



KLINGER FLUID CONTROL: Our solutions – your peace of mind

Marcin Niedźwiecki;
Key Account Manager District Heating





KLINGER FLUID CONTROL

Our solutions – your peace of mind.

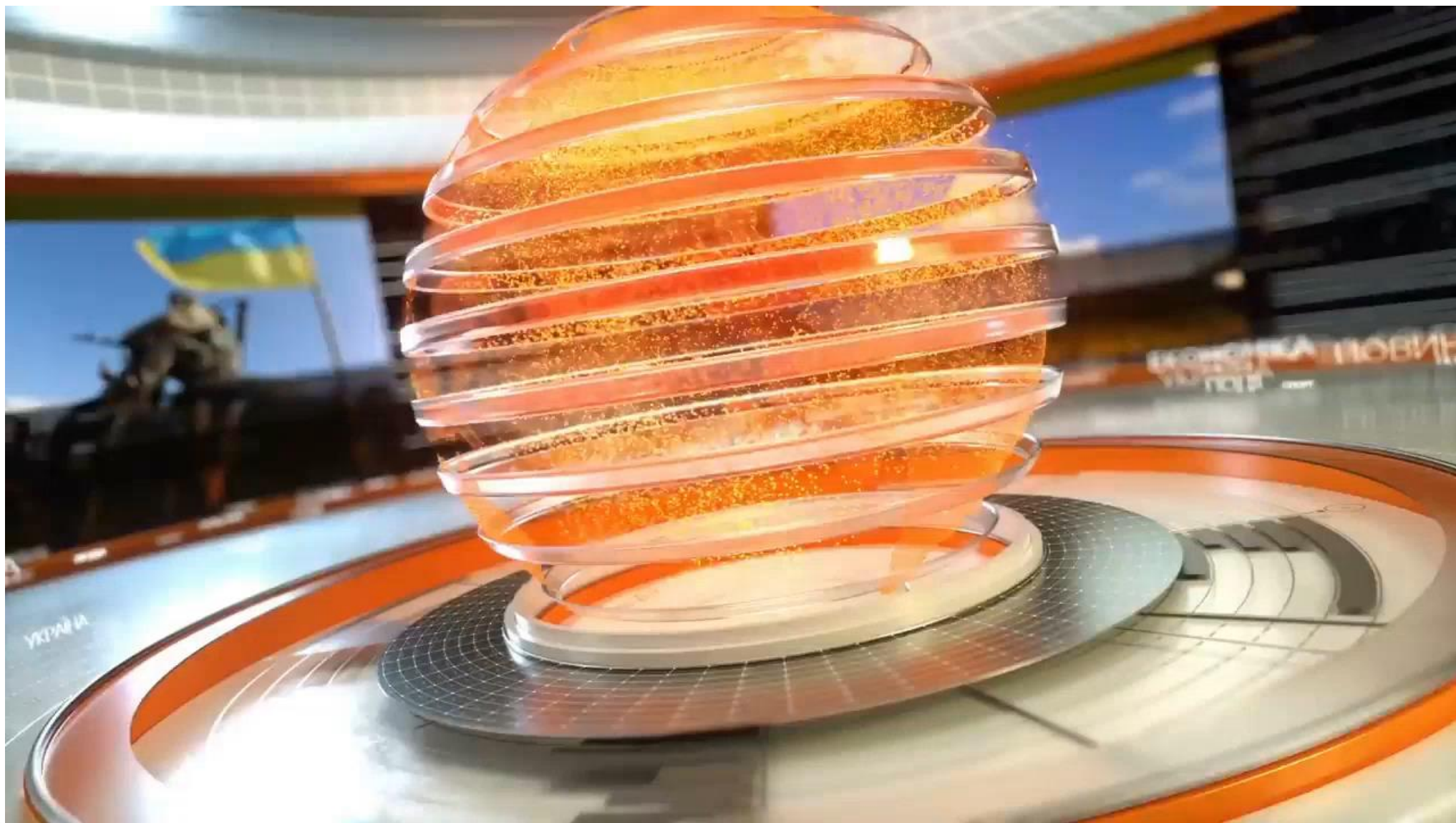




EVERY DAY IS AN EFFORT TO MAINTAIN RELIABILITY

13 January 2020 Kyiv, Ukraine







RELIABILITY—WE GUARANTEE IT !

Here is our proven and reliable solution for Energy sector.



PRODUCT PORTFOLIO

Our products - are your solutions.



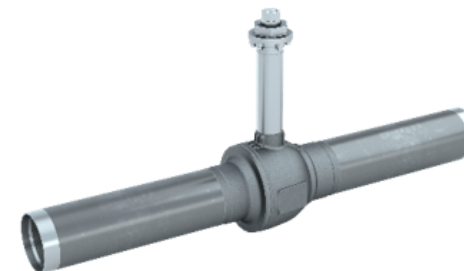
BALLOSTAR® KHI

It is suitable for a wide range of applications in above-ground and underground pipelines, chambers, cogeneration plants, power plants, pumping stations, and for media such as steam, condensate, and district heating water, among others.



MONOBALL KHO

This cast and fully welded valve is used in chambers, heat exchangers, server cooling systems, and connections.

