We supply reliable components for cold and hot applications and various pressure levels up to 1000 bar. Our concept offers a high degree of flexibility in producing a valve tailored to the requirements of your hydrogen application.

H_2 VALUE CHAIN

TYPICAL APPLICATIONS

+ GH_2 liquefaction
+ LH_2 storage and withdrawal
+ LH_2 refueling
+ LH_2 transport by trailer or ship
+ GH_2 and LH_2 refueling station concepts
+ Fuel supply in space
+ Power-to-gas
+ Fuel cell and gas fuel systems for LH_2 for vehicles and ships

G = gaseous | L = liquid

INFRASTRUCTURE

HYDROGEN INFRASTRUCTURE APPLICATIONS

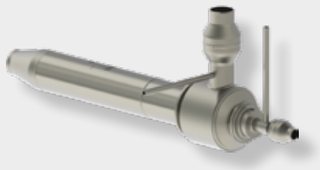
LIQUEFACTION
LH_2 / GH_2 control and shut-off valves, check valves and ejectors for liquefaction plants.

LH_2 TRANSPORT
Shut-off valves for mobile tank trailers for H_2-transportation

STORAGE AND DISTRIBUTION
LH_2 / GH_2 control and shut-off valves, check valves and couplings for gas storage and distribution systems.

FILLING STATIONS
High and low pressure control and shut-off valves for H_2 fuel station gas storage.

IDEAL FOR
- LIQUEFACTION
- STORAGE
- TRANSPORTATION
- FILLING



EJECTOR

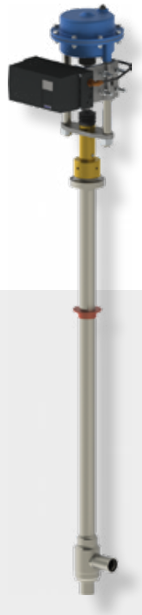
BELLOW VALVE

HIGH PRESSURE VALVE

HYDROGEN MARITIME APPLICATIONS

ONBOARD HYDROGEN GAS SUPPLY
LH_2 / GH_2 control and shut-off valves, check valves for onboard liquefaction and storage.Type approval for various classification societies.

IDEAL FOR
- LIQUEFACTION
- STORAGE
- TRANSPORTATION



BELLOW VALVE

MULTILINE COUPLING

COLD CHECK VALVE

ON- AND OFFSHORE

SPACE AND RESEARCH

HYDROGEN SPACE APPLICATIONS

HIGH PRESSURE VALVES

CUSTOMIZED CHECK VALVES

BELLOW VALVE

IDEAL FOR

- FUEL SUPPLY
- STORAGE
- DISTRIBUTION
- TEST BEDS

LIQUEFACTION

LH_2 / GH_2 control and shut-off valves, check valves and ejectors for liquefaction plants.

STORAGE AND DISTRIBUTION

LH_2 / GH_2 control and shut-off valves, check valves and couplings for gas storage and distribution systems.

HANDLING H_2 WITH SWISS PRECISION

To ensure that large-scale plants around the world function safely and smoothly, our employees take care of every last detail, pedantically, meticulously – typically Swiss.

Thus, we develop and produce components that make the handling of hydrogen safe and reliable. Our products meet all applicable standards and offer the corresponding certificates:

- + IECEx approval
- + ATEX approval
- + SIL Certification
- + DNV, ClassNK, etc.

SWISS PRECISION

WEKA – YOUR FIRST CHOICE FOR

- + cryogenic valves and components for service temperatures down to 1.8 K (-271 °C)
- + cryogenic control and shut-off valves, bellow sealed towards outer environment
- + sizes up to DN 250
- + pressures up to PN 1000
- + Johnston couplings, multi coaxial couplings, warm and cold check valves
- + customer specific development according to requirements
- + cryogenic valves and components with marketspecific certifications

WEKA SERVICE THAT SUITS YOU BEST

ENGINEERING QUALITY

WEKA's engineers and designers develop valves and components for cryogenics and level measurement technology that meet the highest requirements. For this purpose, we use comprehensive training as well as modern working tools and draw on years of experience with a high practical relevance.

