UKL
A Neterwala Group JV

Efficient.
Together.

Company Profile

uniklinger.com

A Neterwala Group JV

Who we are?

Uni Klinger Limited
uniklinger.com

We are UKL, a Neterwala Group joint venture with Klinger AG in India.

Passionately customer-centric

We deliver customer-centric solutions combining innovation with world-class manufacturing, offering a range of engineered products for steam flow & control, condensate management and fluid sealing.

Our heritage - The Neterwala Group
neterwala.com

The Neterwala Group is a diversified business house with leadership in metallurgy, custom-engineered manufacturing for civil & defence aerospace, instrumentation & data services for oil & gas and mineralogy, environment and agriculture domains, comprising manufacturing locations in India and the United Kingdom.

40+ years of enabling industry reduction of carbon footprint

For over forty years, we have enabled process plants be safer, more efficient and sustainable. We are deeply committed in our efforts to combat climate change. All our products and solutions are targeted to save energy thereby reducing carbon footprints of our customers.

Dedicated to quality

Our three plants in Maharashtra, India conform to international product specifications, quality standards and approvals.

Partner with us

With you, we are

Efficient.
Together.

Deeply experienced across all process industries

Our core experience cuts across applications in oil refineries, chemical & petrochemical plants, pharmaceuticals, food & beverage, paper, textiles and tyre manufacturing.

Collaborative innovator

We innovate with our customers to develop products and solutions to meet their emerging process needs and partner closely with engineering & design consultants, original equipment manufacturers and turnkey contractors in meeting their clients' critical requirements.

Our Core Values

Touching Lives

We are passionately driven, customer centric, and aligned with our purpose of "touching lives of all stakeholders in society positively with technology".

Creativity

We foster diversity in our teams and apply multi-faceted expertise for innovation.

Collaboration

We actively engage with stakeholders, build authentic relationships of trust and co-create unique solutions.

Fluidity

We lead with connectedness, constantly learning, adapting and changing.

Care

We take pride in our social responsibility, ethics and conduct business with transparency.

Our Product Range

UKL soft-plus
UKL GPS

OUR PRODUCTS

Piston Valves

Our commencement of business was with the introduction of our flagship product - Piston Valves - in India launching an industry transformation. Significant savings in steam, fuel and carbon-di oxide emissions are achieved by replacing the use of traditional valves with our Piston valves that have bubble-tight shutoff valves conforming to Leakage class VI along with zero fugitive emissions. Piston valves are most suitable for steam and condensate applications as well as Thermic Fluid. Apart from this, our customers use Piston valves for Hot Water, Refrigerants and other critical media.

The UKL Piston Valve is a seat-less and gland-less valve. By virtue of its design, it can replace conventional types of globe valves or any other isolation valves, bringing distinct advantages. The piston valve works on the principle of resilient rings in conjunction with a metallic stainless-steel piston that moves vertically between the rings, giving an effective and durable seal. This sealing system delivers a bubble tight shut off and conform to Class VI leak standards.

The sealing rings, at the heart of the piston valve, can handle over 250 different media and UKL piston valves are ideally recommended for critical and hazardous media, including steam, heat transfer oils, acids, and gases.

Our Piston Valves are manufactured in:
Forged carbon steel / stainless steels sizes 15mm to 40mm
Cast Carbon Steel / Stainless Steels suitable to ANSI 150#, #300 & DIN PN 16/40 standards 50 to 200mm.

OUR PRODUCTS

Bellow Seal Valves

We added Bellow Seal Valves to our portfolio to provide zero-leak-to-atmosphere valve solutions. They are well suited for thermic fluid, corrosive chemicals, steam, and hazardous media. Bellow seal valves are ideal for applications requiring zero fugitive emissions for safety, environment protection and compliance with norms.

UKL Bellow Seal Valves, in gate or globe versions, incorporate metallic stainless-steel bellows which are flexible welded to the shaft, at the lower end, and to the body-bonnet flange at the other, thus effectively shutting off any leak / emission to the atmosphere.

Bellows incorporated in UKL valves are designed and manufactured, as per international standards, for performance, reliability, and long life.

