REVOTRON ENGINEERING

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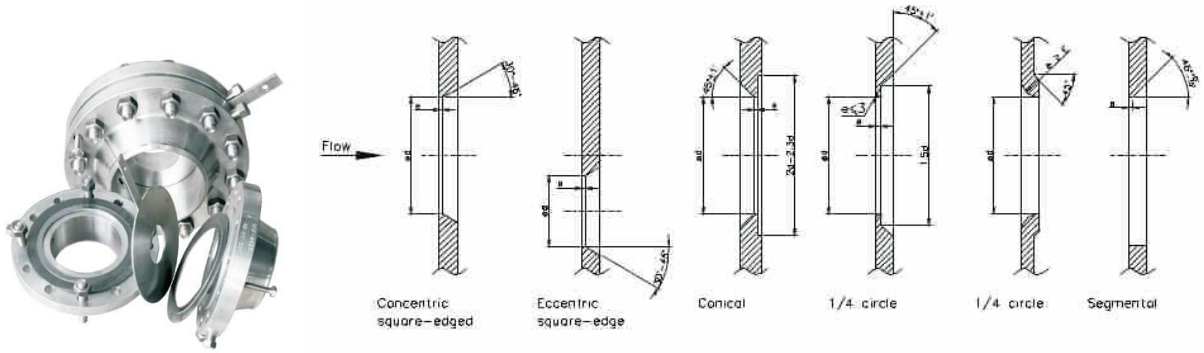
ABOUT US

We Revotron Engineering manufacturer & supplier of various types of process control instruments, accessories & water treatment plants like Flow Elements, Flow Meters, Transmitters, Analytical Instruments, Valves, Valve Manifolds, Steam Traps, Rotameters, RO Plants, Water Softening Plants, DM Water Plants. We belief in providing result oriented & client satisfied solutions in process field & gain the clients trust in short period of time.

We are regular supplier of Boiler spare parts & service provider to various renowned organizations like, doing Boiler IBR Annual Passing jobs & Boiler cleaning jobs, supplying various types of industrial products, supplying all Boiler / Burner spare parts/ components of Nestler, Thermax, IAEC, IBL, Work, and JNM Boiler, supplying all type of IBR approved material which is required for Boilers, Erection & commissioning of Boilers & Burners, doing all types of fabrication of structures & pipeline.

ORIFICE PLATE ASSEMBLY

The Orifice Plate is a differential pressure device suitable to measure the flow rate in a closed conduit. (It is an affordable device for general applications).



Applications: Oil & Gas / Petrochemical Industries / Power Stations

Type Of Elements: Square Edge Orifice / Quadrant Orifice / Conical Entrance Orifice / Segmental orifice
Material: As per Customer's requirements / Main material Reference: ASTM-ASME Code
Type of Pressure Taps and Relevant Calculation: Flange Taps**,** Corner Taps**,** Radius Taps**,** Pipe Taps
Type Of *c*onstruction: **Flange Taps:** With pressure taps on flanges or on carrier ring
Corner Taps: With pressure taps on flanges, or on annular chambers, or on a monolithic plate
Radius / Pipe Taps: Pressure taps shall be welded on pipe (In this case the assembly shall be supplied complete with the relevant spool pipe)

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Flow Calculation : Main Reference code: ISO 5167/ASME MFC-3M; ASME PTC 19.5
Type of Plate Connections: All / Main Connections: RF-RJ
Type of Flanges: WN-SW-LJ-THD-SO according to International Standards (ANSI/ASME/UNI/DIN/API)

Other Options: **Single Chamber Orifice Plate Assembly:** is a special kind of construction with a system that allows an easy removal of the plate from the assembly
Dual Chamber Orifice Plate Assembly: is a special kind of construction with a system that allows an easy removal of the plate from the assembly under pressure.

STANDARD LIMITS AND APPLICATION FIELDS

Dimensions: All taps configurations: 2" to 40"

Beta Ratio: All taps configurations: 0.1 to 0.75

Reynolds Number Range: For beta ratio up to 0.56: greater than 5000 (for lower Reynolds numbers, special orifice types are required)

PERFORMANCES

- **Accuracy (referred to the discharge coefficient): as per ISO Code**
- **Rangeability: 1 to 3**
- **Repeatability: +/- 0.1%**
- **Max PPL 50 to 70% of full scale differential pressure**
- **Straight Lengths Requirements: as per ISO 5167**

TYPICAL SUPPLY CONFIGURATIONS

- **Orifice Plate only**
- **Orifice Plate Assembly**
- **Meter Run Assembly (up to 2")**
- **Complete Upstream /Downstream Spool Orifice Assembly (with Flow Conditioner, if required) for 2" and above**

CALIBRATION

- **Accuracy (referred to the discharge coefficient) after calibration in an accredited laboratory**
  +/- 0.5% of F.S.

