



Elevating Efficiency Through **Advanced Engineering & Precision Valves**



www.vk-utam.com

A HISTORY OF QUALITY A COMMITMENT TOWARDS INNOVATION

Since our inception in 1988, UTAM has evolved with a strong reputation as one of the leading manufacturers of flow control products, in both the Indian and International markets.

UTAM is now in its third decade of operations. To serve clients better, UTAM delivers its products through three mainline brands viz. UTAM, VTM and FEDREL. We address requirements across all industry sectors and manufacture and market a wide variety of Industrial Valves viz Globe, Piston, Bellow, Gate, Ball, Check, and Butterfly Valves and a wide range of Flow Meters.

This catalogue intends to showcase the company's Products and Solutions for Process Control. Steam & Condensate Systems.

TOP-NOTCH PRODUCTS DELIVERED THROUGH EXPERTISE ACROSS INDUSTRIES

All manufacturing facilities of UTAM are ISO 9001:2008 certified, with special care taken to ensure a consistency of production, testing, quality and availability. One of the facilities of UTAM is dedicated towards manufacture of Products for Steam and Process Control Applications and is IBR Approved.

UTAM continues to expand its range of offerings and address the demands of industrial applications, while staying true to its philosophy of Quality, Safety, Ease of Operations and Simple on-Line Maintenance.

The low cost of ownership and the promise of long-term reliability has made our brand, the preferred partner for clients from diverse industries.

OUR VISION

"Leading the Way to Precision and Efficiency: Our vision is to be the top provider of innovative valves and industrial utilities worldwide. With cutting-edge technology, exceptional engineering, and unwavering customer focus, we optimize processes, conserve resources, and build a sustainable future."

OUR HISTORY

A LEGACY OF EXCELLENCE, SPREAD OVER 30 YEARS

1988

Incepted as UTAM to manufacture bronze and copper alloys.

Manufacturing goes up a level;
New facility with modern machines and testing set.

1995

1996

Meets ISO Standards.

Diversifies into ferrous valves. Gets IBR certification.

1998

2003

VTM valves comes into force.
Ventures into exports with distribution network in Middle East.

Flow meter brand FEDREL was introduced.

2007

2008

First major supply of marine valves to shipping companies. Tie-ups linked with global valve brands for contract manufacturing.

FEDREL launches complete range of Woltman type flow meters.

2009

2011

Electromagnetic, Ultrasonic and Vortex flow meters launches under FEDREL.

Begins india operations for organized projects.
Foundry certified to Pressure Equipment Directive (European certification)

2013

2014

Commences manufacturing of valves using super alloys like AL-BRONZE, NI-AL-BZ ETC. Balancing valves and BTU meters launched to offer complete products range for HVAC applications.

API certification further strengthens position in the oil & gas industry.

2015

2018

Our New venture UTAM Synercon establishes its operations to cater to the process industry providing Solutions in Steam Systems & Other Utilities

INFRASTRUCTURE

THE PILLARS OF OUR SUCCESS



Design

At UTAM our penchant for innovation reflects in our efforts to constantly develop new products and also explore effective ways to meet customer demands in terms of product reliability, longevity and lower energy bills. To help foster innovation across all levels, we have invested heavily in:

Deploying state-of-the art design and simulation techniques such as specialized 3D modeling software along with FEA (Finite Element Analysis) and CFD (Computational Fluid Dynamics) tools.

Employing skilled Design Engineers with the right kind of expertise and mindset necessary for innovation.



Foundry

To maintain a strong grip over quality control and on-time delivery of our products, we at UTAM have installed Modern Induction Furnaces as well as Shell & Sand Moulding techniques. These installations have facilitated in producing castings of premium quality, which helped us secure the prestigious PED (Pressure Equipment Directive) certification.



Manufacturing

UTAM has two modern factories spread over 11,000 Square Meters, in the city of Jalandhar, in Punjab, India. The factories employ a skilled workforce of over 300. The latest CNC machining centers, horizontal boring machines, specialized welding machines, spray paint and powder coating facilities and cranes used for handling large sized products, help the diligent workforce achieve the ultimate target of customer satisfaction. Globally accepted processes are established in the factories to ensure that products conform to various International standards and customer requirements, while adhering to Health, Safety and Environment practices.



Testing and Calibration

At UTAM, our physical testing and chemical analysis labs are equipped with modern machinery to ensure that the metallurgical properties of all the raw materials are in strict compliance with the highest standards and codes.