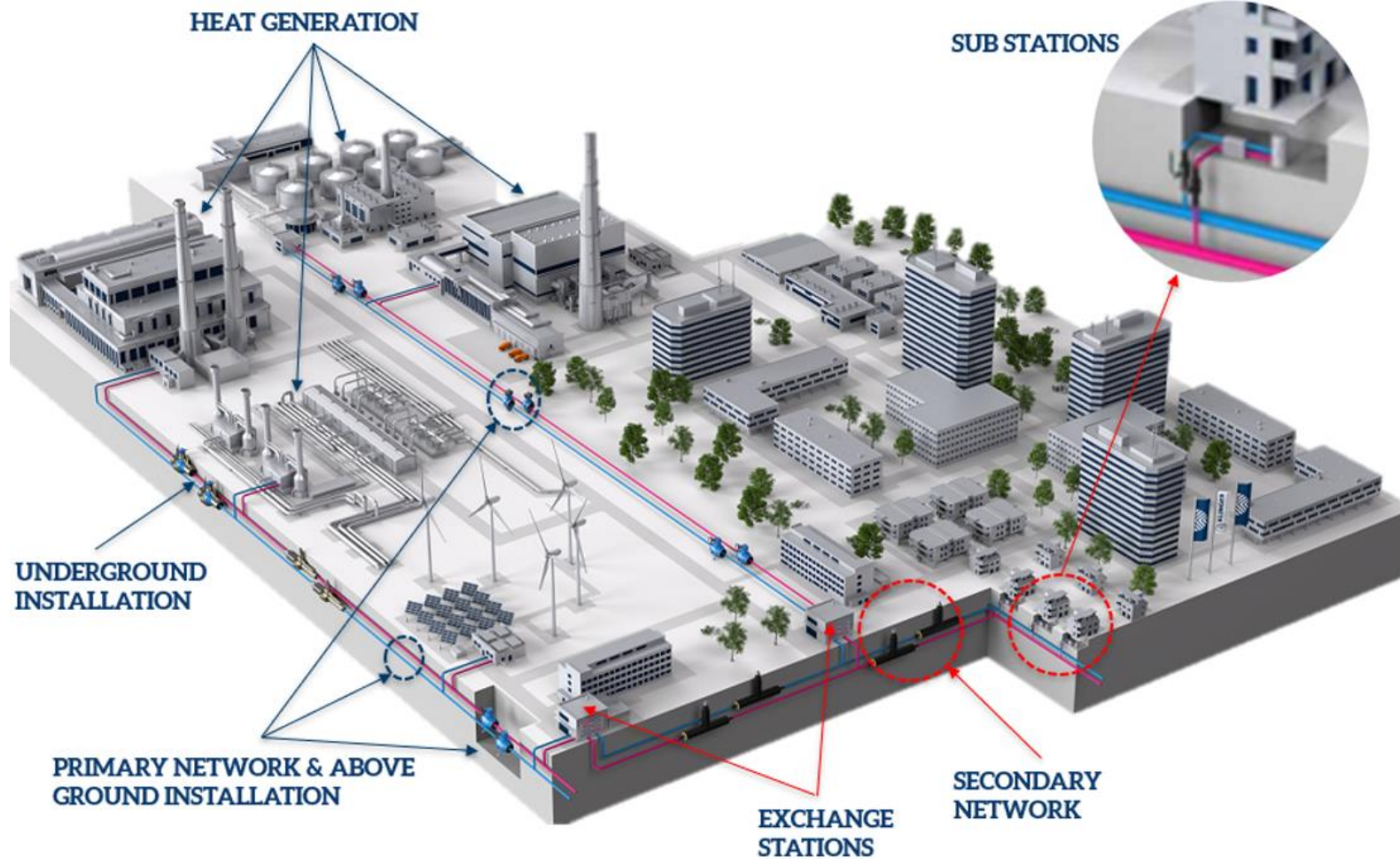


MONOBALL KHO-U

This solution is used in underground installations with all types of pre-insulation for heating, cooling, and air conditioning systems.



SOLUTIONS FOR DISTRICT HEATING



PRODUCT PORTFOLIO

Our products - are your solutions.



BALLOSTAR® KHA

Due to the modular construction system the KHA ball valves are suitable for many different operating conditions and applications.



BALLOSTAR® KHA DBB

Thanks to double block and bleed function, it is ideal for use in steam and hot water systems. It meets the highest safety standards.