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NOTE

▪Manufactured according to client specifications

▪ Flow Meter can be supplied complete with all relevant accessories (valves / manifold/condensing pot /transmitter/ fitting / tubing

INTEGRAL ORIFICE PLATE ASSEMBLY

Revotron Engineering IOPA integral orifice plate assembly is used in conjunction with a differential pressure transmitter. This combination uses the differential pressure created by the orifice to measure liquid, gas, and steam flow in 1/2, 1, and 1 1/2 in (approximately 15, 25, and 40 mm) pipes. 1/2, 1, or 1 1/2 in pipe is welded to body. Outer ends are NPT, R threaded, prepared for welding, or flanged (ANSI Class 150, 300), as specified. This assembly overcomes impulse tubing, minimise leakage points in comparison with standard orifice flow meter assembly.

Applications: Oil & Gas / Petrochemical Industries / Power Stations, Etc.

Line Size : 15 NB TO 40 NB

IOP Moc : AISI 316, AISI 304, Monel, Hastelloy C

Body Moc : A351- CF8M, A 216-WCB, A 105, A 182- F316

Gasket Moc : P.T.F.E.

Accuracy : ± 2 % of F.S.

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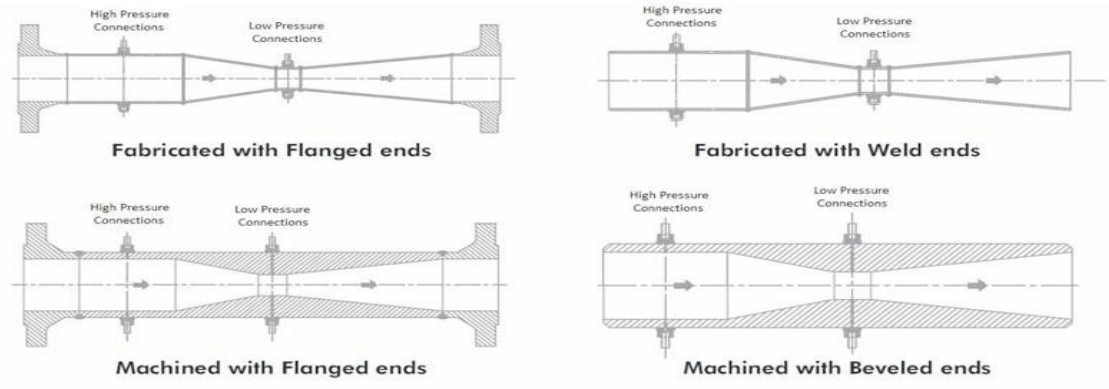
VENTURI TUBES

Revotron Engineering manufacture & supply wide range of venturi tubes with various material of construction.



TECHNICAL SPECIFICATIONS

Applications: Oil & Gas / Petrochemical Industries / Power Stations

Type and Construction: Manufactured by bar stock / Manufactured by welded plate / For big size and very high wall thickness Venturi Meter can also be manufactured by forging / Conical divergent angle of 7° for low loss venturi / conical divergent angle of 15° for Classical Venturi / All types can be supplied truncated or not truncated / Process connections: all types / Instrument connections: all types / Venturi tube for rectangular duct Pressure Taps: With annular chamber (for classic/standard applications) / With piezometric ring (for light applications) / direct pressure taps (for high wall thickness and heavy applications)

Material: All material requested by the customer / Material Specifications: all /Main material Reference: ASTM-ASME Code

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Flow Calculation: Main Reference code: ISO 5167 ASME MFC-3M / Other standards: ANSI 2630 /AGA-3/A PI.Ch.14 (1992)/Miller-Spinks-Shell Engineering Handbook

STANDARD LIMITS AND APPLICATION FIELDS

Dimensions: Venturi by bar stock: 2” to 10” / Venturi by welded plate: up to 48” (and above, where acceptable by the Customer) / Venturi by forging: all dimensions

Beta Ratio: Venturi by bar stock: 0.4 to 0.75 / Venturi by welded plate: 0.4 to 0.7 / Venturi By Forging: 0.3 to 0.75

Reynolds Number Range: Venturi by bar stock: 200000 to 1000000 / Venturi by welded plate 200000 to 200000 Venturi by forging: 200000 to 2000000.

PERFORMANCES

- Accuracy (referred to flow coefficient): as per ISO Code
- Rangeability: 1 to 3
- Repeatability :(+/- 0.1%)
- Max PPL (5-15) % of full scale differential pressure
- straight Lengths Requirements as Specified In ISO 5167 International Code

CALIBRATION

- Accuracy (referred to flow coefficient) after calibration in accredited lab: (+/- 0.5%).

NOTE

- Flow Meters can be manufactured according to all client specifications
- Flow Meter can be supplied with all suitable accessories (valves / manifold / condensing pot / transmitter / fitting / tubing).