UKL Bellow Seal Valves are available in:
Forged carbon steel – A105 – 15 to 40 NB
Cast carbon steel – ASTM A216 Gr, and
Weldable cast B-grade steel – 15 NB to 400 NB

OUR PRODUCTS

Steam Trapping Condensate Recovery Solutions

UKL offers a complete range of steam traps and accessories, serving the industry in energy conservation & condensate management.

Thermodynamic Traps

Thermodynamic traps work on the principle of difference in the velocities of steam and condensate. Thermodynamic Traps are used mainly on main steam distribution lines. Thermodynamic steam traps are compact and lightweight.

UKL thermodynamic traps are available in:
Materials of construction: AISI 420 / 743 Gr. CA40[UTD21/55] / ASTM A217 Gr. WC6[UTD62] / ASTMA 182 Gr. F22 cl3. [UTD120]
Sizes: 15, 20 and 25mm, and end connections: threaded to BSP/BSPT/ NPT, SW and BW, as well as Flanged to #150/300/600/900/1500.
Pressure ranges of 30 bar [UTD21], 55 bar TD55 [single and three orifices], 100Bar [UTD 62] and 250 Bar [UTD120]
Maximum operating temperature: 425 deg. C [UTD55], 550 deg. C. [UTD62/120]

Ball Float Traps

Steam used for Process heating in Process Equipment, coils, vessels, and heat exchangers, generate relative larger quantities of condensate post heat transfer. The condensate needs to be drained as soon as it is formed. The heat exchange areas need to be free from condensate in order to support efficient heat transfer and keep process timing in control. Ball Float traps are the most suitable traps for all kind of process applications as they discharge condensate instantly.

Working on the principle of buoyancy and steam – water density differences, ball float traps discharge condensate near steam saturation temperatures. Rising and falling condensate levels open and close the float trapping and discharging the condensate.

UKL Ball Float Traps are available in:
Sizes: 15 mm – 100 mm
End connections: Screwed / Socket weld ends, flanged ends to #150 / 300 / 600
Working Pressure up to 40 bar and Differential Pressure up to 32 bar

Inverted Bucket Traps

Like ball float traps, inverted bucket traps are suitable for trapping and discharging relatively large volumes of condensate. Based on the principle of buoyancy, rising condensate level fills and envelopes the Bucket causing it to sink and open the mechanically linked valve and discharges the condensate. Conversely, when the level of condensate drops steam enters the bucket, causing the bucket to float which, in turn, closes the valve and stops condensate discharge. UKL inverted bucket traps are robust, rugged, and made with corrosion resistant materials.

UKL Inverted Bucket Traps are available in:
Stainless Steel, Carbon Steel, Alloy Steel
Sizes: 15 mm – 65 mm, and end connections: Screwed/Socket weld ends, Flanged ends to #150 / 300 /600 / 1500
Working pressure up to 69 bar and differential pressures

Double Orifice Float Trap Module (DOFT-M)

Double Orifice Float Trap Module (DOFT-M) is a unique trap with two orifices, high discharge capacity and only one delta pressure for all process applications. DOFT-M has an in-built inlet isolation valve, outlet isolation valve, by-pass valve and integral strainer. This trap is provided with an SLR valve seat arrangement or Thermostatic vent for effective removal of air and other un-dissolved gases.

It has been specially designed by UKL to meet the frequently varying condensate loads in many applications. This trap efficiently handles different load condition like initial load, running load and peak load. It helps in avoiding opening of bypass valve, particularly in startup conditions.

DOFT does not require separate inlet/ outlet / bye-pass valves or strainer. All these are inbuilt making it an extremely compact solution for all process trapping applications.

The Compact Intelligent Trap Valve Station, (ITVS)

Our trap & valve stations integrate isolation valves, bypass valves with traps in compact modules, eliminating the need for fabricated modules and thereby saving time, cost and equipment space. This unit offers a compact one piece solution, with inbuilt piston valves and universal connection for steam traps, replacing the conventional complex and elaborate trap modules.

ITVS can be supplied with Thermodynamic or Inverted Bucket Trap combinations

UKL's Compact Intelligent Trap Valve Stations are available in:
End connection sizes of 15 and 20mm, and
Pressure Rating #300.
Integration with the Bitherm Smartwatch Web unit, for 24 x 7 performance monitoring for pressure, differential pressure, temperature and decibel levels.