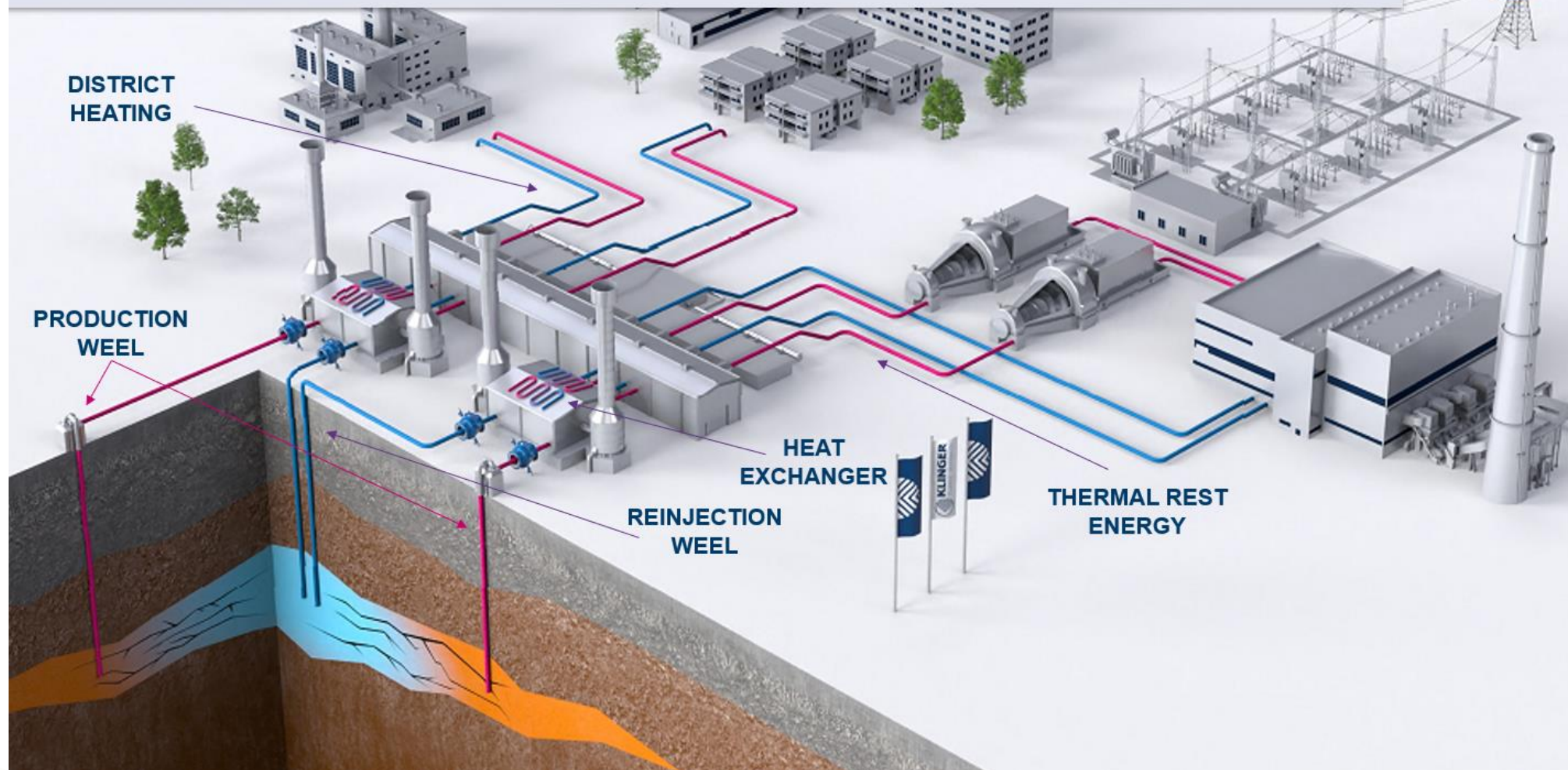


PISTON VALVE KVN

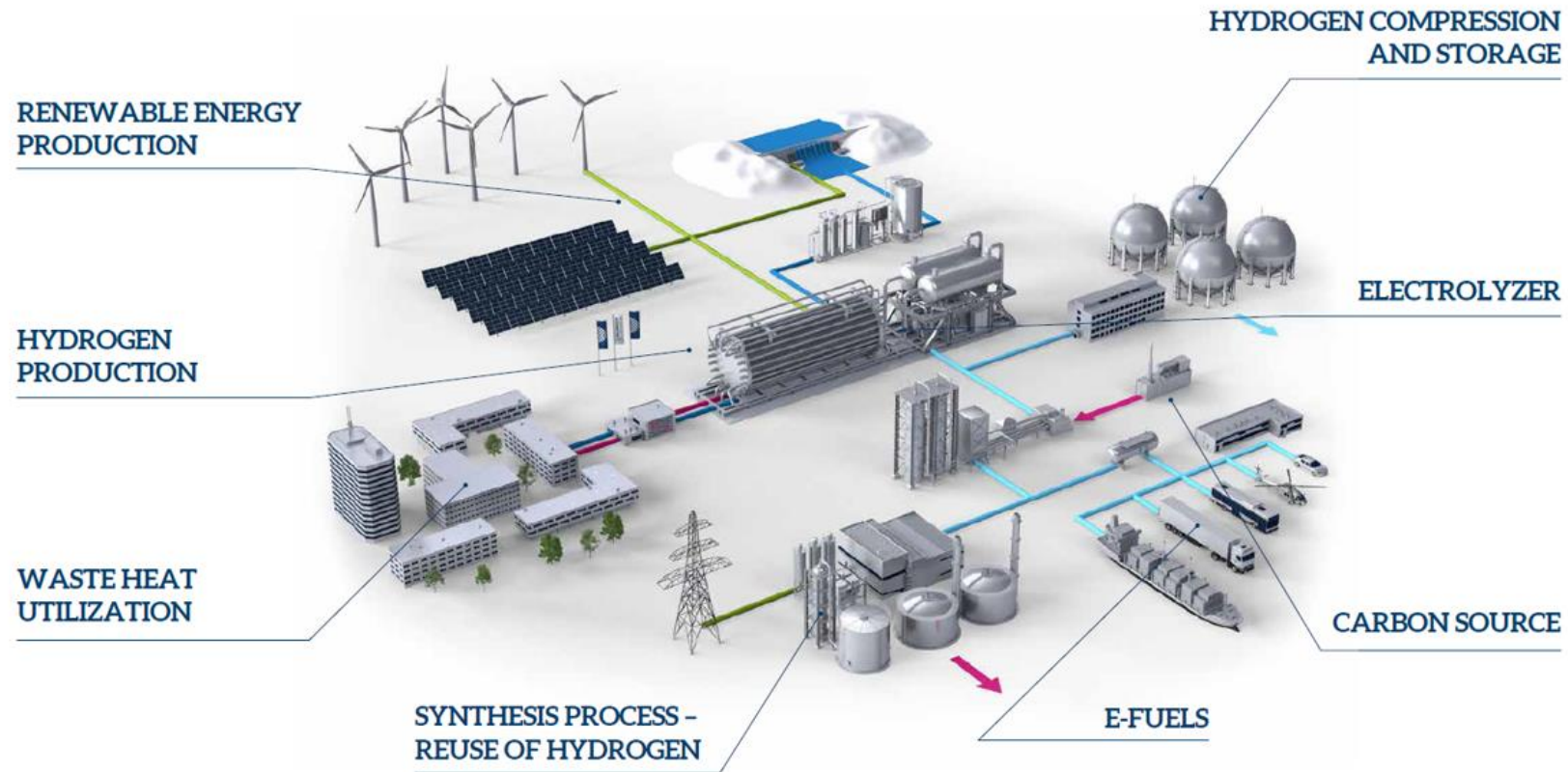
The KVN model is characterized by 100 year old design, exceptional durability, and universal use—making it suitable for media such as hot water, steam, and many other gases and liquids where the highest tightness is required.