For example, each and every valve and flow meter of brand UTAM is tested completely for its functionality before being sent out to customers. Pneumatic testing is conducted on conventional and Programmable Logic Controlled test benches, capable of testing valves up to #2500 pressure rating. We have a specialized test bench to test safety valves up to size 250 mm and 150 bar set pressure. The Fedrel manufacturing facility within UTAM boasts of testing and calibration facilities for flow meters from sizes 15mm to 400mm. The instrumentation used on these test benches are calibrated by NABL accredited Test Laboratories. We have a strict calibration program to ensure that all these instruments are re-calibrated regularly.



Quality First, Quality Always.

Customer satisfaction is what drives us at UTAM. We know that complete customer satisfaction can only be achieved by adopting a no-compromise approach towards quality.

Quality Assurance:

UTAM Products are produced using process and procedures that comply with ISO 9001 and API Spec Q1 standards. We check for compliance with these set standards at every step, right from Procurement of raw materials through to Production, Welding, Assembling, Testing, Packaging and Marking of finished valves. The orders are reviewed by the Engineering and QA (Quality Assurance) departments and special requirements are incorporated in the Work Order issued for each order. The (Quality Assurance) departments also maintain the calibration and gauge control system as well as train and qualify workers to achieve quality workmanship. Copy of these records can be provided on request.

Quality Control:

The Quality Control department deals with all aspects related to quality, from receiving of Raw Materials to control of Machining, Welding, Testing, Nondestructive Examination, Assembly, Pressure Testing, Cleaning, Painting, and Packaging.

Pressure Testing:

Each Valve is pressure tested in accordance with relevant standards or customer requirements, as applicable.

OUR RANGE OF PRODUCTS FOR PROCESS CONTROL & STEAM

BOILER MOUNTING & CONTROLS

Water Level Gauges, Feed Check Valves, Blow Down Valves, Fusible Plug, Safety Valves

PIPELINE ACCESSORIES

Piston Valves, Bellow Sealed Stop Valves, Globe Valves, Moisture Separators, Disc Check Valves, Strainers, Sight Glass.

CONTROL SYSTEM

Electric & Pneumatic Actuated Valves, Pressure Reducing Valves, Pressure Control Valves, Temperature Control Valves & Safety Valves, Automatic Blowdown Control.

STEAM TRAPS

Thermodynamic Steam Traps, Inverted Bucket Steam Traps, Ball Float Steam Traps. Concise Ball Float Steam Traps, Concise Thermodynamic Steam Traps, Eject Condensate Traps.

ENGINEERED & PACKAGED SOLUTIONS

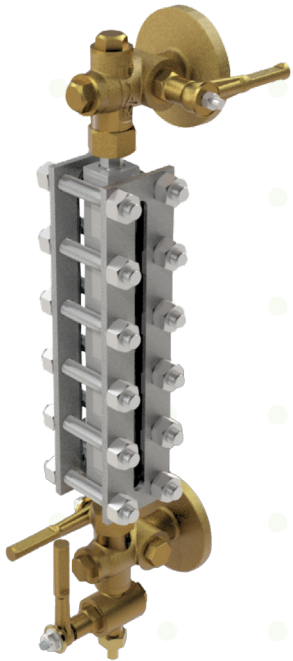
Pressure Reducing Stations, Pressure & Temperature Control Solutions, Hot Water Skids.

FLOW METERING

Vortex Flow Meters, Electromagnetic Flow Meter

CONDENSATE RECOVERY SOLUTIONS

Condensate Recovery Pumping Skids, Flash Vessels & Atmospheric Deaerator Heads.



Reflex Water Level Gauge

UTAM Water Level gauge is used to determine the water level in a boiler. In the absence of this device, it is difficult to measure the level of water stored in the boiler.

Sizes up to 20mm
Pressure Rating up to PN-20
Body Material- S.G Iron,
Cast Carbon Steel/Bronze

Feed Check Valves

UTAM Check Valve Permits the liquid to flow in only one direction, preventing the process flow from reversing. They are uni-directional valves.

Sizes up to 300mm.
Pressure Rating ANSI 600#
Cast Carbon Steel, Forged Carbon Steel.



Blowdown Valves

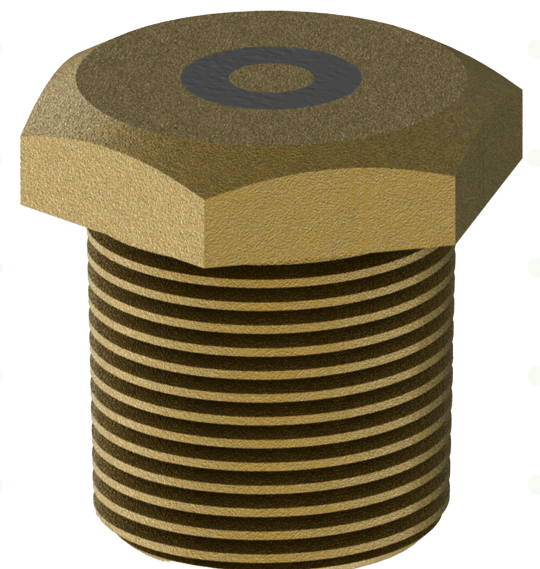
UTAM Blowdown Valves are used to maintain the Boiler feed water TDS within Permissible limits to avoid Scale formation on the boiler internals, metal corrosion & carryover.