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MULTIPORT AVERAGING PITOT TUBE

Revotron Engineering the Multiport Averaging Pitot Tube is a differential pressure device suitable to measure the flow rate in a closed conduit for general applications (it is a general purpose and affordable device). Normally used in big pipes with low flow velocity.

TECHNICAL SPECIFICATIONS

Applications: Oil & Gas / Petrochemical Industries / Power Stations

Type Of Elements: Standard Model ED-20/21: Diamond Shape-Manufactured by Square Bar 20x20 mm Standard Model ED-45/46: Diamond Shape-Manufactured by Square Bar 45x45 mm Special Device: Diamond Shape-Manufactured by Square Bar sized with Stress and Vibrations Analysis Results;

Material: As per Customer's requirements / Main material References: ASME/ASTM

Process Connections: Threaded Coupling / Flanged Nozzle

Flow Calculation: Main Reference code: AS PER STANDARDS

PERFORMANCES

- Accuracy (referred to flow coefficient): 2 to 2.5% for Standard Device; to be evaluated case by case for Special Devices
- Repeatability: +/- 0.15%
- Max PPL 10÷15% of full scale differential pressure.

CALIBRATION:

- Not Applicable

NOTE

- Flow Meters can be manufactured according to all Customer Specifications
- Flow Meter can be supplied complete with all relevant accessories (valves / manifold / condensing pot / transmitter / fitting /tubing).

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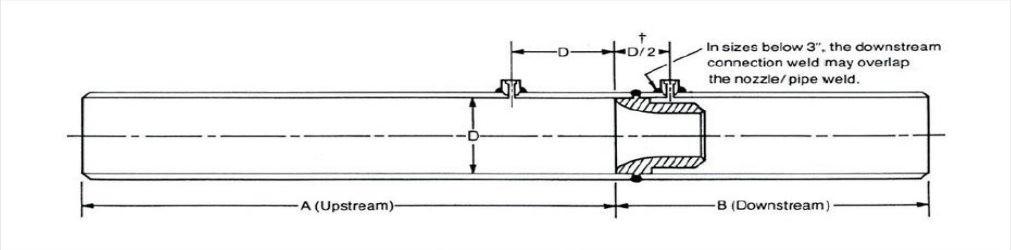
FLOW NOZZLES

Revotron Engineering Flow Nozzle is a differential pressure device to measure flow rate in a closed conduit for heavy applications and high flow rate.



Weld in type : FIG 1

TECHNICAL SPECIFICATIONS

Applications: Oil & Gas / Petrochemical Industries / Power Stations

Type Of Elements: ASME Long Radius / ASME Long Radius with diffuser / ASME Throat Taps; ASME Throat Taps with diffuser / Short Nozzle ISA 1932 / Venturi Nozzle with ISA Inlet

Material: All material requested by the customer / Material Specifications: all Main Material Reference: ASTM-ASME Code

Type Of Construction: Flanged / Welding in Pipe with pins / With complete spool pipe and Flow conditioner

PERFORMANCES

- Accuracy (referred to flow coefficient): as per ISO Code
- Rangeability: 1 to 3.0
- Repeatability: (+/- 0.1%)
- Max PPL (50 to 70) % of full scale differential pressure
- Straight Lengths Requirements: as Specified In ISO 5167 International Code

CALIBRATION

- Accuracy (referred to flow coefficient) after calibration in accredited lab :(+/0.25%)

NOTE

- Flow Meters can be manufactured according to all Customer Specifications.
- Flow Meter can be supplied with all suitable accessories (VALVES / MANIFOLD / CONDENSING POT / TRANSMITTER / FITTING /TUBING

REVOTRON ENGINEERING

AEROFOILS

Revotron Engineering provides economical flow measurement products based on differential pressure principle, suitable to wide range of line size, pressure & temperature applications with service like any liquid, gas or steam. We also provide products for special applications required in the process industries.

Apart from the materials mentioned any other material can be supplied on request.

An aerofoil is differential pressure producer flow elements which is used to measure flow in a duct square or rectangular in shape. This is used in air or gas applications. This is useful in large duct where other differential pressure producers are difficult to install & very expensive.

It’s straight length requirements are very less.

TECHNICAL SPECIFICATIONS

Line Size: 500 mm To 2000 mm

MOC: IS 2062, AISI 516-60/70

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FLOW CONDITIONERS

Revotron Engineering Flow Conditioner is a device that improves the fluid velocity profile across the flow section. This device is typically applied when pipe straight length requirements cannot be satisfied. This often happens when, due to layout constraints, it is not possible to install a flow meter in a straight portion of pipe suitable to obtain acceptable metering conditions. With this device it is possible to have the best fluid velocity profile, even if the pipe straight.

PERFORMANCES:

Flow conditioner can reduce upstream pipe straight length requirements to a half of what prescribed by ISO 5167-1.