GEO THERMAL SOLUTIONS



HYDROGEN SOLUTIONS





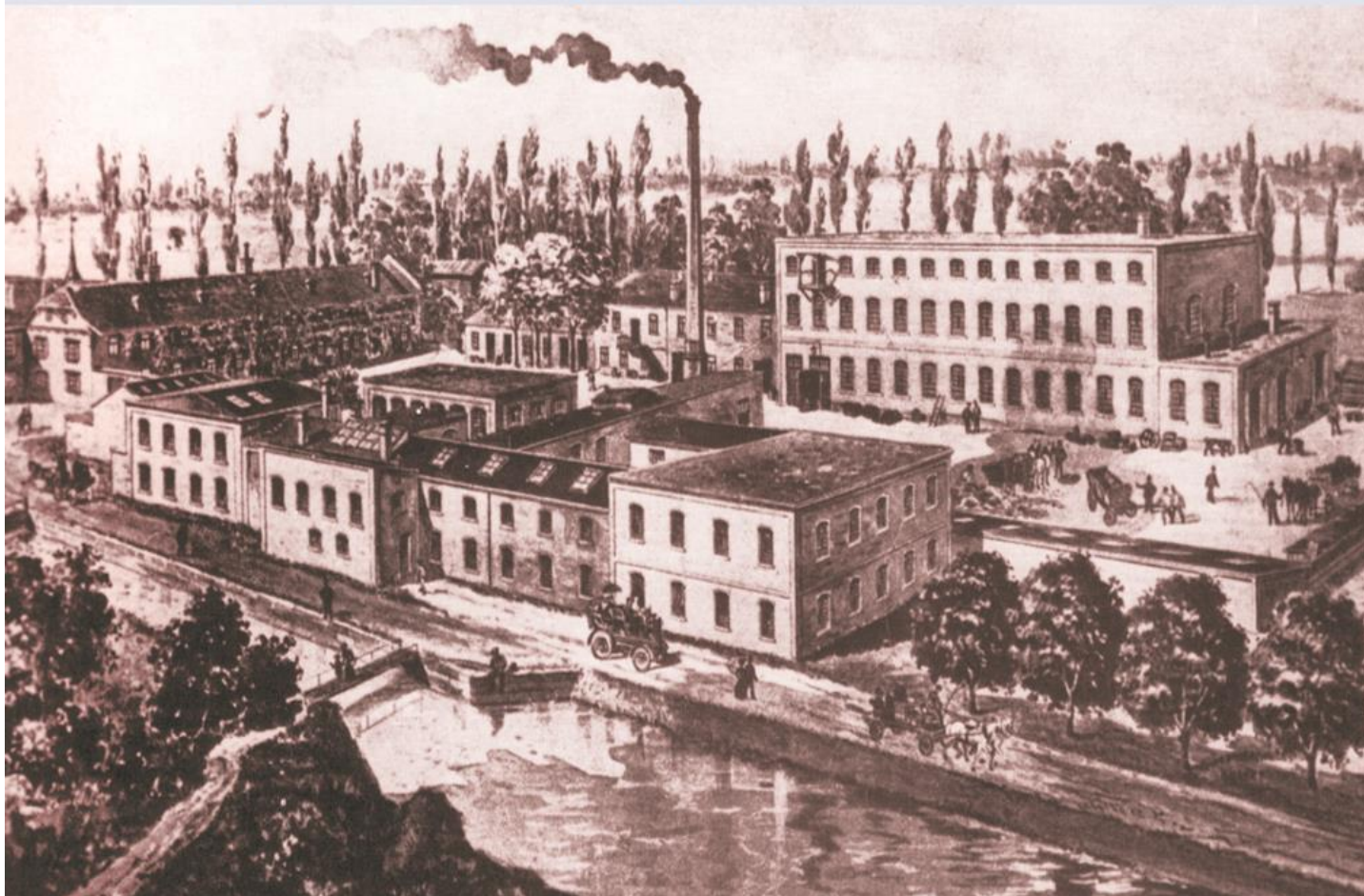
WE ARE SURE THAT WE WILL HELP YOU SOLVE YOUR EVERYDAY CHALLENGES

Here's why:



BECAUSE WE HAVE 135 YEARS OF EXPERIENCE

To this day, it remains a European product.



Richard Klinger
established his
factory in
Gumpoldskirchen
in 1893.



THANKS TO 50 YEARS OF PROVE RELIABILITY

Continuous operation in Vienna.



This KHSVI was installed 25 years ago in the hot water network of the Vienna district heating. The customer operated the ball valve up to 25bar and 180°C. In summer 2019 the customer realised an increased torque. They wanted to replace the valves, but due to the trust and reliability of the product, KLINGER proposed inspecting the old ball valves and, if they were in good condition, modernizing them, thereby offering a more cost-effective solution.





Because regardless of the mounting position, our valves have been operating in Paris for 25 years.



THANKS TO 35 YEARS OF RELIABILITY IN TORUŃ

Toruń – the city where Copernicus was born.



Case study:

- » Installed in 1991
- » 30 years in use
- » Removed in 2021
- » Reinstalled in 2021







KLINGER FLUID CONTROL

What makes our product so special?



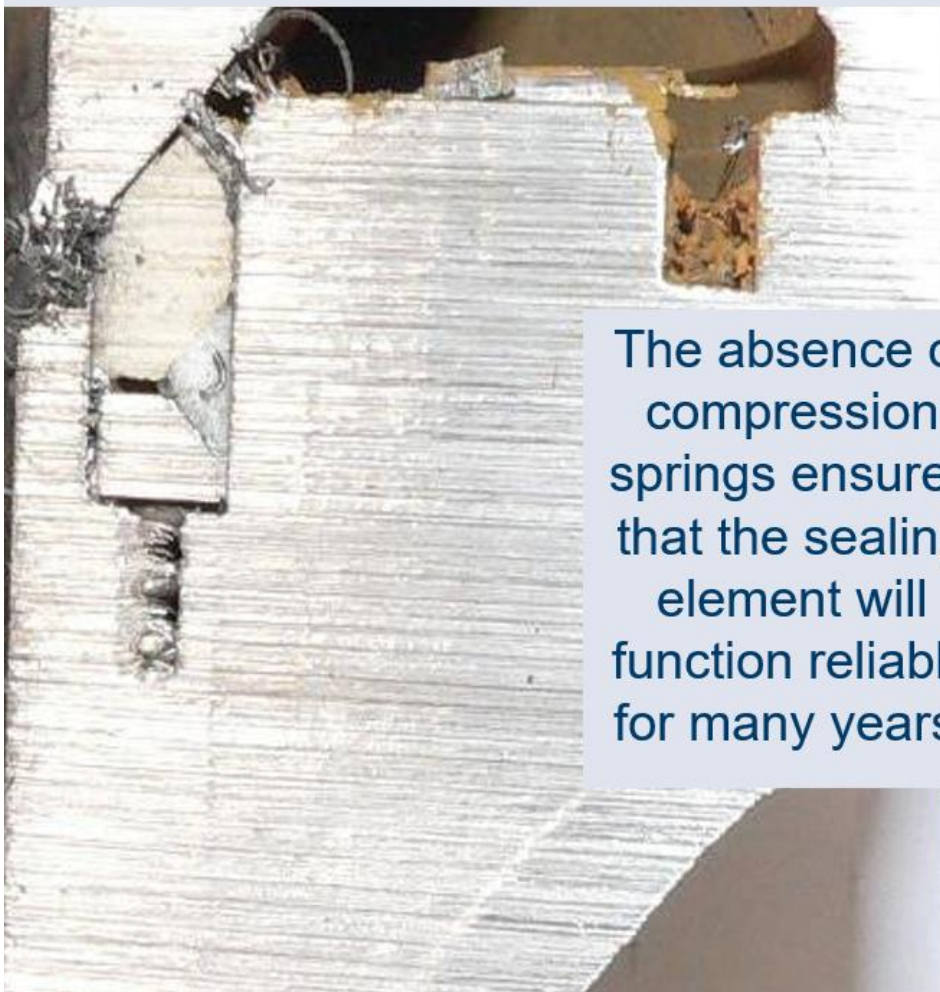
A HIGHLY ADVANCED SEALING MATERIAL



Standard, patented
KFC 25 (Klinger
Flon Carbon)
material, protected
from the medium on
three sides by a
stainless steel
membrane, with a
temperature
resistance of up to
260°C.