Sizes up to 50mm
Pressure Rating ANSI 300#
Body Material - Cast Carbon Steel, Bronze.

Fusible Plug

UTAM Fusible Plug are used in Steam Boilers to enhance the safety during operation. It's working depends upon the water level in the Boiler shell. When the water level goes below the fusible plug, the lead present inside the Plug gets melted because of steam and the water from the boiler shell comes out and wets the flue gases and even disrupts the combustion thereby protecting the Steam Boiler from any mishap.

Sizes up to 50mm
Pressure Rating ANSI 300#
Body Material- Bronze





Thermodynamic Steam Trap

UTAM Water Level gauge is used to determine the water level in a boiler. In the absence of this device, it is difficult to measure the level of water stored in the boiler.

Sizes up to 25mm

Pressure Rating ANSI 300#

Body Material- Stainless Steel, Cast Carbon Steel.

Inverted Bucket Steam Trap

UTAM Inverted bucket traps works on the principle of the density difference between steam and water to drain condensate. An inverted bucket floats in condensate that surrounds the bucket. As the bucket moves up and down in the condensate, a linkage connected to the bucket closes or opens a discharge valve allowing the condensate to discharge.

This trap always requires enough water in the trap body to act as a seal around the lip of the bucket.

Sizes up to 50mm

Pressure Rating ANSI 150#

Body Material- S.G Iron





Concise Ball Float Steam Trap Module

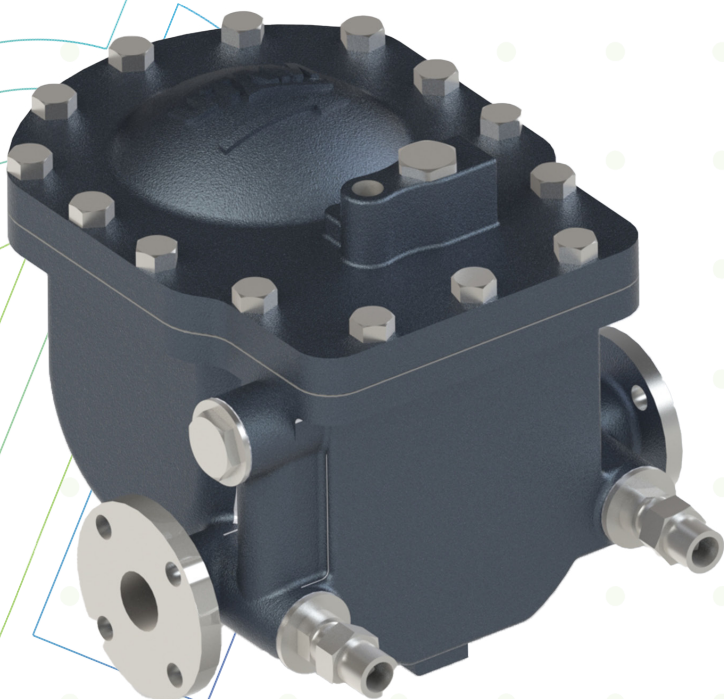
UTAM Concise Ball float Steam trapping module is a compact solution for condensate removal from process applications. The module consists of inbuilt strainer, inlet, outlet & by-pass isolation valves, check valve housed in the trap body.

Sizes: Upto 25NB
Pressure rating: ANSI 150#
Body Material; S.G. Iron and Cast Steel

Ball Float Steam Trap

UTAM Ball Float Steam traps operate on the density principle. Condensate fills a float chamber, causing the float to rise, and through a lever mechanism pulls a valve off its seat and opens the orifice of a discharge valve. The opening and closing of the seat provides modulation to handle light or heavy condensate loads. The discharge valve is under condensate water. The water forms a seal that prevents live steam loss.

Sizes up to 50mm.
Pressure Rating ANSI 150#
Body Material- S.G Iron, Cast Carbon Steel.



Eject Condensate Trap (ECT)

UTAM Eject Condensate Traps are used to remove condensate effectively from low pressure steam applications where there is a possibility of stall conditions occurring due to process temperature control. The ECT utilizes Steam or Compressed air for operation.