NOTE:

Flow Conditioners can be supplied alone or included in meter run section as an accessory of flow meter device.

TECHNICAL SPECIFICATIONS

Applications Oil & Gas / Petrochemical Industries / Power Stations
Conditioner Type The Tube Bundle flow Straightener / The Gallagher Flow Conditioner / Perforated Plate Flow Conditioner (K-Lab Nova / Spearman) / Sprenkle Flow Conditioner / Zanker Flow Conditioner
Material As per Customer's requirements / Main material Reference : ASTM-ASME Code
Permanent Tube Bundle flow Straightener: k=0.75 / Gallagher Flow Conditioner: k=2
Pressure Loss (approx.) K-Lab Nova Perforated Plate Flow Conditioner: k=2 / Spearman I**ntroduced by** Perforated (Plate Flow Conditioner: k=3.2 / Sprenkle Flow Conditioner:
Flow Conditioner: k=11÷14 / Zanker Flow Conditioner: k=3

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PRESSURE REDUCTION

(Single and Multistage Restriction Orifice)

These devices are designed to reduce the fluid pressure. The table here below summarizes typical applications and calculation criteria.

TECHNICAL SPECIFICATIONS

Applications: Oil & Gas / Petrochemical Industries / Power Stations

Type Of Elements: **Single Stage Restriction** (refer to pipe taps configuration in-ISO 5167 and in Miller Engineering Handbook) **Critical Restriction** (typically sized according to Miller Engineering Handbook) **Multistage Restriction** (sized according to standard calculation)

Material: All material requested by the customer / Material Specifications: all Main Material Reference: ASTM- ASME Code

Type Of Multistage Construction: With body by bar stock / With body from pipe

Calculation: Accuracy (referred to the pressure drop): +/- 2% up to 1 1/2"; +/- 1% for 2" and above)
Gas Service: multistage calculation is performed to avoid to have sound velocity in the vena contracta section of each stage.
Liquid Service: multistage calculation shall be carried out to avoid cavitation.

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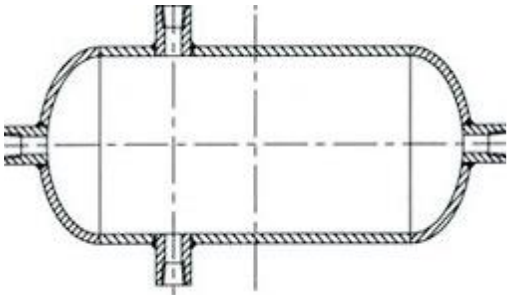
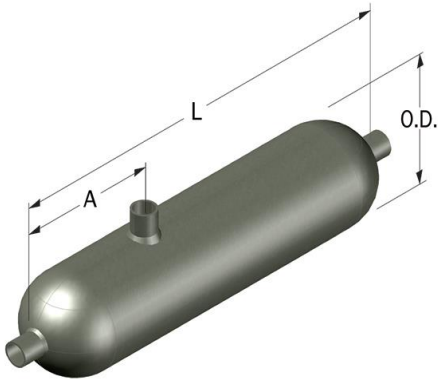
CONDENSATE POT





Enhance flow measurement accuracy

The primary use for the Revotron Engineering range of condensate pots is to increase the accuracy of flow measurement in steam pipelines. They provide an interface between the vapour phase and the condensed phase in the impulse lines.

The condensate pots are available in a range of materials and have been designed in accordance with ASME VIII Div. 1 and produced in an ASME coded workshop.

Installation can be either vertical or horizontal lines between the primary (Flow Meter) or the secondary (transmitter/ gauge) to act as a barrier to the line fluid permitting direct sensing of the flow conditions. Units should be mounted at the same level minimizing possible error that could arise due to unequal head of fluid in the connecting pressure lines. Please see our Condensate Pot Installation Guide. Typical industry applications include: Refineries, Power plants, Chemical and Petrochemical, Steel plants and other process industries For condensate pots with internal volumes of 1 liter or less, a CE mark is not permitted as they are covered by a manufacturers declaration under SEP

Certification / Design Codes

All condensate pots are designed in accordance with ASME VIII Div. 1 and produced in an ASME Coded workshop.
Design temperature 100oC.

**Other pressures, temperatures and materials available as special order. For these applications please state pressure, temperature and material requirements.

REVOTRON ENGINEERING

VALVE MANIFOLDS

- Valve manifolds are instruments that come with one or more valves, which can be connected to a transmitter. They are mostly made of stainless steel, carbon steel, or alloys. Manifolds are widely used in sectors such as oil & gas, chemicals, wastewater, power, and so on. They can be fitted in smallest of spaces owing to their compact size. Manifolds are easy to install and hence reduce the installation cost of several valves. Valve Manifolds are designed for mounting to Pressure Gauges, Pressure Transmitters and Pressure Switches.

