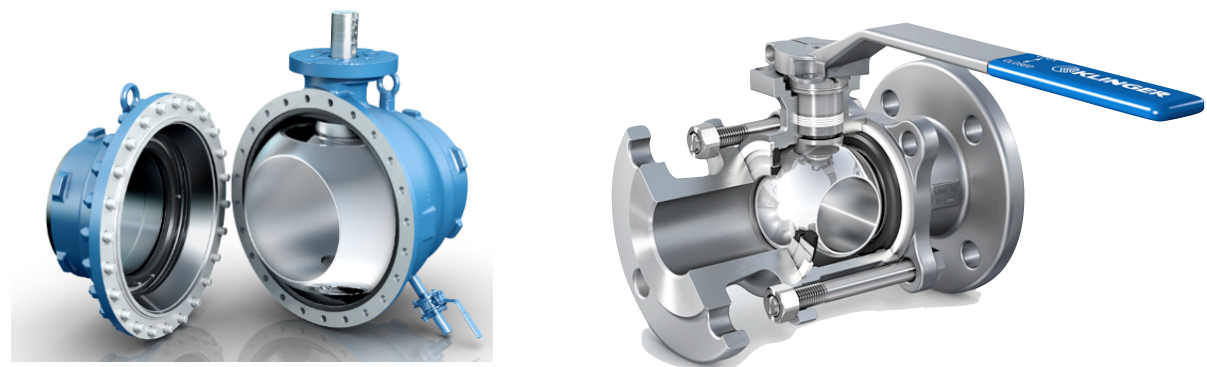


» KLINGER FLUID CONTROL PRODUCTS FOR THE STEEL INDUSTRY

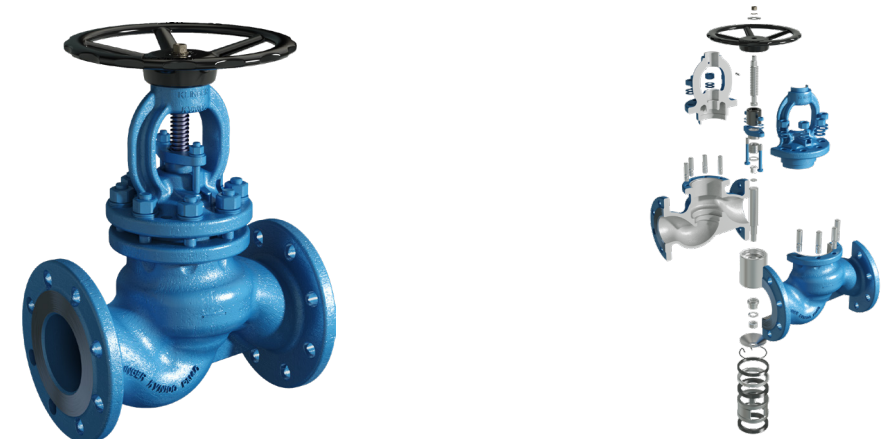
KLINGER Fluid Control ball valves

KLINGER Fluid Control ball valves are available in nominal diameters ranging from DN10 to DN1000 (NPS 3/8" to NPS 40"). Using a unique pre-stressed elastic sealing concept makes the valves very reliable, even when operated with **highly abrasive media** in both flow directions. In combination with the KLINGER Fluid Control special formula of the **soft sealing** element, **temperature range up to 300°C** can be processed without a problem and ensuring leakage rate A. For temperatures above 300°C up to 400°C or certain media, metal sealings are part of the standard valve portfolio. For applications with very high safety demands, ball valves from DN50 to DN1000 are available with a **Double Block and Bleed (DBB)** function. This feature saves cost and is a perfect solution when there is a very limited installation space, as one valve with the DBB function replaces two common ball valves. Due to the design principle of the sealing elements in combination with the stuffing box design, applications with **high turning cycles** are a perfect fit.