Pressure Rating ANSI 150#
Body Material - Cast Carbon Steel/Stainless Steel.



Concise Thermodynamic Steam Trap Module

UTAM Concise Thermodynamic Steam trap modules are used for Steam main drain piping. The compact design avoids piping fabrication. The module consists of inbuilt strainer, inlet & by-pass isolation valves, trap test valve housed in the trap body.

Sizes: DN 15, DN 20

Rating - ANSI 150#

MOC. Cast Steel, Stainless Steel

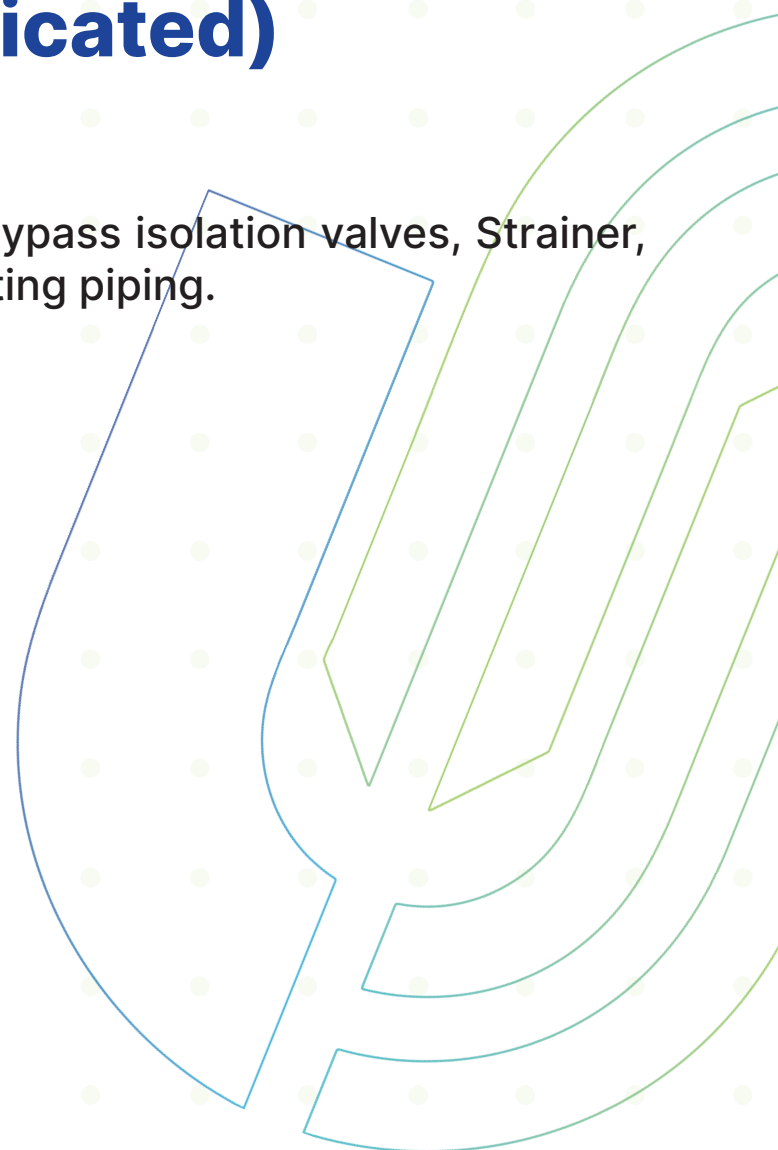
Ball Float Steam Trap Module (Fabricated)

UTAM Fabricated Ball float steam trap module consists of Inlet & Bypass isolation valves, Strainer, Ball float steam trap, Sight glass, Disc check valve and interconnecting piping.

Sizes up to 50mm

Pressure Rating ANSI 150#

Body Material- S.G Iron, Cast Carbon Steel.