In addition, we use the WEKA project management system, which optimally supports both smaller customer orders and complex developments.

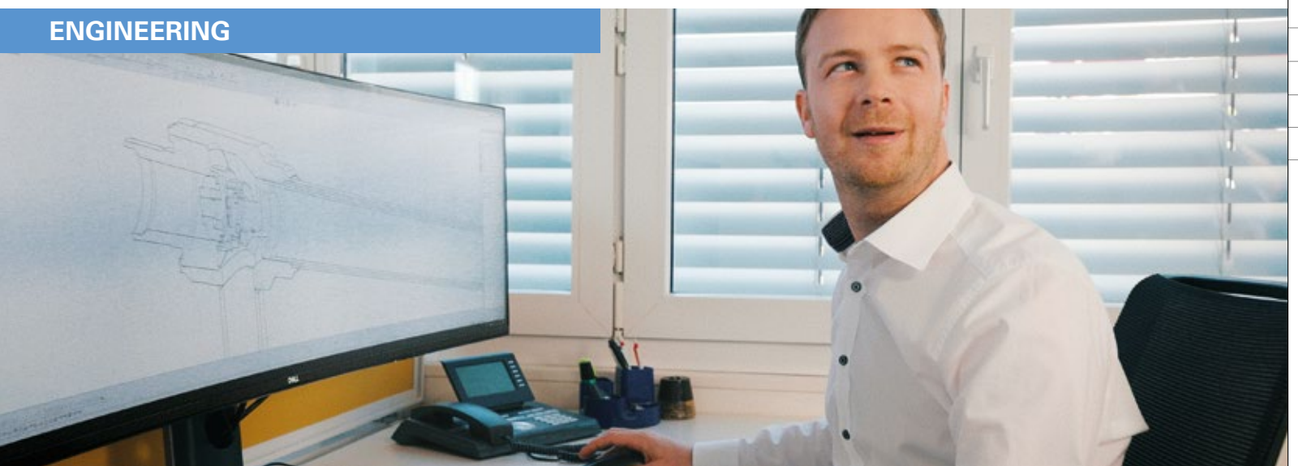
CUSTOMIZED DEVELOPMENT

One of our strengths is to develop individual solutions for specific customer requirements should there be no suitable product in our standard portfolio. Our customers appreciate a close cooperation to achieve an optimum result for their needs.

THE 9 KEY PRINCIPLES FOR WEKA SERVICE

+ speed
+ know-how
+ efficiency
+ accuracy
+ flexibility
+ transparency
+ accessiblity
+ personal responsibility
+ professionality

ENGINEERING



« SCIENTISTS DREAM ABOUT DOING GREAT THINGS. ENGINEERS DO THEM. »

ON-SITE SERVICE

SERVICE AND SUPPORT

Offering our customers all-round service is important to us. That is why our commitment goes far beyond the supply of our products. The know-how of our qualified engineers and technicians is available to our customers at all times.

SERVICES OFFERED

+ product training
+ remote support
+ service assignment
+ on-site support during installation
+ troubleshooting
+ and / or commissioning of our products

On request and by arrangement, we can be on site, in urgent cases even at short notice. Our many years of experience enable us to solve most problems on location without having to dismantle the components. This guarantees a faster resumption of operations and saves our clients valuable time and money.

For new customers, we are also happy to provide commissioning instruction. This is a valuable preventative measure, as the technology can become very complex, especially in the field of cryogenic applications.

If you also want to rely on the know-how of our employees, please contact us. We look forward to provide you with an individual service package.