INNOVATIVE SEALING RING



The absence of compression springs ensures that the sealing element will function reliably for many years.



UNIQUE BALL DESIGN

Light, cast—not made from bent sheet metal. Coated with chrome, not soft nickel.

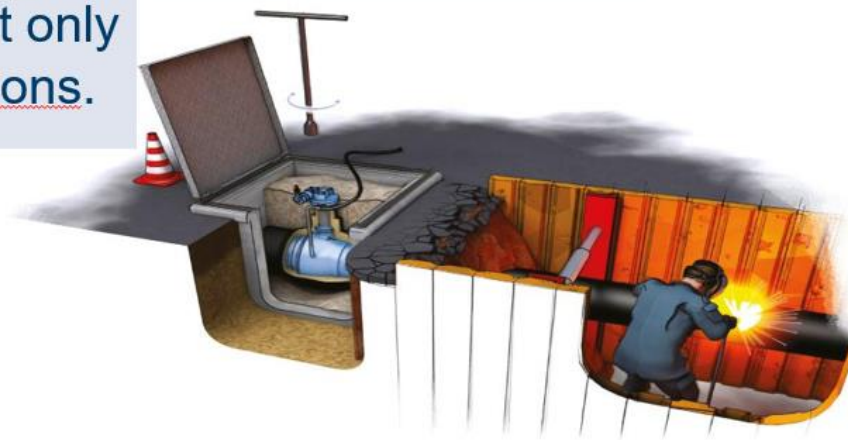
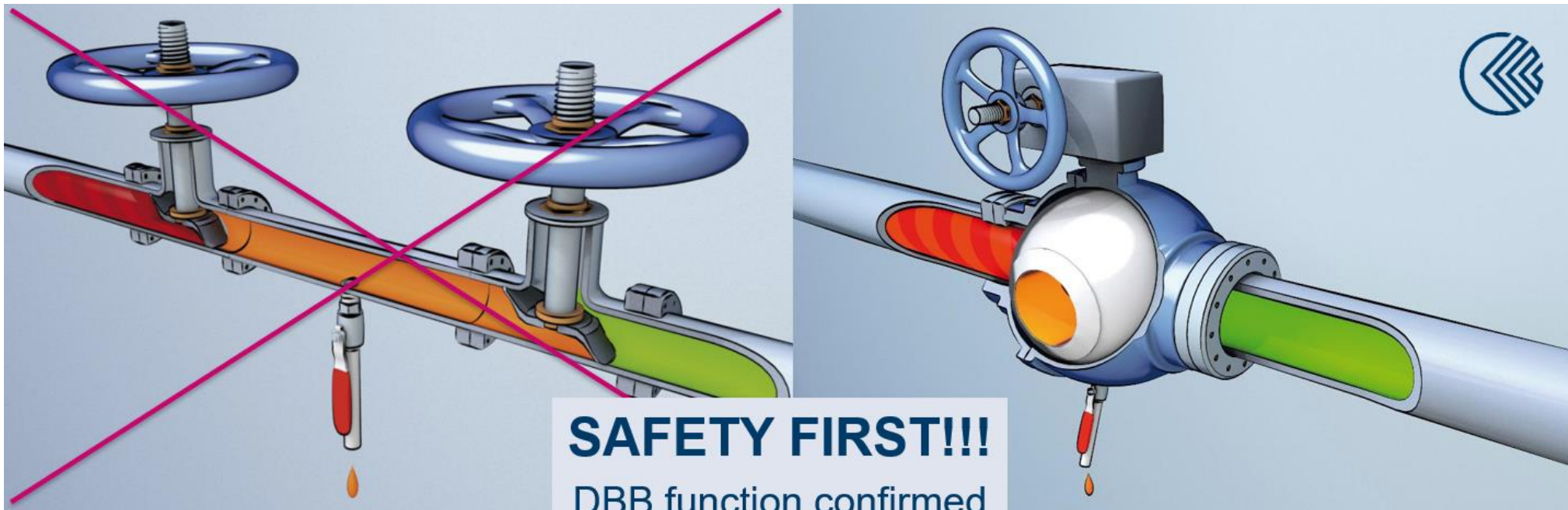


	Execution	Hardness (Vickers scale)	Surface roughness (RZ)
KLINGER	Ductile graphite iron ball chrome plated	800 – 1000 HV	0,6 µm
Competitor	Nickel plated	500 – 650 HV	5,6 µm
	Stainless steel	300 – 350 HV	3,5 µm

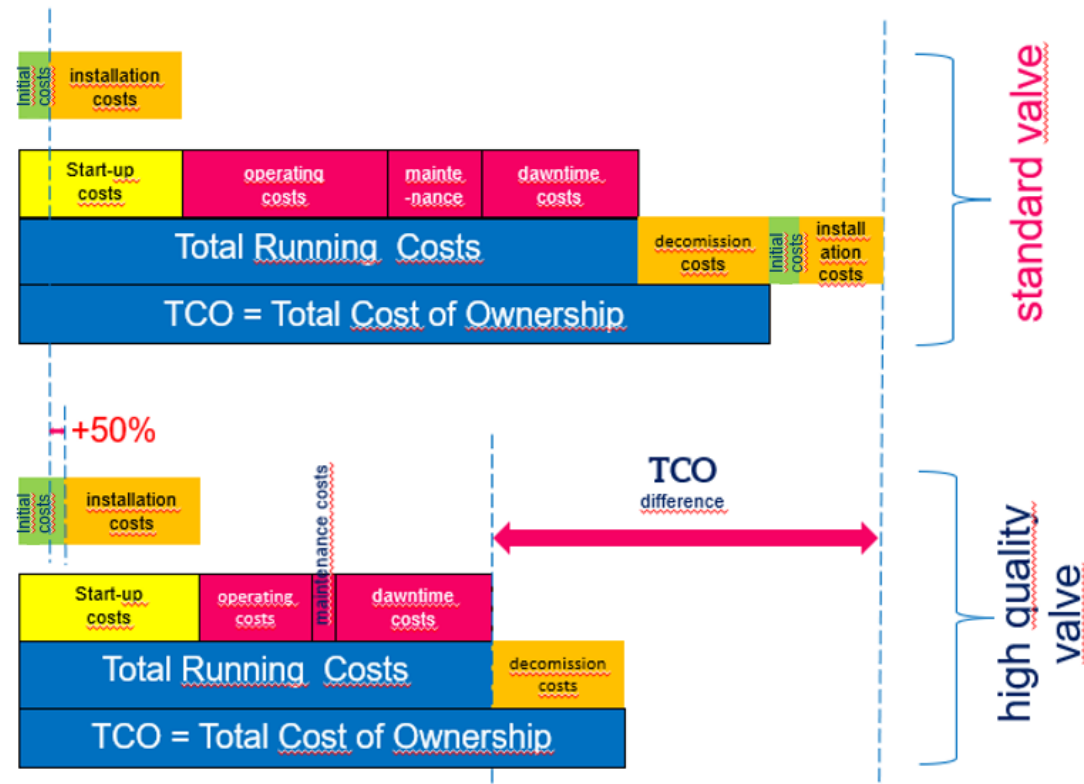
Klinger's solution
is a design with
cast ball and
trunion mounted.