Control Valves

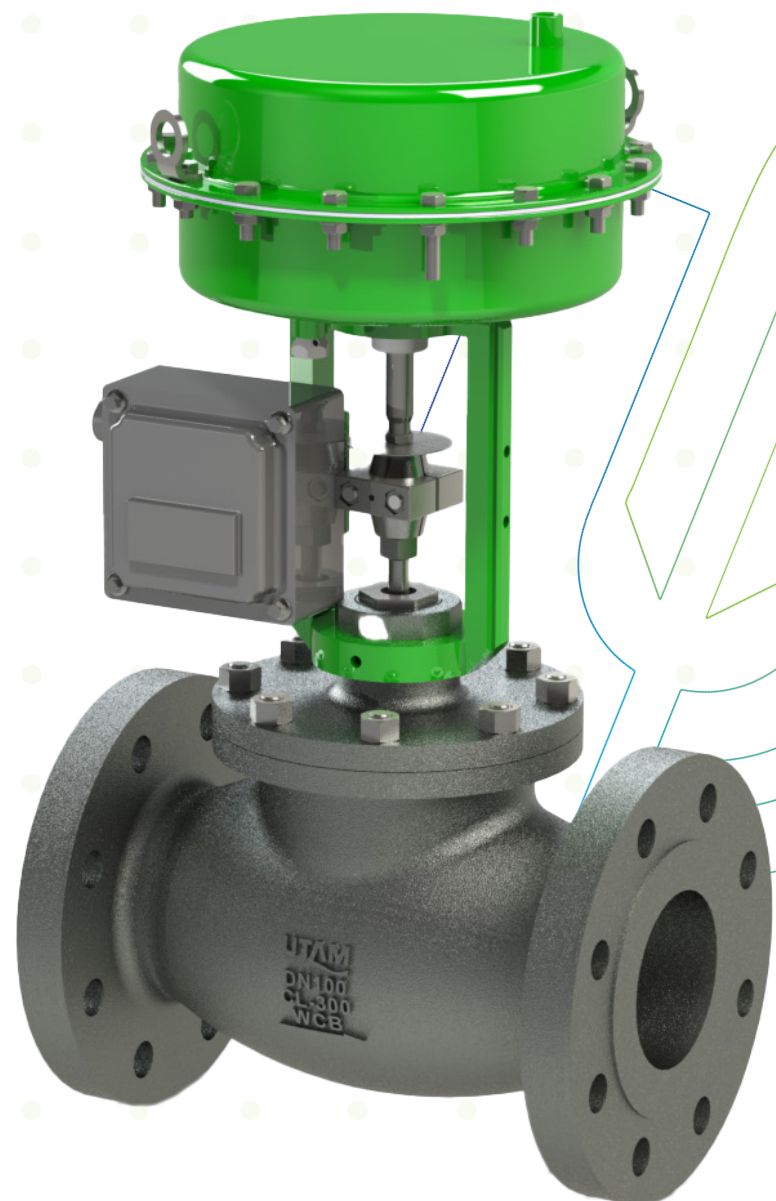
UTAM offer wide range of control valves for Pressure, Temperature and Flow control. These can be offered as stand alone control valves and also as control stations with the necessary accessories.

Control Valves

Sizes upto - 300 NB

Pressure rating - ANSI 300#

Body Material - Cast Carbon Steel/Stainless Steel.



Pressure Reducing Valves and Engineered Stations.

UTAM Pressure reducing valves and Bellow reducing valves are used to lower steam pressures to desired parameters from high pressure. These are used enhancing the steam quality to achieve accurate process parameters. They add to efficiency and safety of the steam system. Our Pressure reducing stations can be used for Steam, Air and water applications.

Sizes - 15 NB to 150NB

Pressure Rating upto PN 40 & ASA 300#

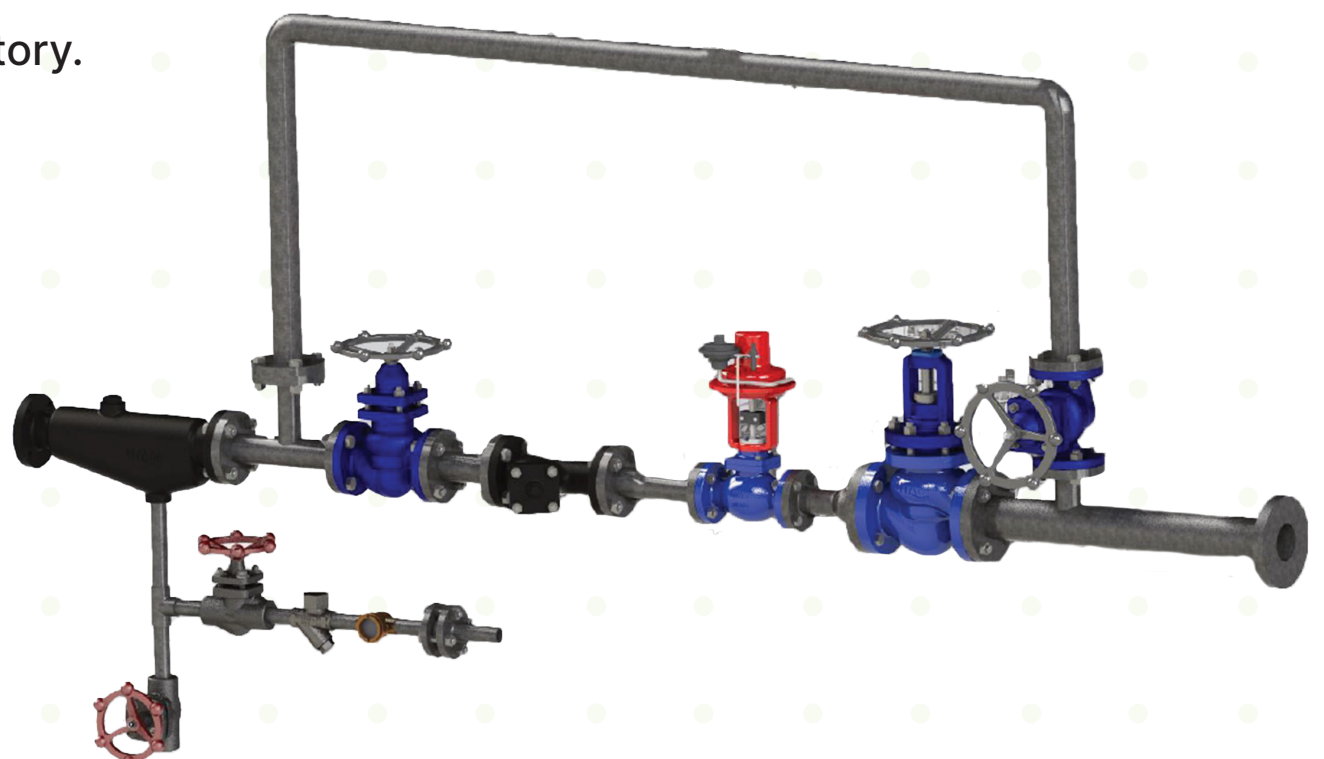
Body Material - Bronze, Stainless Steel, S.G Iron, Cast Carbon Steel