APPLICATIONS

CONVEY, REGULATE, SHUT OFF, CONTROL, MEASURE, DISPLAY – **WEKA SOLUTIONS MAKE IT POSSIBLE.**

CHEMICAL, OIL AND GAS

CHEMICALS AND PHARMACEUTICALS

OIL AND GAS INDUSTRY / PETROCHEMICALS

INDUSTRY AND TRADE

EXPLOSION-PROOF PLANTS

MECHANICAL AND PLANT ENGINEERING

ENERGY, SPACE AND RESEARCH

HYDROGEN INFRASTRUCTURE

SPACE INFRASTRUCTURE

WITH STANDARD AND CUSTOMIZED SOLUTIONS, THE WEKA TECHNOLOGY IS AT HOME IN MANY APPLICATION AREAS.

LIQUIDS AND GASES

For more than 80 years, our range of cryogenic components and magnetic level indicators have been improving the operations of many important applications in a wide variety of industries.

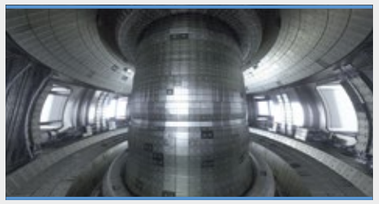
If your business is one of them, we look forward to hearing from you soon.

LIQUEFACTION OF GASES

GAS RECIRCULATION SYSTEMS

WATER MANAGEMENT

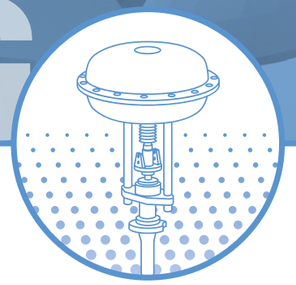
SHIPBUILDING



PLASMA AND FUSION RESEARCH

POWER GENERATION

PRODUCT CATALOG



WEKA
HYDROGEN COMPONENTS

VALVES AND CRYOGENIC COMPONENTS

WEKA

HYDROGEN COMPONENTS

For more information visit
weka-ag.ch

PRODUCT CATEGORY	CONTROL AND SHUT-OFF VALVES		CONTROL AND SHUT-OFF VALVES	
PRODUCT LINE	LOW PRESSURE CRYOGENIC VALVES		MEDIUM PRESSURE CRYOGENIC VALVES	
PRODUCT TYPE	COLD (TxV)	WARM (WxV)	COLD (TxV)	WARM (WxV)
PRODUCT NAME	BELLOW VALVES	BELLOW VALVES	BELLOW VALVES	BELLOW VALVES
DESIGN TEMPERATURE @ PN	1 … 323 K (-272 … +50°C)	243 … 323 K (-30 … +50°C)	1 … 338 K (-272 … +65°C)	243 … 338 K (-30 … +65°C)
DN (NOMINAL DIAMETER) / PN (PRESSURE NOMINAL)	DN2 … DN250 / PN6 DN2 … DN150 / PN25 DN2 … DN80 / PN40	DN2 … DN250 / PN6 DN2 … DN150 / PN25 DN2 … DN80 / PN40	DN2 … DN150 / PN80	DN2 … DN150 / PN80
FULFILLED CERTIFICATIONS AND REGULATIONS:				
CE	X	X	X	X
ASME (not u-stamp)	X	X	X	X
KGS	X			
ATEX (for mech. / el. comp.)	X	X	X	X
IECEX (for mech. / el. comp.)	X	X	X	X
KC (for el. components)	X	X	X	X
JIIS (for el. components)	X	X	X	X
CSA (for el. components)	X	X	X	X
FM (for el. components)	X	X	X	X
SIL	X	X		
Marine approval	X	X		