VALVE MANIFOLDS – ISOLATION VALVE NEEDLE TYPE

Hand operated valve for isolation of medium, with a variety of inlet & outlet connections.

Material : CS, SS 316, SS 304, Monel, Hastelloy C

Inlet	Outlet
1/4”NPT (F)	1/4”NPT (F)
3/8”NPT (F)	3/8”NPT (F)
1/2”NPT (F)	1/2”NPT (F)

VALVE MANIFOLDS – TWO WAY VALVE MANIFOLD

A Two way valve manifold combines facilities for isolation, calibration, test & venting of the instrument. This manifold is generally used with pressure gauges, transmitters, pressure switches & similar pressure measurement equipment. The manifold are available in number of configurations to suit every type of installation. A variety of mounting / support methods are possible.

Material: CS, SS 316, SS 304, Monel, Hastelloy C

Vertical Inlet, Outlet & Drain/Test Connection

For line installation and suitable for wall mounting using 2 nos. of M8 bolts

Inlet	Outlet	Drain / Test
1/2”NPT (F)	1/2”NPT (F)	1/4”NPT (F)

Horizontal Inlet, Instrument Flanged Outlet & Drain/Test Connection

Suitable for direct mounting to gauge pressure transmitters. 1 No of P.T.F.E. ring, manifold to instrument sealing ring with 2 Nos. of 7/16” UNF carbon steel bolts are included with the

manifold. The drain valve bonnet is on left hand side. The manifold can be base mounted using locating pin & mounting bolt.

Inlet	Outlet	Drain / Test
1/2”NPT(F)	Flanged (12.0 mm hole at 41.3 mm apart)	1/4”NPT(F)

Vertical Inlet, Outlet & Drain/Test Connection for PT

Suitable for direct mounting to pressure transmitter.

Inlet	Outlet	Drain / Test
1/2”NPT(F)	1/2”NPT(F)	1/4”NPT(F)

VALVE MANIFOLDS-THREE WAY VALVE MANIFOLD

A three way valve manifold is used in conjunction with differential pressure transmitter. It provides two isolation, equalizing & drain/test functions. It allows to operate or to isolate, zero adjust the instrument & safely drain any trapped medium. The drain ports have dual functions. They can also be used as test or calibrations after the draining operation.

Material: CS, SS 316, SS 304, Monel, Hastelloy C

Direct Mounting (T Type)

This manifold is suitable for direct mounting to differential pressure transmitter. The mounting holes are at 54.0 mm x 41.3 mm (2 1/8 “ x 1 5/8 “). The manifold is supplied with 2 Nos. of neoprene rubber ring for manifold to instrument sealing & 4 Nos. of 7/16”UNF carbon steel bolts. An optional drain /test connection at instrument side is available.

Inlet	Outlet
1/4”NPT (F)	Flanged

Remote Mounting

This manifold is suitable for remote mounting from a differential pressure transmitter. The base mounting holes are suitable for 2 Nos. of M6 bolts. An optional drain/test connection at instrument side is available.

Inlet	Outlet
1/2”NPT (F)	1/2”NPT (F)

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Direct Mounting (H Type)

The mounting holes are at 54.0 mm x 41.3 mm (21/8'' x 15/8''). Instrument side 12.0 mm hole & process side 7/16" UNF threading provided for mounting integral orifice plate.

Inlet	Outlet
Flanged	Flanged

Direct Mounting with Drain/Test Connection for Smart DPT

This manifold is designed for direct mounting on differential pressure transmitter. The instrument outlet centers are at 54.0 mm. An optional outlet centers at 33.0 mm is also available.

Inlet	Outlet	Drain / Test
1/2"NPT (F)	Flanged	1/4"NPT (F)

VALVE MANIFOLDS – FIVE WAY VALVE MANIFOLD

Five way valve manifold is used in combination with differential pressure transmitter providing isolation, equalizing & drain/test functions. It allows the operator to isolate zero adjust the instrument & safely drain any trapped medium. The drain ports have dual functions. They can also be used as test or calibration connections after the draining operation

Material: CS, SS 316, SS 304, Monel, Hastelloy C

Direct Mounting:

This manifold is suitable for direct mounting to a differential pressure transmitter which has outlet flanged connection centers at 54 x 41.3 mm. 2 Nos. of neoprene rubber manifold to instrument sealing rings & 4 nos. of 7/16" UNF carbon steel bolts are supplied with the manifold.

Inlet	Outlet	Drain / Test
1/2"NPT (F)	Flanged	1/4"NPT (F)

Remote Mounting

This manifold is suitable for remote mounting from differential pressure transmitter. The base mounting holes are suited to 2 nos. of M6 bolts.