KLINGER Fluid Control piston valves

The original KLINGER piston valves ranging from DN15 to DN200 (NPS 1/2" to NPS 8") are the most reliable valve solution for steam and hot oil applications. With its superior sealing rings the standard version can be operated at a **temperature range of up to 400°C**. The operating principle of a KLINGER piston valve has a **self cleaning function** and is therefore **insensitive against contaminated media**. As the piston itself is always guided in combination with the unique sealing ring design, steam hammers do not damage any internal parts. KLINGER KVN piston valves are the perfect solution to regulate the flow through the valve and therefore within the process. Compared to globe valves, the sealing elements and the piston can be easily replaced without dismantling the valve from the pipe. This in turn dramatically reduces maintenance costs.



KLINGER FLUID CONTROL VALVES FOR STEEL PRODUCTION



» ABOUT KLINGER GROUP

KLINGER is an established top leader for industrial valves, sealings and fluid monitoring systems and is known for its high quality products. Founded in 1886 as a family business, today KLINGER presents itself as a global group that offers its independent production, sales and service companies unique know-how and on-site consulting in a total of 60 countries worldwide. Since more than 130 years, KLINGER is fully committed to supplying not just products, but tailored state of the art sealing, fluid control and fluid monitoring solutions. The goal of KLINGER is to bring together the high standards regarding quality, technology and efficiency, enhancing the performance of our customers servicing the manufacturing industry, infrastructure, automotive, marine, oil & gas, the chemical industry, pulp & paper, the energy sector, steel, food & beverage and the pharmaceutical industry.

» ABOUT KLINGER FLUID CONTROL

KLINGER Fluid Control, a subsidiary of the KLINGER Group, has been an innovative and reliable quality manufacturer of industrial valves in Gumpoldskirchen/Austria for over 130 years. The products from KLINGER Fluid Control are characterized by their high reliability, an above-average service life and low life cycle cost. Through its global distribution and service network, KLINGER Fluid Control offers both standardized and tailor-made products, services and solutions for customers in over 60 countries. In order to make the customers' operations safer and more secure KLINGER Fluid Control invests in relevant technical innovations and solutions.