UTAM Pressure Reducing Station (PRS)

Why we need a pressure reducing system?

- Many plants use steam at different pressures in different applications, within their process.
- Pressure Reduction Stations operate on liquids, vapors and gaseous media. Often, the media is transported at higher pressure because it is efficient and economical. The Pressure Reduction system allows use of equipment suitable for lesser pressure rating, making the system economical to build and maintain.
- Our PRS are supplied with all required accessories and safeties.
- The station is pre fabricated and can be directly installed in your piping systems.
- The station is IBR approved from factory.



Piston Valves

UTAM Piston Valves are seatless and glandless valve. At the heart of the piston valve are the piston and the sealing rings. A burnished piston, sealed against stainless steel reinforced graphite, achieves a leak proof shut off.

Sizes up to 200mm

Pressure Rating ANSI 900#

Body Material - Carbon Steel/Stainless Steel



Safety Valves

UTAM Safety Valves are used on pressure vessels viz, Boilers, Air receivers, Reactors etc to relieve excess pressure. Our Safety valves are reliable on high pressure applications thereby ensuring that there is no equipment failure and in turn taking care of Human Safety. We offer Single post Spring operated safety valves and Full lift Safety Valves.

Size 200 NB

Pressure Rating - ANSI 600#

Body Material - Bronze, S.G.Iron, Cast Carbon Steel.



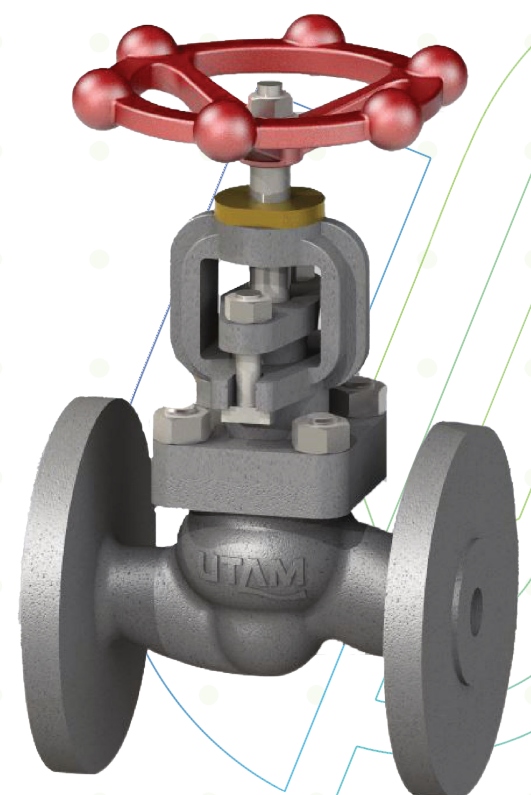
Globe Valves

UTAM Globe Valves Are used for Isolation purpose on steam and hydraulic application.

