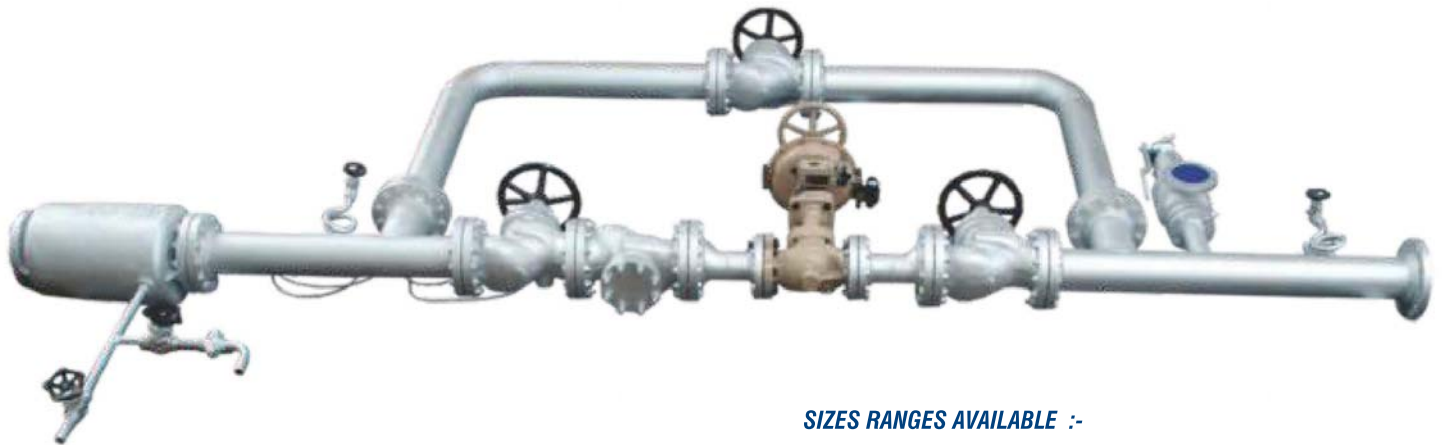


## UNIKLINGER PRESSURE REDUCING STATION:-

Steam has more latent heat of evaporation at lower pressure and for a given process, it is ideal to use steam at lowest possible pressure when the transfer is of indirect type. The advantage of using steam as a heat transfer media in processes apart from it being cheap and reusable is that controlling of one parameter allows other parameters to be controlled automatically. When water is heated it leads to an increase in its temperature, corresponding increase in steam pressure. Its sensible heat and its total heat also increases but a reduction in latent heat and its specific volume. However for efficient steam distribution network it is recommended to distribute steam at high pressure, reduce steam pressure near the equipment and use it at lowest permissible pressure. Steam should be distributed at high pressure as it has low volume and impacts the inventory cost. At the same time steam has higher specific volume at low pressure. Steam should be used at lowest possible pressure that depends on the process temperature to be achieved. This reduction of pressure is achieved by the assembly of different products, known as Pressure Reducing Station. The UKL UPRS are designed to provide consistent source of low pressure steam from available high pressure pipeline.



All the components, valves, moisture separators, its drain trap modules, strainer etc are manufactured by UKL and provided as a complete Pressure Reducing Station to give optimum results for effective steam utilization.

The UKL has developed unique software for correct and accurate sizing of PRS valves and components, giving the precise desired pressure reduction within the specified flow parameters.

The UKL pressure reducing station is optimally sized to ensure a balanced techno-economic design . Use of Klinger Piston Valves for isolation will eliminate valve passing and leaking problems

## MAIN FEATURES :

- Pre-fabricated complete assembly, ready to install & operate, with all relevant approvals & certifications
- The UKL PRS is sized optimally to ensure a balanced techno-economic design for each & every specified application/s
- Sized to give the desired flow rate even in varied inlet conditions
- Highly efficient – Baffle type moisture separator included in UKL PRS to safe guard the PRV
- Higher flow rangeability of 1 : 40
- Both IBR certified and Non-IBR PRS available
- Proper design – leads to achieving constant specified downstream pressure
- We offer hardened trim in control valve for all PRS for longer service life
- Both variants available – PRS with **electro-pneumatic Control valve and PRS with self-acting PRV**

## SIZES RANGES AVAILABLE :-

Inlet from 25 NB

Outlet 25 NB to 400 NB

Higher Size UPRS also available

## MATERIAL OF CONSTRUCTION:

Carbon Steel | Alloy Steel

## END CONNECTIONS:

Flanged End Class #150/#300 as per ASME B16.5

Higher pressure class also available

## OPTIONAL:-

IBR/ Non-IBR

Drain trap modules

# Pressure Reducing Station UPRS

## PARAMETERS FOR DESIGN OF UPRS

Inlet Pressure (Max.) & (Min.) in kg/cm<sup>2</sup>  
Outlet Pressure (Max.) & (Min.) in kg/cm<sup>2</sup>  
Steam Flow Rate (Max.) & (Min.) in kg/cm<sup>2</sup>

## HOW TO ORDER:-

Always specify the above mentioned parameters along with respective enquiries.

