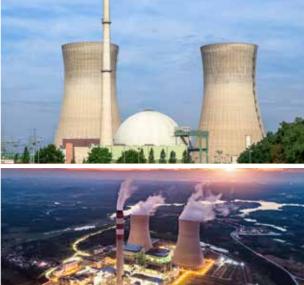




- » Ash Handling
- » Flue Gas to Stack
- » Dry / Super-Heated Steam
- » Wet / Saturated Steam
- » Induced / Forced Air
- » Water Treatment
- » Gas / Air Lines
- » Fuel / Oil
- » Cooling Water
- » Boiler Feed Water







GLOBAL LEADER

LOCAL PARTNER



KLINGER Power Generation - Select the correct product for the application.

VALVES - OUR RECOMMENDED RANGE

GGC - STANDARD GATE, GLOBE AND CHECK



KLINGER stock a wide variety of standard gate, globe and check valves.

SLURRY KNIFE GATE



A slurry Knife Gate valve is a component that utilizes a blade to cut through clogging or heavy slurries. Ideal for ash handling applications.

BUTTERFLY VALVE



Butterfly valves are used where space is limited. The pressure loss through a butterfly valve is small in comparison with the gate valve. Ideal for cooling water applications.

PLUG VALVE



Plug valves are valves with cylindrical or conically tapered "plugs" which can be rotated to control flow through the valve.

STEAM TRAPS



Steam traps are a type of sensory valve that eliminates condensate and non-condensable gases such as air from the system without allowing steam to escape.

LEVEL EQUIPMENT & GLASSES



KLINGER manufactures a wide variety of level equipment including sight glasses, level gauges, magnetic level gauges and associated products. These can be manufactured to customer specification

CONTROL COMPONENTS



KLINGER stock a wide range of control components including actuators, pneumatic semismart and smart positioners, solenoid valves and magnetic, micro and proximity switch boxes.

SAFETY EQUIPMENT



Safety devices are critical aspects of any fluid or gas system, used to prevent damage to industrial plant and equipment. KLINGER stock a full range of pressure safety valves and bursting discs.









AIR TORQUE

denadon SDD

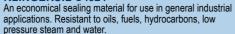


Linocoreal











KLINGERSIL C4400

A high quality, general purpose sealing material for use in many industrial applications. Excellent fluid swell and gas permeability properties. Suitable for use in vacuum applications.



FLANGE INSULATION SETS

Provide an effective seal and electrical isolation of flanges and equipment, to prevent galvanic corrosion and aid in the cathodic protection of the piping system.



KLINGER STYLE K10

KLINGERSIL C4400 - A high

quality, general purpose sealing material

Excellent fluid swell and gas permeability

STAINLESS STEEL BELLOWS

Metal expansion joints consist of a flexible

flanges or butt welds to allow for connection

bellow element with end fittings such as

A gasket with excellent high pressure

temperature and chemical resistance.

used in critical service. Very tolerant

of cyclic applications and misaligned

Metal expansion joints consist of a

flexible bellow element with end fittings

for connection to the adjacent piping or

centrifugal pumps, boiler feed water pumps,

valves in high pressure and temperature

applications. Wear resistant and gentle on

pump shafts, sleeves and valve stems. The

excellent heat transfer capabilities of carbon

yarns along with the lubricant used makes

KLINGER TOPCHEM 2003

KLINGER TOPCHEM 2005

for worn or damaged flanges.

A chemically resistant sealing material for strong acid

requirements at medium to low temperatures. Ideal

A chemically resistant sealing material for strong acid

applications with high mechanical and temperature

requirements. Ideal for use in aggressive chemicals

Provide an effective seal and electrical isolation of

and aid in the cathodic protection of the piping

flanges and equipment to prevent galvanic corrosion

and in the demineralising of boiler feed water.

FLANGE INSULATION SETS

and alkali applications with medium to low mechanical

such as flanges or butt welds to allow

KLINGER STYLE K466M - A universal packing for

this packing ideal for power generation plants.

STAINLESS STEEL BELLOWS

to the adjacent piping or equipment.