NOT, hollow
NOT, guide tube.





TOTAL COST OF OWNERSHIP OF VALVES



AND THAT'S WHY THESE CITIES CHOSE US



General			Product				Operating condition		
Country	Customer	Industry	Type	Flange connection	Nominal Pipe Size [DN]	Material	Pressure [bar]	Temperature [°C]	Media Medium
Austria	Wien Energie GmbH	Heating	KHI	PN40	150-800	VIII	22,5	180	hot water
Austria	Wien Energie GmbH	Heating	KVN	PN16	15-200	III	8	90	hot water
Austria	Wien Energie GmbH	Heating	KVN	PN40	15-200	VIII	22,5	180	hot water
Austria	EEG Energie Graz gmbh & Co KG	Heating							
Austria	Linz AG	Heating	KHSVI	PN 25	150-600	VIII	25	130	hot water
Austria	Salzburg AG	Heating	KHSVI	PN 25	150-400	VIII	16	130	hot water
Austria	Kelag Wärme Österreich	Heating	KHSVI	PN 25	150-400	VIII	16	130	hot water
Austria	EWV Gruppe	Heating	KHI	PN 15	150-300	VIII	16	120	hot water
Austria	ESG Linz	District heating above ground	KHSVI	PN25	600	VIII	10-25bar	80°C - 130°C	Hot Water
Austria	Fernwärme Wien	District heating above ground	KHI / KHSVI	PN25	150-800	VIII	10-25bar	80°C - 130°C	Hot Water
Austria	Fernwärme Wien	District heating above ground	KVN	PN25	15-200	VIII	10-25bar	80°C - 130°C	Hot Water
Bulgaria	Power Plant Pleven	District heating above ground	KHSVI	PN25	500	VIII	10-25bar	80°C - 130°C	Hot Water
Bulgaria	Toplifikacia	District heating above ground	KHSVI	PN25	500	VIII	10-25bar	80°C - 130°C	Hot Water
Denmark	HOFOR - AMV Copenhagen 2018	Power plant-district heating water	KHSVI	PN25	1000	VII-AF-KFC	25	120	Hot water
Denmark	HOFOR - AMV Copenhagen 2017	Power plant-district heating water	KHSVI-VVS	PN25	700-800	VII-AF-KFC	25	120	Hot water
Denmark	HOFOR - AMV Copenhagen 2017	Power plant-district heating water	KHSVI-VVS	PN25	700-800	VII-AF-KFC	25	120	Hot water
Denmark	HOFOR - AMV Copenhagen 2017	Power plant-district heating water	KHSVI	PN40	500	VII-AF-KFC	25	120	Hot water
Denmark	HOFOR - AMV Copenhagen 2017	Power plant-district heating water	KHSVI	PN25	600	VII-AF-KFC	25	120	Hot water
Denmark	INO power - enduser CTR 2017	District heating distribution	KHSVI-VVS	PN25	300	VII-AF-KFC	25	120	Hot water
Denmark	HOFOR - AMV Copenhagen 2016	Power plant-district heating water	KHSVI-VVS	PN25	800	VII-AF-KFC	25	120	Hot water
Denmark	HOFOR(Vattenfall) - AMV Copenhagen 2008	Power plant-district heating water	KHSVI	PN25	600-700	VII-AF-KFC	25	120	Hot water
Denmark	HOFOR - AMV Copenhagen 2008	Distribution line tunnel-district heating water	KHSVI	PN25	700	VII-AF-KFC	25	120	Hot water
Denmark	HOFOR - AMV Copenhagen 2007	Distribution line tunnel-district heating water	KHSVI	PN25	200-700	VII-AF-KFC	25	120	Hot water
Denmark	Vattenfall AMV Copenhagen 2007-2008	Power plant-district heating water	KHSVI	PN25	500-800	VII-AF-KFC	25	120	Hot water
Denmark	TVIS District Heating	District heating above ground	KHSVI	PN25	800	VIII	10-25bar	80°C - 130°C	Hot Water
Denmark	VEKS District Heating	District heating above ground	KHSVI	PN25	800	VIII	10-25bar	80°C - 130°C	Hot Water
Finland	Wärtsilä Oy	Energy/ OEM	KHA	PN 40	25-80	VIII	3-5 barg	60C	gas & oil
Finland	Espoo District Heating	District heating above ground	KHSVI	PN25	300	VIII	10-25bar	80°C - 130°C	Hot Water
Finland	Espoo District Heating	District Heating	KHI	PN25	300	VIII			hot water
France	Logstot France Elyo Gennedith CPCU	District Heating	KHO	PN16	DN50R40 to DN150R125	VIII	6	109	Water