Inlet	Outlet	Drain / Test
1/2"NPT (F)	1/2"NPT (F)	1/2"NPT (F)

REVOTRON ENGINEERING

ELECTROMAGNETIC FLOW METERS

Revotron Engineering supplies electromagnetic flow meters are micro controller based flow meters that help you to measure the flow rate accurately of any conductive liquids & slurries in a closed conduits. Electromagnetic flow meters works on the faradays law of induction. Unaffected by the temperature, pressure, density, or viscosity of the liquid. Able to detect liquids that include contaminants (solids, air bubbles). There is no pressure loss. No moving parts (improves reliability).Suitable for all conductive liquids having conductivity > 10 micro seamen's.

Technical Specifications:

Line Size: 15 NB to 2000 NB
Type of Output: 4 to 20mA DC, 4 to 20mA DC with HART, Others on request.
Accuracy: < ± 0.5% of M.V.
Lining : Neoprene / Hard / Ebonite Rubber, EPDM, PFA, PTFE, PU, CERAMIC
Flange : MS, CS, SS316, SS304
Electrode : SS 316L, Hastelloy C, Platinum, Tantalum, Titanium
Coil Housing : MS, SS304, SS316
Process Connections: ANSI150 flanged, as per table B 16.5 (Other On Requirement)
Power Supply: 90 - 250 V AC, 50 Hz, 24 V DC (+/- 10%), Solar Powered

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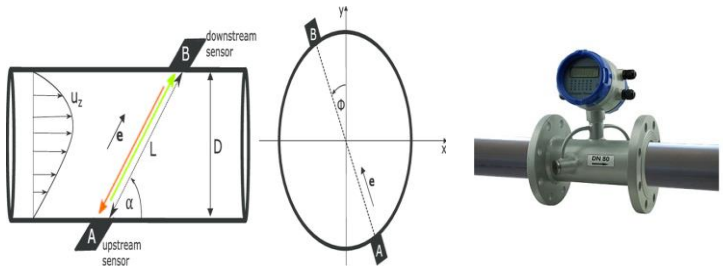
ULTRASONIC FLOW METERS

Revotron Engineering supplies ultrasonic flow meters are based on transit time working principle. The flow meter can measure the velocity along the path through ultrasonic beam by using ultrasonic transducers. By averaging the difference in measured transit time flow rate will be calculated. This flow meter suitable to measure the flow rate of conductive & nonconductive clean fluids.

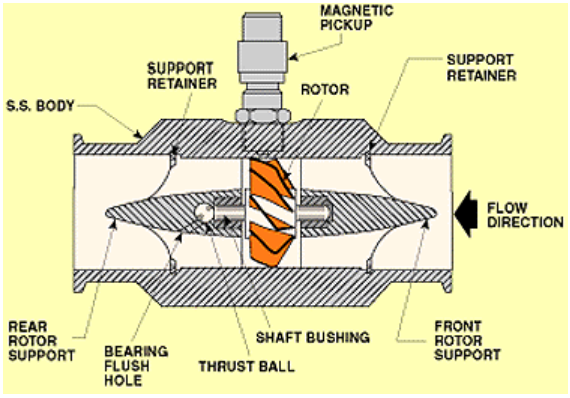


Technical Specifications:

Line Size: 15 NB to 2000 NB
Type of Output: 4 to 20mA DC, 4 to 20mA DC with HART, Others on request.
Accuracy: ± 0.5% to 1 % of M.V.
Flange : MS, CS, SS316, SS304
Sensor MOC : SS 316
Process Connections: ANSI150 flanged, as per table B 16.5 (Other On Requirement)
Power Supply: 90 - 250 V AC, 50 Hz, 24 V DC (+/- 10%), Solar Powered

TURBINE FLOW METERS

Revotron Engineering supplies turbine flow meters to measure the conductive & nonconductive clean fluids, low viscosity fluids. This flow meter requires stable operating conditions to maintain a working performance.



REVOTRON ENGINEERING

Technical Specifications:

Line Size: 15 NB to 300 NB
Type of Output: 4 to 20mA DC, 4 to 20mA DC with HART, Others on request.
Accuracy: ± 0.5% to 1 % of M.V.
Flange : SS316, SS304
Rotor MOC : SS410
Shaft MOC: Tungsten Carbide
Process Connections: ANSI150 flanged, as per table B 16.5 (Other On Requirement)
Power Supply: 90 - 250 V AC, / 24 V DC

THERMAL MASS FLOW METERS/ CONTROLLER

Revotron Engineering supplies thermal mass flow meters / controller to measure the gas flow. This is a precision instrument that measures gas mass flow. Gas flows by the heated flow sensor and molecules of the gas transport heat away, the sensors cools & energy is lost. This instrument measure/ control the gas flow based on the concept of convective heat transfer. The device is used in a wide range of applications in many industries.