## For Example :-

Based on application, please specify,

### - Inlet pressure

Maximum (kg/cm<sup>2</sup>) & Minimum (kg/cm<sup>2</sup>)

### - Outlet pressure

Maximum (kg/cm<sup>2</sup>) & Minimum (kg/cm<sup>2</sup>)

### - Flow rate

Maximum (kg/hr) & Minimum (kg/hr)

**UKL UPRS : 40 NB x 65 NB x 100 NB**  
(inlet) (PRV) (outlet)

## The Saving Potential in UKL UPRS :-

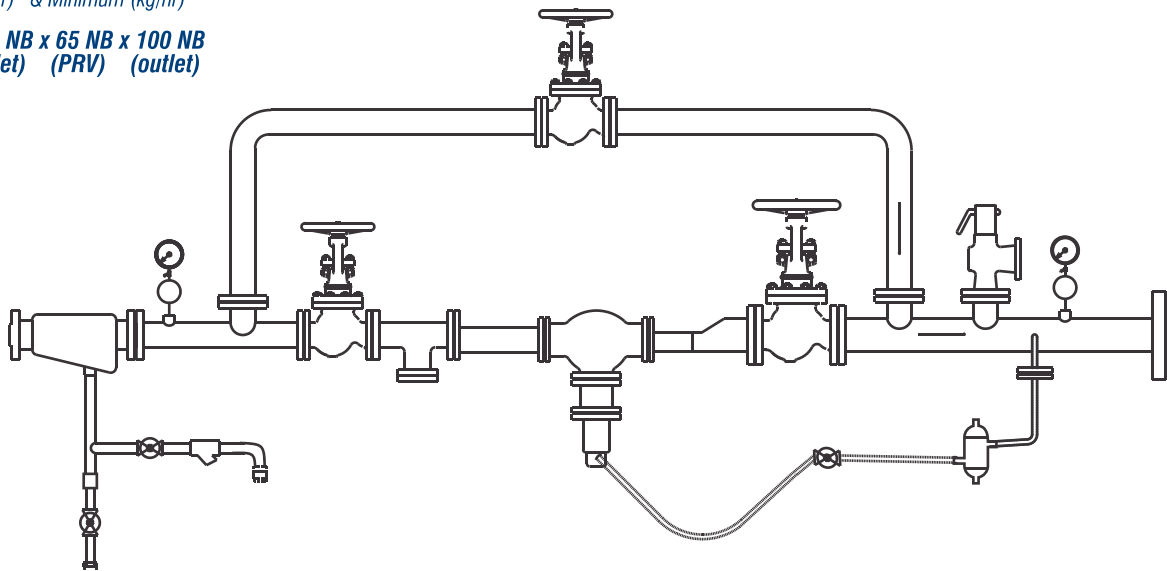
Suppose saturation steam is used at 10 bar in a radiator coil where air is heated to 90° C. If steam at 3 bar is used in this coil using UKL UPRS, the saving potential are-

**Latent Heat at 10 bar(g) : 478.5 Kcal/Kg**

**Latent Heat at 3 bar(g) : 509.6 Kcal/Kg**

**Possible savings : Over 6.5% in steam consumption**

**Possible payback of under 6 months.**



Other Products : 

Cast / Forged Steel Piston Valves, Bellow seal valves, High Pressure valves (Gate/Globe) , Strainers – “Y” Type, ITVS Steam Traps (Thermodynamic, Thermostatic, Ball Float Traps and IBT), Pressure Reducing Station, Condensate Recovery Products. Level Gauges (Reflex, Transparent, Bicolor), Sight Glass, Hot Water Generation System, Safety and Relief Valves.

**FSD Products :** Compressed Asbestos / Non Asbestos Fiber Sheeting / Cut Gaskets, Spiral Wound Gaskets / Gland Packing

In view of technical progress designs and dimensions are subject to change without notice.



**UNI KLINGER LIMITED**

A joint venture of the Neterwala group of companies and KLINGER AG, Switzerland.



**HARSH ENGINEERING SALES & SERVICE PVT. LTD**

**Only Authorized Dealers for UNI KLINGER products, Telangana**

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