KLINGER MAXIFLEX GASKETS

flanges

for use in many industrial applications.

properties. Suitable for use in vacuum

Style K10 is a high quality economy grade packing manufactured from a combination of glass and acrylic varns, cross braided and impregnated with PTFE lubricant. KLINGER style K10 is an excellent general purpose packing. Ideally suitable for pumps, valve stem & reciprocating applications.



KLINGER MAXIFLEX GASKETS



A gasket with excellent high pressure, temperature and chemical resistance, used in critical service. Very tolerant of cyclic applications and misaligned flanges



KLINGERSIL C4430

A sealing material with high temperature resistance in steam, oils. fuels, hydrocarbons and other chemicals Suitable for potable water.

KLINGER STYLE K54

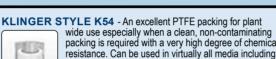


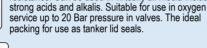
An excellent PTFE packing for plant wide use especially when a clean, noncontaminating packing is required with a very high degree of chemical resistance. Can be used in virtually all media including strong acids and alkalis. Suitable for use in oxygen service up to 20 Bar pressure in valves. The ideal

ULTRA CLAMPS

Permanent stainless steel pipe repair clamps.

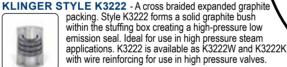
packing for use as tanker lid seals





ULTRA CLAMPS

Permanent stainless steel pipe repair clamps.





STYLE 396C - The most effectively designed wire reinforced graphite product on the market today for the sealing of fugitive fuel emissions. Style 396C meets or exceeds all requirements of A.P.I.589 and 607 tests as well as A.P.I. fire test for soft-seated quarter-turn



STAINLESS STEEL SPRAY

SHIELDS - Stainless steel spray shields are designed, for high pressure systems, to prevent injuries and damage to equipment by containing sprays resulting from



SAFETY SPRAY SHIELDS

Fabric spray shields are designed to prevent injuries and damage to equipmer by containing sprays resulting from leaks.

KLINGER STYLE K54 - An excellent PTFE packing for plant wide use especially

when a clean, non-contaminating packing is required with a very high

including strong acids and alkalis. Suitable for use in oxygen service

up to 20 Bar pressure in valves. The ideal packing for use as tanker lid

degree of chemical resistance. Can be used in virtually all media

PTFE BELLOWS - Our PTFE bellow range are used to

PTFE lined and other fragile pipework.

compensate for thermal expansion in pipelines, for the protection of

PTFE LINED PIPE - Combines the chemical resistance of

TREATMENT



WET &

SATURATED

STEAM

SIGRAFLEX

HOCHDRUCK

A high integrity, multi laminate

KLINGER STYLE K3222



KLINGER PRESSURE SEAL AND DIE-

KLINGER MAXIFLEX GASKETS

Offer a leak free sealing solution for high

performance valve applications which

A gasket with excellent high

pressure, temperature and

chemical resistance, used in

critical service. Very tolerant

INDUCED &

FORCED

AIR

HANDLING

FLUE

GAS

TO STACK

sealing material with

excellent thermal and

chemical resistance

Manufactured from

multiple layers of 316

of cyclic applications and

misaligned flanges.

STAINLESS STEEL BELLOWS

Metal expansion joints consist of a

flexible bellow element with end fittings

such as flanges or butt welds to allow

for connection to the adjacent

SUPER

HEATED

STEAM

POWER

GENERATION

BY

APPLICATION

piping or equipment.

FUEL

COOLING

WATER

GAS &

AIR LINES

BOILER FEED

WATER

require high pressure and temperature

FORMED GRAPHITE RINGS

A cross braided expanded graphite packing. Style K3222 forms a solid graphite bush within the stuffing box creating a high-pressure low emission seal. Ideal for use in high pressure steam applications. K3222 is available as K3222W and K3222K with wire reinforcing for use in high pressure valves.

KLINGER STYLE K466M - A universal packing for centrifugal



SEALEX® JOINT SEALANT Specially processed, 100% pure PTFE on

a roll, provides soft, highly compressible

gasket for longer life and trouble-free

pumps, boiler feed water pumps, valves in high pressure and temperature applications. Wear resistant and gentle on pump shafts, sleeves and valve stems. The excellent heat transfer capabilities of carbon yarns along with the lubricant used makes this packing ideal for power generation plants.