AND THAT'S WHY THESE CITIES CHOSE US



France	Dalkia Rennes	District Heating	KHSVI + KVSN	PN25	20 to 150	VIII	20	180	Hot water
France	Versailles Gardens	District Heating	KHSVI	PN25	The biggest possible	VIII			
France	Engie	District heating above ground	KHSVI VVS PN40	BW	150 - 400	VII	20 bar	180°C	Superheated water
France	Dalkia	District heating underground	KHSVI VVS PN25	BW	150 - 500	VII	10 bar	120°C	Hot water
France	Petroineos	Energy	KVN + KVSN	ANSI 150 + ANS	15 - 50	VIII	4 bar + 11 bar		Steam
France	Renault	Energy	KHSVI + KHI	BW + Flanges	250 - 500	VII	13,5 bar	175°C	Superheated water
France	Compagnie de Chauffage	District heating above ground	KHI	PN25	300;150	VIII	10-25bar	80°C - 130°C	Hot Water
France	Dalkia	District heating above ground	KHI	PN25	300	VIII	10-25bar	80°C - 130°C	Hot Water
France	Dalkia	District heating above ground	KHSVI	PN25	350	VIII	10-25bar	80°C - 130°C	Hot Water
France	Elyo	District heating above ground	KHSVI	PN25	400	VIII	10-25bar	80°C - 130°C	Hot Water
France	Elyo	District heating above ground	KHI	PN25	200	VIII	10-25bar	80°C - 130°C	Hot Water
France	Dalkia	District heating above ground	KHI	PN25	250	VIII	10-25bar	80°C - 130°C	Hot Water
France	Elyo	District heating above ground	KHI	PN25	300	VIII	10-25bar	80°C - 130°C	Hot Water
France	Elyo	District heating above ground	KHSVI	PN25	300	VIII	10-25bar	80°C - 130°C	Hot Water
France	Elyo	District heating above ground	KHSVI	PN25	400	VIII	10-25bar	80°C - 130°C	Hot Water
France	Climadef	District heating above ground	KHI	PN25	200	VIII	10-25bar	80°C - 130°C	Hot Water
France	Elyo	District heating above ground	KHI	PN25	250	VIII	10-25bar	80°C - 130°C	Hot Water
France	CEA	District heating above ground	KHSVI	PN25	300	VIII	10-25bar	80°C - 130°C	Hot Water
France	Dalkia	District heating above ground	KHI	PN25	250	VIII	10-25bar	80°C - 130°C	Hot Water
France	Dalkia	District heating above ground	KHI	PN25	200	VIII	10-25bar	80°C - 130°C	Hot Water
France	Dalkia	District heating above ground	KHI	PN25	200	VIII	10-25bar	80°C - 130°C	Hot Water
France	CPCU	District heating above ground	KHSVI	PN25	700,600,500	VIII	25 bar	250°C	Steam
France	Elyo	District heating above ground	KHSVI	PN25	300	VIII	26 bar	250°C	Steam
Germany	BEWAG Berlin	District heating above ground	KHSVI	PN25	800	VIII	10-25bar	80°C - 130°C	Hot Water
Germany	BMW Munich	District heating above ground	KHI	PN25	350	VIII	10-25bar	80°C - 130°C	Hot Water
Germany	BTB-Block-HKW-Betr.ges.	District heating above ground	KHSVI	PN25	500	VIII	10-25bar	80°C - 130°C	Hot Water
Germany	ESSAG Cottbus	District heating above ground	KHSVI	PN25	600	VIII	10-25bar	80°C - 130°C	Hot Water
Germany	ESWE Wiesbaden	District heating above ground	KHI	PN25	250	VIII	10-25bar	80°C - 130°C	Hot Water
Germany	EVP Potsdam	District heating above ground	KHSVI	PN25	400	VIII	10-25bar	80°C - 130°C	Hot Water
Germany	EWAG Nürnberg	District heating above ground	KHSVI	PN25	350	VIII	10-25bar	80°C - 130°C	Hot Water
Germany	FHZ-Werk Neukölln	District heating above ground	KHSVI	PN25	350	VIII	10-25bar	80°C - 130°C	Hot Water
Germany	FUG Ulm	District heating above ground	KHSVI	PN25	400	VIII	10-25bar	80°C - 130°C	Hot Water



AND THAT'S WHY THESE CITIES CHOSE US



Germany	Neckarwerke	District heating above ground	KHSVI	PN25	300	VIII	10-25bar	80°C - 130°C	Hot Water
Germany	Städtische Werke	District heating above ground	KHSVI	PN25	600	VIII	10-25bar	80°C - 130°C	Hot Water
Germany	SÜC	District heating above ground	KHSVI	PN25	350	VIII	10-25bar	80°C - 130°C	Hot Water
Germany	TWS Stuttgart	District heating above ground	KHSVI	PN25	500	VIII	10-25bar	80°C - 130°C	Hot Water
Germany	VW-Power Plants	District heating above ground	KHSVI	PN25	500	VIII	10-25bar	80°C - 130°C	Hot Water
Greece	Hellenic Power Corporation	District Heating	KHI	PN10	150	VIII	10	300	Superheated steam
Hungary	District Heating	District Heating	KHI	PN25	500	VIII			hot water
Hungary	District Heating Szabolcső	District Heating	KHI	PN25	500	VIII			hot water
Hungary	Győr Tarhő	District Heating	KHI	PN25	200	VIII			hot water
Hungary	I K W	District Heating	KHI	PN25	400	VIII			hot water
Hungary	Power Plant	District Heating	KHI	PN25	600	VIII			hot water
Hungary	Power Plant	District Heating	KHI	PN25	500	VIII			hot water
Hungary	Power Plant / District Heating	District Heating	KHI	PN25	400	VIII			hot water
Hungary	Petar	District Heating	KHI	PN25	400	VIII			hot water
Hungary	Szetar	District Heating	KHI	PN25	200	VIII			hot water
Iceland	Power Plant	District heating above ground	KHSVI	PN25	500	VIII	10-25bar	80°C - 130°C	Hot Water
Iceland	Reykjavikur	District heating above ground	KHSVI	PN25	500	VIII	10-25bar	80°C - 130°C	Hot Water
Iceland	Sudurnesja	District heating above ground	KHSVI	PN25	500	VIII	10-25bar	80°C - 130°C	Hot Water
Italy	District Heating Mailand	District heating above ground	KHSVI	PN25	400	VIII	10-25bar	80°C - 130°C	Hot Water
Italy	Demont-Delta-TI-atzwanger	District Heating	KHSVI VVS	PN25	300 to 700	VIII	25	120 to 140	Hot water
Italy	Orion	District Heating	KHSVI VVS	PN25	200 to 400	VIII	25	120 to 140	Hot water
Italy	AEM	District Heating	KHI	PN25	200-500	VIII			hot water
Italy	AEM	District Heating	KHI	PN25	200-400	VIII			hot water
Italy	AEM	District Heating	KHI	PN25	200	VIII			hot water
Italy	AIM	District Heating	KHI	PN25	300	VIII			hot water
Italy	AGEA	District Heating	KHI	PN25	300-400	VIII			hot water
Italy	AGAC	District Heating	KHI	PN25	300	VIII			hot water
Italy	AGSM	District Heating	KHI	PN25	300	VIII			hot water
Poland	Cieploch S.S.	District heating above ground	KHI	PN25	300	VIII	10-25bar	80°C - 130°C	Hot Water
Poland	Elektropolownia Krakow - Leg	District heating above ground	KHSVI	PN25	800	VIII	10-25bar	80°C - 130°C	Hot Water
Poland	Elektropolownia Bedzin	District heating above ground	KHI	PN25	700	VIII	10-25bar	80°C - 130°C	Hot Water
Poland	Elektropolownia Lublin-Wrotkow	District heating above ground	KHSVI	PN25	600	VIII	10-25bar	80°C - 130°C	Hot Water
Poland	Elektropolownia Siekierki	District heating above ground	KHSVI	PN25	500	VIII	10-25bar	80°C - 130°C	Hot Water