Technical Specifications:

Line Size: 6 NB To 25 NB
Flow Range: 0.01 to 2500 slpm
Turn Down: 50:1
Accuracy: +/- 1 % of F.S. & +/- 0.25 % of F.S. (For digital type)
Response time: Better than 1 Sec
Output: 4-20 mA or 0-5 Vdc
Power Supply: 24 V DC
Application: Gas application, Various Industries

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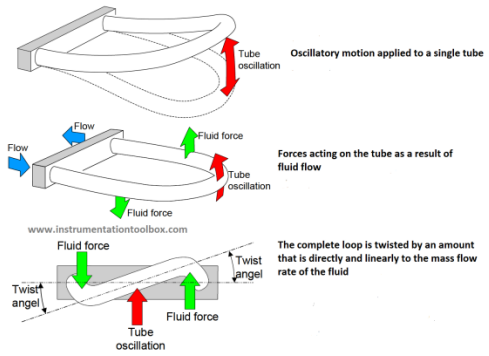
CORIOLIS MASS FLOW METERS

- Revotron Engineering supplies coriolis mass flow meters to measure the precise flow rates of liquids in various industries. It works on coriolis phase shift principle. A coriolis flow meter contains a tube which is energized by a fixed vibration. When a fluid passes through this tube the mass flow momentum will cause a change in the tube vibration, the tube will twist resulting in a phase shift. Coriolis mass flow meters does not require straight length requirement during installation. Ability to measure undefined or variable mixtures. Suitable for supercritical fluids, e.g. carbon dioxide (CO2) or ethylene (C2H4).



Technical Specifications:

Line Size: 8 NB To 150 NB
Turn Down: 1:2000
Accuracy: +/- 0.2 % of F.S
Response time: down to 50...100 msec
Output: 4-20 mA
Power Supply: 24 V dc / 230 V AC
Application: Liquid, Gas, Various industries, Water sector, Power Sector, Oil & Gas Etc.
Process Connection: Flanged other on as per requirement.

REVOTRON ENGINEERING

PRESSURE TRANSMITTERS

In any process industry pressure measurement is a vital parameter to maintain the pressure of fluid process, reaction & safety of process equipment. Pressure transmitters helps you to measure the pressure of gases, vapours, liquids in different industries like sugar factories, power plants, steel plants, refineries, chemical, food & pharmaceutical companies.

Differential Pressure Transmitters

Technical Specifications

Measuring Range: -0.1885psi to 1000psi
Supply Voltage: 12.5 - 45 VDC
Signal Range: 3.9mA - 20.8mA
Accuracy: +/-0.075% of URL for SPAN
Static Pressure: 30 Bar to 130 Bar, Higher On Request
Electrical connections: M20 x 1.5 / ½" NPT / ½" BSP / ¾" ET
Process connection: ¼" NPT (M/F), ½" NPT (M/F), ¼" BSP (M/F), ½" BSP (M/F), 5 Meter Capillary
MOC Electronics Enclosure: Die Cast Aluminum PU Painted / SS316
Display Type: LCD Display
Filling Fluid: Silicon Oil / Inert
Output: 4 to 20 mA, 4 to 20 mA with HART
Sensor Type: Capacitive Sensor / Piezo Resistive Sensor
Diaphragm Material: SS316L , Hastelloy C, Other

Pressure Transmitters

Technical Specifications

Measuring Range: -1.160psi to 10000psi
Supply Voltage: 12.5 - 45 VDC
Signal Range: 3.9mA - 20.8mA
Accuracy: +/-0.075% of URL for SPAN
Electrical connections: M20 x 1.5 / ½" NPT / ½" BSP / ¾" ET
Process connection: ¼" NPT (M/F), ½" NPT (M/F), ¼" BSP (M/F), ½" BSP (M/F)

MOC Electronics Enclosure: Die Cast Aluminum PU Painted / SS316
Display Type: LCD Display
Filling Fluid: Silicon Oil / Inert
Output: 4 to 20 mA, 4 to 20 mA with HART
Sensor Type: Capacitive Sensor / Piezo Resistive Sensor
Diaphragm Material: S S316 / SS316L / Hastelloy C / With Remote Seal

REVOTRON ENGINEERING

PRESSURE SWITCHES

Revotron supplies foremost quality pressure switches of different makes. in Pressure switches are important components for controlling the activation and deactivation of pumps in fluid systems when pressure thresholds are reached. They are also used in process control systems for maintaining steady pneumatic or mechanical pressure.
Pressure switches are used in industrial applications to control pressure in pipelines. Oil Pressure Switches: Oil pressure switches are found in engines, compressors, and hydraulic systems. They perform the same function as gas and air pressure switches in regard to the use of oil.

TEMPERATURE TRANSMITTERS

In any process industry temperature measurement is also major parameter to maintain the temperature of fluid process & reaction. Pressure transmitters helps you to measure the pressure of gases, vapours, liquids in different industries like sugar factories, power plants, steel plants, refineries, chemical, food & pharmaceutical companies.