Stainless steel spray shields are designed, for

STAINLESS STEEL SPRAY



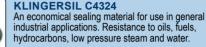
containing sprays resulting from leaks.

INSULATION JACKETS



SHIELDS

Are used in a variety of applications where energy saving and temperature maintenance control is



KLINGERSIL C4430

A sealing material with high

KLINGER MAXIFLEX GASKETS

A gasket with excellent high pressure,

temperature resistance in steam

oils, fuels, hydrocarbons and other

chemicals. Suitable for potable water.

temperature and chemical

resistance, used in critical

service. Very tolerant of cyclic

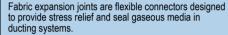
applications and misaligned

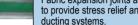


KLINGER MILAM PSS

An asbestos-free sealing material with tanged or pegged 316 stainless steel reinforced Mica. Outstanding thermal stability at temperatures of

FABRIC EXPANSION JOINTS







Effective sealing of Soot blowers is of the utmost importance. KLINGER manufacture and supply an effective mechanical packing arrangements that will reduce maintenance and ensure a safe operation.

KLINGER STYLE K7302DL



Exclusive to KLINGER. Highly abrasion resistant Style K7302DL is well suited for heavy duty pumping applications. Ideally suited for heavy slurries and abrasives in Ash handling plants. Other industries include: petrochemical, pulp and paper sugar and mining



BELLOWS

STAINLESS STEEL

Metal expansion joints consist

of a flexible bellow element

flanges or butt welds to allow

for connection to the adjacent

with end fittings such as

piping or equipment.



INSULATION JACKETS

Are used in a variety of applications where energy saving and temperature maintenance control is required

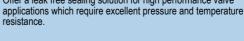


SEALEX® JOINT SEALANT Specially processed, 100% pure PTFE on a roll, provides soft, highly compressible gasket for longer life and trouble-free

FABRIC EXPANSION JOINTS Fabric expansion joints are flexible connectors designed to provide stress relief and seal gaseous media in ducting systems.



KLINGER PRESSURE SEAL AND DIE-**FORMED GRAPHITE RINGS** Offer a leak free sealing solution for high performance valve







forms a solid graphite bush within the stuffing box creating and K3222K with wire reinforcing for use in high pressure



A gasket with excellent high pressure, temperature and chemical resistance, used in critical service. Very tolerant of cyclic applications and misaligned flanges.

KLINGER MAXIFLEX GASKETS



STAINLESS STEEL SPRAY SHIELDS Stainless steel spray shields are designed, for high pressure systems, to prevent injuries and damage to



INSULATION JACKETS Are used in a variety of applications where energy saving and temperature maintenance control is

KLINGER STYLE K3222



a high-pressure low emission seal. Ideal for use in high pressure steam applications. K3222 is available as K3222W

PTFE with the pressure carrying capabilities of mild steel or stainless steel pipes. Liners provide for the safe handling of corrosive fluids.





KLINGER is the world's leading manufacturer and supplier of industrial gaskets, mechanical gland packing, fluid control products, pipe products, expansion joints, engineering plastics and field services. Established in 1886 as a family enterprise, the group of KLINGER independent companies now has a worldwide presence in over 60 countries, providing a range of products and services to customers in the manufacturing, infrastructure, marine, oil & gas, chemical, pulp & paper, energy, food & beverage, agriculture, mining and pharmaceutical industries. In addition, KLINGER provides professional technical support and advanced training solutions. Our professional services include bolt load and torque calculations, failure analysis, joint integrity management, on-site machining, valve reconditioning, on-line leak sealing, and shutdown support.

The power generation industry harnesses energy from fossil fuels, gas, nuclear fusion and hydro-electric schemes. In order to satisfy the growing demand for electrical power, KLINGER has the products, technical expertise, footprint and stock holding to service the power generation industry as a global leader and local partner. For technical information, contact our technical team on technical@klinger.co.za or contact one of our KLINGER branches nearest to you.

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All information is based on years of experience in production and operation of sealing elements. However, in view of the wide variety of possible installation and operating conditions one cannot draw final conclusions in all application cases regarding the behaviour in gasket joint. The data may not, therefore, be used to support any warranty claims. This edition cancels all previous issues. Subject to change without notice.