BY TRUSTING US...



Poland	Elektrołpownia Toruń-Grebowin	District heating above ground	KHSVI	PN25	400	VIII	10-25bar	80°C - 130°C	Hot Water
Poland	Elektrołpownia Tychy	District heating above ground	KHSVI	PN25	600	VIII	10-25bar	80°C - 130°C	Hot Water
Poland	Elektrownia Chorzów	District heating above ground	KHSVI	PN25	600	VIII	10-25bar	80°C - 130°C	Hot Water
Poland	Elektrownia Łagisza	District heating above ground	KHSVI	PN25	500	VIII	10-25bar	80°C - 130°C	Hot Water
Poland	Elektrownia Wodna Żarnowiec	District heating above ground	KHI	PN25	250	VIII	10-25bar	80°C - 130°C	Hot Water
Poland	GPEG	District heating above ground	KHSVI	PN25	600	VIII	10-25bar	80°C - 130°C	Hot Water
Poland	Zespół Elektrociepłowni	District heating above ground	KHI	PN25	300	VIII	10-25bar	80°C - 130°C	Hot Water
Poland	Zespół Elektrociepłowni	District heating above ground	KHSVI	PN25	800	VIII	10-25bar	80°C - 130°C	Hot Water
Poland	Zespół Elektrociepłowni	District heating above ground	KHSVI	PN25	700	VIII	10-25bar	80°C - 130°C	Hot Water
Poland	Zespół Elektrociepłowni	District heating above ground	KHSVI	PN25	600	VIII	10-25bar	80°C - 130°C	Hot Water
Poland	Zespół Elektrociepłowni	District heating above ground	KHSVI	PN25	800	VIII	10-25bar	80°C - 130°C	Hot Water
Poland	DALKIA	District heating above ground	KH(SV)I	PN25	DN150-600	VIII	27 bar	230-260	Steam
Poland	DALKIA	District heating above ground	KH(SV)I	PN25	DN400-700	VIII	29 bar	230-260	Steam
Poland	McCAIN	District heating above ground	KH(SV)I	PN25	DN150-200	VIII	30 bar	200-220	Steam
Poland	INTERNATIONAL PAPER	District heating above ground	KH(SV)I	PN25	DN150-200	VIII	31 bar	200-220	Steam
Serbia	Belgrade heating company	District Heating	KHI	PN25	600	VIII	25	120	Hot water
Serbia	Belgrade heating company	District Heating	Monoball	PN25	15 to 200	VIII	10 to 25	90 to 120	Hot water
Slovakia	Bratislavská Teplárenská	District Heating	KHI	PN25	500	VIII	20	250	Steam
Slovakia	KIA Slovakia	District Heating	KHSVI	PN25	250 to 300	VIII	20	-20 to 260	Steam
Slovakia	Power Plant Kosice	District heating above ground	KHSVI	PN25	600	VIII	10-25bar	80°C - 130°C	Hot Water
Sweden	Energi Göteborg	District heating above ground	KHI	PN25	350	VIII	10-25bar	80°C - 130°C	Hot Water
Sweden	Energiverken Uppsala	District heating above ground	KHI	PN25	100	VIII	10-25bar	80°C - 130°C	Hot Water
Sweden	Fortum AB	District Heating	KHSVI	PN16	600	VIII	16	120	Water
Sweden	Energi Göteborg	District Heating	KHI	PN25	350	VIII			hot water
Sweden	Energiverken Uppsala	District Heating	KHI	PN25	100	VIII			hot water
Sweden	Högdalens Energiverk	District Heating	KHI	PN25	80	VIII			hot water
Sweden	Fortum District Heat AB	District Heating	KHSVI	PN16	400 to 1000	VIII	16	120	water
Sweden	Vattenfall Power Heat AB	District Heating	KHSVI VII-AF-KFC	PN16	600, 700	VIII	10-16	80 to 120	water
Sweden	Vattenfall Power Heat AB	District Heating	KHSVI VII-HNBR-KFC	PN16	200, 250	VIII	6	180	steam
Sweden	Mälarenergi AB	District Heating	KHSVI VII-AF-KFC	PN16	600 to 800	VIII	10-16	90 to 120	water
Switzerland	NOK Döttingen - KKW Benzau	District Heating	KHA-FL KFC	PN16	80	VIII	2 to 3	130	Hot water
Switzerland	Fernwärme Zürich	District Heating	KHWI-KFC	PN25	350	VIII	23	130	Hot water
Switzerland	Fernwärme Zürich	District Heating	KHWI-KFC, KHFS-OE	PN25	65 to 350	VIII	23	130	Hot water
Switzerland	Fernwärme Zürich	District Heating	KHI KFC	PN25	350	VIII	23	130	Hot water
Ukraine	Kiewenergo	District heating above ground	KHSVI	PN25	400-800	VIII	25 bar	135°C	Hot Water
Ukraine	Kiewenergo	District heating above ground	Monoball	PN25	25-300	VIII	25 bar	135°C	Hot Water



THANK YOU FOR YOUR ATTENTION!

KLINGER Fluid Control GmbH
Am Kanal 8-10 » A-2352 Gumpoldskirchen
T +43 2252 600 100
office@klinger.kfc.at



Hvala na pažnji!
Thank you for your attention!

Podaci o autoru
Ime Prezime
Organizacija
E-mail
Author information
Name Surname
Organization
E-mail