Size - 300 NB

Pressure Rating - Tab H, ANSI 300#

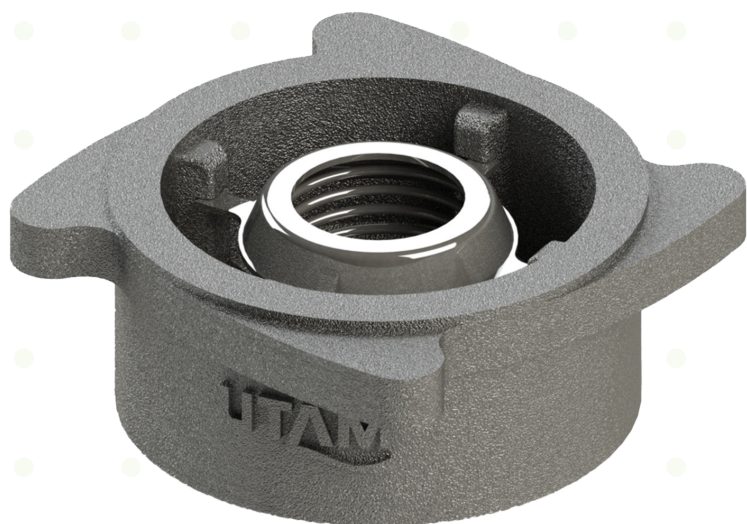
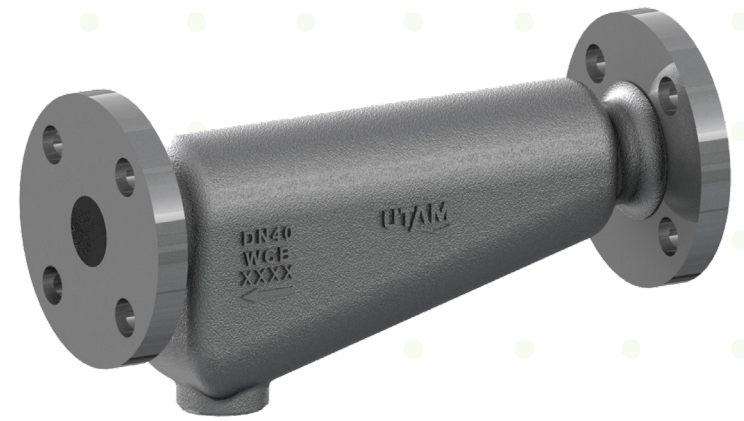
Body - Bronze, S.G Iron, Cast Carbon Steel/Stainless Steel.



Moisture Separators

UTAM Moisture Separators remove moisture from the steam. Due to high density, the condensate droplets settle down and drain from the draining point.

Sizes up to 150mm
Pressure Rating ANSI 300#
Body Material- S.G Iron, Cast Carbon Steel.



Disc Check Valve

UTAM Disc Check Valve spring and disc construction allows the valve to open at the slightest pressure differential, and the valve seat provides an extremely tight seal. The valve closes at the instance back pressure exceeds the line pressure.

Sizes up to 100mm
Pressure Rating up to CL-300
Body Material - Stainless Steel

Strainers

UTAM Strainers are used for filtering or separation of solid matter and to protect the downstream equipment (valve seating) from damage.

Sizes up to 200mm
Pressure Rating ANSI 300#
Body Material- Bronze, S.G Iron, Cast Carbon Steel.



Sight Glass

UTAM Sight Glass is used for a visible indication of condensate flowing in the pipeline. It helps to identify steam leakage from steam traps.

Sizes up to 50mm
Pressure Rating ANSI 300#
Body Material- Bronze, S.G Iron, Cast Carbon Steel.

Flash Vessel

UTAM Flash Vessel Allow Steam from high pressure condensate to separate to low pressure steam. This low pressure flash Steam has suitable latent heat which can be used for low pressure steam applications or can be recovered back to the boiler feed water tank.

Sizes up to 300mm
Body Material - Carbon steel



Skid Mounted Mechanical Pump

UTAM skid mounted mechanical pumps are designed to recover condensate using steam and compressed as motive they do not need any level switches or electric power hence are safe to operate. Condensate is pumped at high temperature without any cavitation problems there by reducing maintenance.

Sizes 25 NB to 80 NB
Body Material - S G Iron & Cast Carbon Steel



Atmospheric Deaerator Heads

UTAM Atmospheric Deaerator Heads are a low cost solution for deaerating boiler feed water at atmospheric pressure. Deaerator head mix hot & cold stream coming from process, Liberate oxygen & other gases there by reduce usage of boiler water chemicals.