PRODUCT CATEGORY	CHECK VALVES		CONTROL AND SHUT-OFF VALVES	
PRODUCT LINE	COLD CHECK VALVE		MEDIUM PRESSURE VALVES	HIGH PRESSURE VALVES
PRODUCT TYPE	CCV	CCV-V	COLD + WARM	WARM
PRODUCT NAME	CCV	CCV-V (BYPASS BORE)	MPV	HPV
DESIGN TEMPERATURE @ PN	1 … 323 K (-272 … +50°C)	1 … 323 K (-272 … +50°C)	1 … 323 K (-272 … +50°C)	243 … 323 K (-30 … +50°C)
DN (NOMINAL DIAMETER) / PN (PRESSURE NOMINAL)	DN6…200 / PN25 DN6…200 / PN40	DN6…200 / PN25 DN6…200 / PN40	DN6, DN15, DN25 / PN280 DN6, DN15, DN25 / PN420	DN6, DN15, DN25 / PN640 (-30 °C…+50 °C)
FULFILLED CERTIFICATIONS AND REGULATIONS:				
CE	X	X	X	X
ASME (not u-stamp)	X	X	X	X
KGS				
ATEX (for mech. / el. comp.)	X	X	X	X
IECEX (for mech. / el. comp.)				
KC (for el. components)			X	X
JIIS (for el. components)			X	X
CSA (for el. components)			X	X
FM (for el. components)			X	X
SIL				
Marine approval	X			

PRODUCT CATEGORY	COUPLINGS				EJECTORS
PRODUCT LINE	SINGLE LINE		MULTI LINE		EJECTORS
PRODUCT TYPE	VERTICAL INSTALLATION	HORIZONTAL INSTALLATION	2 FLUID LINES, 1 VACUUM INSULATION	2 FLUID LINES, 2 VACUUM INSULATIONS	EJECTORS
PRODUCT NAME	TLK-S	TLK-SH	TLK-MS	TLK-2MS	EJECTORS
DESIGN TEMPERATURE @ PN	1 … 323 K (-272 … +50°C)	1 … 323 K (-272 … +50°C)	1 … 323 K (-272 … +50°C)	1 … 323 K (-272 … +50°C)	1 … 323 K (-272 … +50°C)
DN (NOMINAL DIAMETER) / PN (PRESSURE NOMINAL)	DN6… DN80 / PN25	DN10… DN50 / PN25	DN5 / 11 / PN25 DN11 / 28 / PN25 DN15 / 28 / PN25	DN16 / 25-38 / PN25 DN21 / 32-44 / PN25 DN30 / 48-60 / PN25	PN25
FULFILLED CERTIFICATIONS AND REGULATIONS:					
CE	X	X	X	X	X
ASME (not u-stamp)	X	X	X	X	X
KGS					
ATEX (for mech. / el. comp.)	X	X	X	X	X
IECEX (for mech. / el. comp.)	X	X	X	X	
KC (for el. components)					
JIIS (for el. components)					
CSA (for el. components)					
FM (for el. components)					
SIL					
Marine approval					

PRODUCT CATEGORY	CHECK VALVE	NEEDLE VALVES	
PRODUCT LINE	COLD + WARM	COLD	WARM
PRODUCT TYPE	HPCV	COLD	WARM
PRODUCT NAME	HPCV	CNV	NV
DESIGN TEMPERATURE @ PN	20 … 323 K (-253 … +50°C)	20 … 323 K (-253 … +50°C)	213 … 323 K (-60 … +50°C)
DN (NOMINAL DIAMETER) / PN (PRESSURE NOMINAL)	DN6 / PN1000	DN6 / PN640 DN15 / PN420	DN4…15 / PN110 DN4…15 / PN260 DN4…15 / PN420	DN4…15 / PN110 DN4…15 / PN260 DN4…15 / PN420
FULFILLED CERTIFICATIONS AND REGULATIONS:				
CE	X	X	X	X
ASME (not u-stamp)	X	X	X	X
KGS				
ATEX (for mech. / el. comp.)	X	X	X	X
IECEX (for mech. / el. comp.)				
KC (for el. components)	X			
JIIS (for el. components)	X			
CSA (for el. components)	X			
FM (for el. components)	X			
SIL				
Marine approval				