Balanced Pressure Thermostatic Trap

Thermostatic Steam trap works on the difference in Enthalpy of Steam and Condensate. A capsule attached to a Bellow filled with precise amount of a Hydrocarbon, Expands and contracts in response to the rising/lowering of Enthalpy. Thereby shutting and opening the valve. Condensate has lower Enthalpy, causing the bellow to contract and the seat to retract which opens the valve and allow discharge of condensate. The reverse happens with the steam and its higher Enthalpy. These traps used largely on Tracing lines or Tank Farms where steam is supplied to maintain Temp / viscosity of the Oil.

UKL Thermostatic trap has a unique Simple design, Minimum number of components and where the Bellow is enclosed and protected thus ensuring long life for the Bellows.

Clean Steam Traps/Sanitary Traps

Pure Steam (Clean Steam) is a purest form of available steam whose condensate should meet all the parameters of Water for Injection (WFI). In general terms it is defined as the steam which is free from all chemicals & biological impurities.

UKL develops sanitary steam trap of balanced pressure design with SS316L bellows capable of releasing condensate within 1°C (2 – 3 °F) of saturated pressure. Clean steam Trap utilizes hygienic body clamp allowing disassembly for inspection or cleaning and is made up of entirely self draining design leading to no condensate retention.

Bi Metallic Steam Trap

UKL Bi-Thermostatic Bimetallic steam traps, with corrosion resistant regulator are unaffected by water hammer and superheated steam which having balanced pressure valve, independent seat and cone valve, and having an external adjustment device that can be used while the trap is functioning, for temperature and flow discharge. The trap also has an integral Y type Strainer.

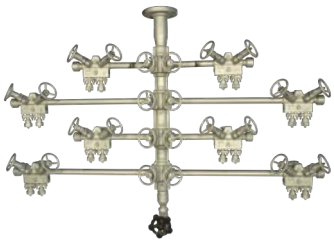
The most innovative of the bimetallic steam traps is the bi-thermostatic steam trap of balanced pressure that incorporates two antagonistic [Opposing] thermostats.

The thermostat on top consists of various bimetallic plate pairs guided by the plugs stem, and the Lower thermostat is formed by one bimetallic sheet that leans and is guided in its edges by the body of the steam trap.

The superior [Upper] thermostat expands with the increase in temperature pressing the plug in the closing direction; at the same time, the inferior [lower] thermostat arches itself allowing the movement of the valve in the same direction, effectively resulting in the progressive strangulation of the condensate flow, till it reaches its complete closure. When the condensate temperature decreases the thermostats act inversely, consequently offering a large flow section.

Steam Distribution and Condensate Collection Manifolds

Steam distribution manifolds facilitate the distribution of steam to various user points, through forged units with inbuilt piston valves. Similarly, condensate from these points can be collected through the condensate collection manifolds, consisting of a trap with associated isolation and by-pass piston valves. These are available in basic configurations of 4 stations / tracing lines, and multiples of 4 stations i.e. 8,12 and 16 tracing lines.



UKL's steam distribution manifolds consist of a manifold with a strainer, isolation piston valve at the inlet at the top, and a trap valve station at the bottom drain point. A condensate collection manifold comprises a manifold with intelligent trap valve stations at the individual tracing lines. These manifolds provide a very effective way of distribution and collection, allowing a clean environment devoid of clusters of pipes and equipment. They help improve aesthetic appearance of the plant, easy identification, and access to individual components for maintenance.

UKL's steam distribution and condensate collection are available in:
Pressure rating PN50.
Material of construction: Forged CS to A105,
Standalone units or Complete with inlet valve and trap assembly at the bottom [Steam Distribution] and complete Trap assembly [Condensate collection].

Pressure Reducing Station (PRS)

Steam circuits are designed for steam distribution at high pressure, as it has low volume, and actual use at low pressure, as it has high latent heat at low pressure. Pressure reducing stations (PRS) lower steam pressure at the point. Such stations comprise several individual components arranged in a modular form.

The UKL Pressure Reducing Station is optimally sized for a balanced techno-economic design. They are available:

in sizes from 15 mm to 200 mm.

with self-actuated pressure reducing valves as well as with external pneumatic control valves.