» STEEL PRODUCTION PROCESSES

COKE OVEN

BLAST FURNACE

DIRECT REDUCTION

BASIC OXYGEN FURNACE

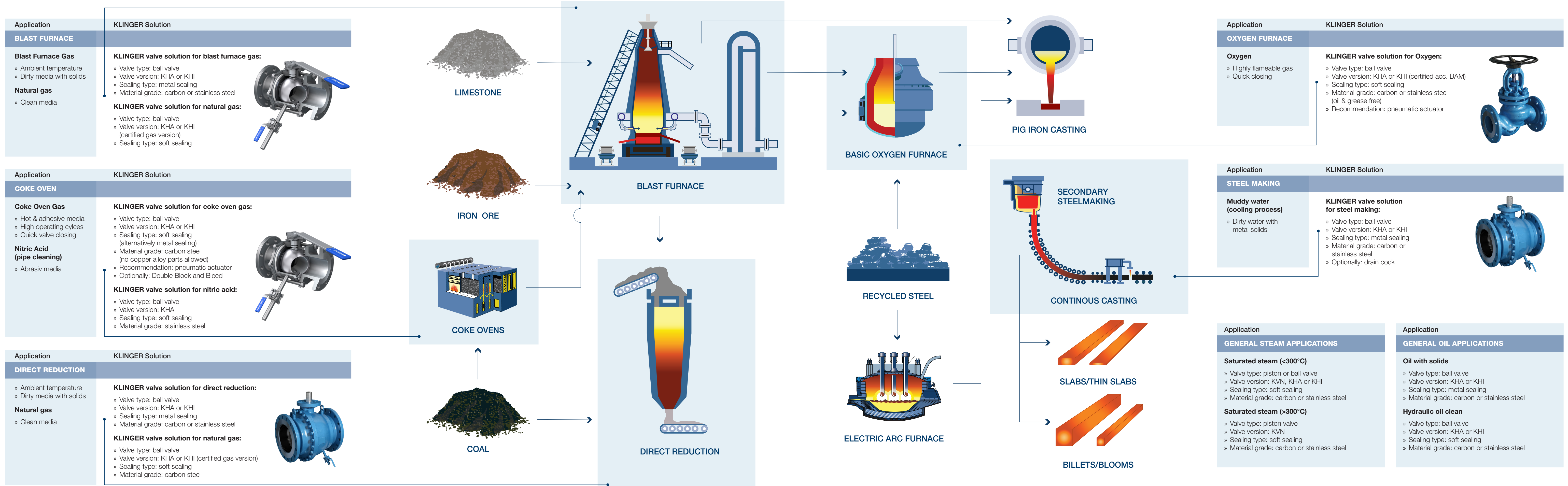
CONTINUOUS CASTING

GENERAL STEAM & OIL APPLICATIONS


Your KLINGER distribution partner

KLINGER Fluid Control GmbH
Am Kanal 8-10, A-2352 Gumpoldskirchen
T: +43 (0)2252 600-0
office@klinger.kfc.at


www.klinger.kfc.at




Application	KLINGER Solution
BLAST FURNACE	
Blast Furnace Gas	KLINGER valve solution for blast furnace gas:
» Ambient temperature	» Valve type: ball valve
» Dirty media with solids	» Valve version: KHA or KHI
	» Sealing type: metal sealing
	» Material grade: carbon or stainless steel
Natural gas	KLINGER valve solution for natural gas:
» Clean media	» Valve type: ball valve
	» Valve version: KHA or KHI (certified gas version)
	» Sealing type: soft sealing




Application	KLINGER Solution
COKE OVEN	
Coke Oven Gas	KLINGER valve solution for coke oven gas:
» Hot & adhesive media	» Valve type: ball valve
» High operating cycles	» Valve version: KHA or KHI
» Quick valve closing	» Sealing type: soft sealing (alternatively metal sealing)
	» Material grade: carbon steel (no copper alloy parts allowed)
	» Recommendation: pneumatic actuator
	» Optionally: Double Block and Bleed
Nitric Acid (pipe cleaning)	KLINGER valve solution for nitric acid:
» Abrasiv media	» Valve type: ball valve
	» Valve version: KHA
	» Sealing type: soft sealing
	» Material grade: stainless steel



Application	KLINGER Solution
DIRECT REDUCTION	
» Ambient temperature	KLINGER valve solution for direct reduction:
» Dirty media with solids	» Valve type: ball valve
	» Valve version: KHA or KHI
	» Sealing type: metal sealing
	» Material grade: carbon or stainless steel
Natural gas	KLINGER valve solution for natural gas:
» Clean media	» Valve type: ball valve
	» Valve version: KHA or KHI (certified gas version)
	» Sealing type: soft sealing
	» Material grade: carbon steel



Application	KLINGER Solution
OXYGEN FURNACE	
Oxygen	KLINGER valve solution for Oxygen:
» Highly flameable gas	» Valve type: ball valve
» Quick closing	» Valve version: KHA or KHI (certified acc. BAM)
	» Sealing type: soft sealing
	» Material grade: carbon or stainless steel (oil & grease free)
	» Recommendation: pneumatic actuator



Application	KLINGER Solution
STEEL MAKING	
Muddy water (cooling process)	KLINGER valve solution for steel making:
» Dirty water with metal solids	» Valve type: ball valve
	» Valve version: KHA or KHI
	» Sealing type: metal sealing
	» Material grade: carbon or stainless steel
	» Optionally: drain cock



Application
GENERAL STEAM APPLICATIONS
Saturated steam (<300°C)
» Valve type: piston or ball valve
» Valve version: KVN, KHA or KHI
» Sealing type: soft sealing
» Material grade: carbon or stainless steel
Saturated steam (>300°C)
» Valve type: piston valve
» Valve version: KVN
» Sealing type: soft sealing
» Material grade: carbon or stainless steel

Application
GENERAL OIL APPLICATIONS
Oil with solids
» Valve type: ball valve
» Valve version: KHA or KHI
» Sealing type: metal sealing
» Material grade: carbon or stainless steel
Hydraulic oil clean
» Valve type: ball valve
» Valve version: KHA or KHI
» Sealing type: soft sealing
» Material grade: carbon or stainless steel