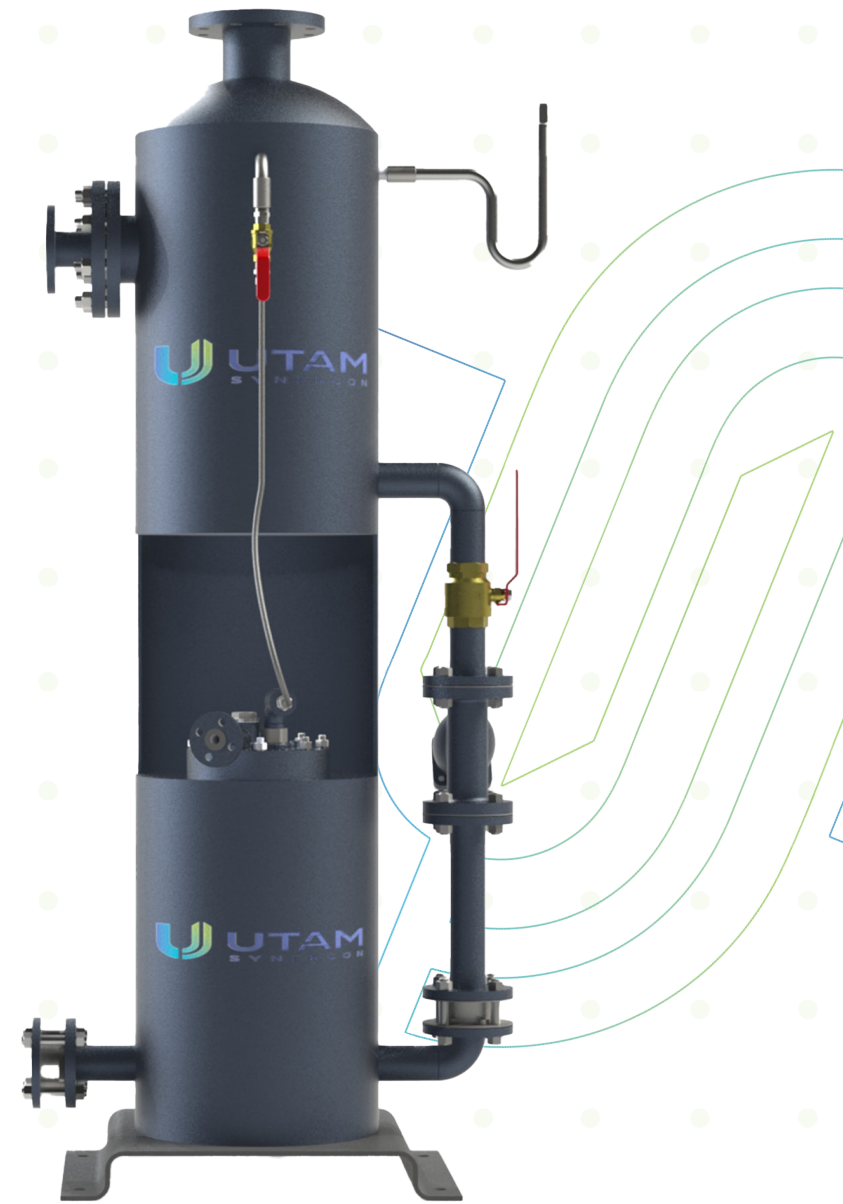
Size 250 NB
Body Material - Stainless Steel



FlashCon Eductor

UTAM FlasCon is a combined skid of our Steam & Compressed air operated Condensate recovery pump and a flash vessel. It reduces the foot print area required for installation on account of its compact design. It ensures total recovery of flash steam and condensate.

Sizes Up to 50mm
Pressure Rating ANSI 150#
Body Material Cast Carbon Steel



Bellow Sealed Valve

UTAM Bellow Sealed Valves design guarantees reliable and excellent protection against leaks and emissions. The stemseal requires virtually no maintenance due to leak free weld connections of the bellows with stem and are properly sandwich between two gaskets and compress between body and bonnet. Constant valve monitoring and re-adjustment of the packing is eliminated in the unlikely event of a bellows failure the backup packing guarantees safe valve performance until the next scheduled shutdown. Our Valves have Multiple walls and tested in helium. Extensive bellows seal qualification testing has been performed in the research and development department to prove the bellows cycle life. Bellows seal valves are designed with a minimum of two plies. Multi-ply bellows are superior to single ply and diaphragm welded construction) bellows.

Sizes Up to 150mm
Pressure Rating ANSI 300#
Body Material Cast Carbon Steel



GLOBAL PRESENCE

Get a detailed snapshot of our global footprint and how we are helping the cause of industries and our clients, worldwide.



- **Pionerring Fluid Controls.**
- **Engineered products for Manufacturing Processes and Utilities.**

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