Condensate Recovery System

UKL Pressure Power Pumps (UPPPU) offer a cost-effective solution to recover hot condensate, a valuable resource in steam systems.

Energy Savings:
Catches condensate containing waste heat for reuse, reducing energy consumption.

Efficient Design:
Uses steam or compressed air to move condensate, avoiding limitations of electrical pumps handling hot liquids.

Low Maintenance:
Automatic operation with level-controlled steam/air intake and venting.

Durable Construction:
Skid-mounted assembly with various sizes and optional insulation for diverse applications.

OUR PRODUCTS

Jointing Sheets and Gaskets

Our range of compressed fibre, semi-metallic, graphite and expanded PTFE gaskets meet zero leak application requirements for all process media, temperatures, and pressures.

Compressed Fibre Jointing Sheets

UKL manufactures a complete range of non-asbestos compressed fibre gasket sheets. Every batch of production is tested 100% in house. All grades of UKL are feature 3 X A properties:

Anti-stick :
This eliminates the need of applying grease to the flange surfaces and results in faster and safer flange cleaning. It implies better sealing with replacement gaskets.

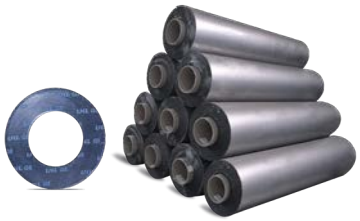
Anti-corrosion:
This finish reduces leachable chlorides at the contacts with flanges, thus reducing the corrosive effect of the flange material.

Anti-leak:
This property conforms to irregularities of flange face giving better micro-sealing.

UKL non asbestos gasket sheets are manufactured in metallic & non-metallic to cover a variety of applications in the industry. Grade X & Y sheets available as per BS7531 International standards and FDA approved grades are for food & pharma industry.

They are available in :
Sheet sizes: 1.5M x 2M, 1.5M x 4M, 1.5Mx6M
Thicknesses: 0.5mm to 6mm

Graphite Sheets



Due to its excellent chemical and thermal capabilities, graphite is used extensively in petrochemical and chemical industries for process duties and steam applications. Laminated graphite sheet materials are used as a replacement for asbestos-based materials. UKL graphite foil & sheets are expanded graphite foils manufactured from purified natural graphite flakes and feature high compressibility recovery, excellent air tightness, purity, and a high thermal conductivity. They are suitable for pressures up to 200 bar and 450 degree celsius temperature.

UKL graphite foils and sheets are manufactured as flexible graphite sheets, or with reinforcing materials, like tanged stainless-steel, stainless-steel foils and wire meshes to increase the tensile strength, load bearing capacity and improve handling characteristics.

UKL graphite products are available in:
Pure graphite tapes and slit coils in different sizes.
Width of 1M & 1.5M in roll of various length and thicknesses.

Expanded PTFE Sheets

UKL expanded PTFE sheets are manufactured with pure multi-directionally expanded polytetrafluoroethylene that is PFOA free. They present excellent corrosion resistance with superior creep resistance and sealing ability creating a high-grade gasket material for a wide range of applications. They can be used for applications where just minimal surface pressures are possible. They possess universal resistance against common chemicals, except melted alkali metal and fluorine at liquid and gas states.

UKL expanded PTFE sheets meet FDA requirements and are also suitable for oxygen applications.

Cut Gaskets

UKL offers standard and custom-made gaskets of all sizes and material – compressed fibre, expanded PTFE and graphite. We manufacture a complete range of standard gasket as per ANSI and DIN standards. These gaskets are available in Full Face as well as Raised Face Flanges. We ensure the best quality and dimensional stability of our ready cut gaskets.

Semi-Metallic Gaskets

Our portfolio of semi-metallic gaskets includes spiral wound, kammprofile and metal-jacketed gaskets. They are made with metal rings of different materials – stainless steels, inconel, hastelloy, or other exotic alloys and with various filler materials - graphite, PTFE, mica or compressed fibre.

Kammprofile gaskets are recognized as a problem solver for heat exchangers, large vessels, and equipment that experience excessive movement due to thermal expansion. Kammprofile gaskets consist of a sealing core metal with or without a guide ring. The sealing core is a solid metal gasket with concentric serrations on both sealing surfaces and faced with soft material such as flexible graphite, EPTFE configuration depending on operating conditions.

UKL Metal Jacketed gaskets custom-built and specially designed for heat exchangers, pressure vessels, flue stacks and boilers etc. They are manufactured to suit API, ASME, DIN & BS standards. All gaskets are custom built to provide accurate & easy assembly of pass partition bars into tube sheet grooves.

UKL manufactures spiral wound gaskets from 15mm to 3500mm ID as per international standards such as API601, ASME 16.20, ASME B16.47 A& B series, DIN, British standards, and JIS. UKL spiral wound gaskets are subjected to compressibility & recovery test as per IS 7719 & seal ability test are conducted at ambient / elevated pressure & temperature.

Gland Packing

UKL manufactures a wide variety of combinations of non-asbestos gland packings in graphite, teflon, aramid, carbon and glass fiber for several applications. All packings are available in braided rope form (standard / custom sizes) or ring form (custom sizes). They are suitable for pumps, valves and other static or rotating equipment.

UKL offers non-asbestos gland packing from sizes 3mm sq to 25mm sq. Higher sizes are also available on request.

OUR PRODUCTS

Safety and Control Valves

In technical collaboration with AST Spa, Italy, we make safety valves and control valves for critical applications.

Pressure Relief Valve for Steam Boilers

The AST - UKL direct spring-operated pressure relief valves are designed to protect against excess pressure in steam boilers, according to ASME Section I and are approved according to IBR 1950 regulation. Their double blow-down rings guarantee the over-pressure and the reseating-pressure required. A special design of the disc eliminates distortion due to thermal stress for maximum seat tightness. They are available with open or closed bonnet.

Specifications:

Orifice Sizes: From “D” to “T “
Set pressure range: up to 153 bar.
Temperature range: up to 566 °C.
Overpressure: 3% or 0.14 bar.
Blowdown: 4% or 0.28 bar.
Size inlet & outlet: from NPS 1 to NPS 8 & from NPS 2 to NPS 12
Inlet flanges ratings: up to Class 2500.

Safety Relief Valve

AST - UKL range of spring loaded conventional and balanced safety relief valves is specifically designed for overpressure protection of unfired pressure vessel (ASME Section VIII application). Sizes and orifices are from 1” D 2” to 8” T 10”, face to face dimensions are in accordance to API526. They are available in set pressure range is from 0.4 Bar to 414 Bar and for pressure ratings up to 2500#. Different material of construction can be selected, depending on the application.

Specifications :

Media: Gas, Steam and Liquid.
Orifices: from "D" to "T" in accordance to API 526; intermediate orifices (K2, P2, Q2, R2) and orifices up to 1520.5 cm² available
Set pressure range: From 0.4 bar to 414 Bar.
Temperature range: From -267 Deg C to 715 Deg C.
Over pressure: Gas 10%, Steam 5% & 10%, Liquid 10% & 21%.
Blowdown: Gas and Steam 5% to 7%
Materials: Carbon Steel, Alloy Steel, Hastelloy, Monel and other material upon request.
Options: Bellows, Flushing nozzles, Lifting lever, Test gag, Finned Bonnet, Limit Switch, Resilient or Hardened seat.

Control Valves

The valves type 8407 have a non-invertible globe body single seat and top guide. Valves are designed according to ASME B16.34 standard. The seat is screwed on the body. These valves are suitable for a broad variety of applications. Seat and metal plug are available in stellite facing on request.

Actuator :
The valves may be equipped with pneumatic spring diaphragm, Piston single or double effect pneumatic actuators can be supplied for special shutoff pressures and electrical actuators.

Accessories :
The valve and actuator may be equipped with any accessory, Such as pneumatic to digital Positioner, Air filter regulator, stem flushing, solenoid valve, Limit switch, position transmitter, lock-up valve, booster, top / side mounted hand wheel etc, ask for details.

Sizes :
From 1/2'' to 10''

Pressure ratings :
ANSI 150 #, 300 # and 600 # , Higher ratings are available on request.

Temperature Range :
-196°C to 538°C.

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Partner with us for **safe, efficient,** and **sustainable** industry.

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