Technical Specifications

Type of Input: RTD (PT-100/PT-200), Thermocouple (B, E, J, K, R, S, T), Resistance, millivolt (0 to 100 mV)
Output: 4-20 mA, 4-20 mA with HART
Display: LCD Display
Accuracy: ± 0.1% F. S
Power Supply: 24V DC
Electrical Connection: ½” NPT (F) / M20 X 1.5 (F) / DIN 43650 Connector
MOC Electronics Enclosure: Die Cast Aluminum / S S316

REVOTRON ENGINEERING

LEVEL TRANSMITTERS

Radar type OR ultrasonic type level transmitters are highly accurate level transmitters to measure the level of different types of fluids including storage tanks, ponds, pits, etc in various industries.

Ultrasonic Level Transmitters

Technical Specifications
Measuring Range: up to 20 mtrs, Other on request
Type of Output: 4 - 20 mA DC, 4 - 20 mA with HART
Power Supply: 24V DC / Battery Operated
Display: LCD
Accuracy: +/- 0.25% of F. S
MOC Electronics Enclosure: Die Cast Aluminium PU Painted 2, SS316, ABS Plastic
Process Connection: 1½" BSP (M), 2" PVC Flanged, 2" S S316 Flanged,) Other on request
Electrical Connection: ½" NPT (F) / M20 X 1.5 (F)
MOC Probe: PVDF / Aluminium

Radar Level Transmitters

Technical Specifications
Measuring Range: up to 20 mtrs, Other on request
Type of Output: 4 - 20 mA DC, 4 - 20 mA with HART
Power Supply: 24V DC, 90 – 250 VAC
Display: LCD
Accuracy: +/- 0.25% of F. S
MOC Electronics Enclosure: Die Cast Aluminium, SS316
Electrical Connection: ½" NPT (F) / M20 X 1.5 (F)
Process Connection: Threaded, Flanged, Other on request.
MOC Probe: SS 316, Other on request.

LEVEL SWITCH

Revotron supplies reputed make level switches. A level switch is an electrical or mechanical method for measuring the level of a liquid, powder, or granule material. Level switches are an essential part of production operations and are used in harsh conditions with extremes in temperature, pressure, and vibrations.

These devices equip electrodes to detect liquid levels. They have been widely used in water works and sewers for buildings and housing complexes, industrial facilities and equipment, water treatment plants and sewage treatment facilities, and many industrial applications.

REVOTRON ENGINEERING

ANALYTICAL INSTRUMENTS

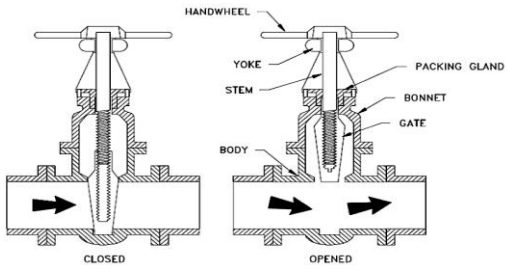
We supply wide range of analytical instruments which used across various industries to measure the pH meter, Conductivity meter, DO meter, Turbidity meter, Chlorine meter, etc of service fluid.

REVOTRON ENGINEERING

VALVES

GATE VALVES

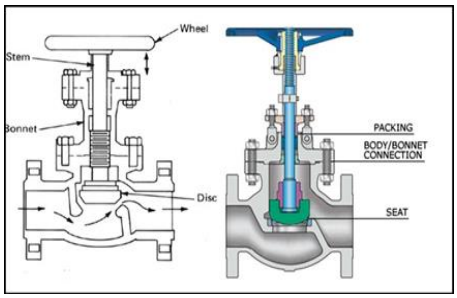
Revotron Engineering supplies wide range of valves. Gate valves are available with lever operated, gear operated, pneumatic cylinder, hydraulic cylinder, electrical actuator operated along with accessories like solenoid, limit switch, air filter regulator etc.



Size Range: 1” To 16”
Design Standard: API 600
End Connection: Flanged End as per ANSI B 16.5/ BS 10 Table / Butt weld End to ANSI B16.25.
Pressure Rating: 150# To 1500#
Inspection & Testing: API 598

GLOBE VALVES

Globe valves at Revotron Engineering are available in On-Off disc, tapered V style control disc and parabolic disc type. Stellated trims are generally provided for all above 300# valves and in lower rating also on request. Globe valves pneumatic spring & diaphragm type actuator/ pneumatic cylinder operated along with accessories like solenoid, valve positioners, I/P Converter, limit switches, and air filter regulator etc.



Size Range: 1” To 16”
Design Standard: BS 1873/ DIN
End Connection: Flanged End as per ANSI B 16.5/ DIN 2536 / BS 10 Table / Butt weld End to ANSI B16.25/ DIN 3239.
Pressure Rating: 150# To 1500#
Inspection & Testing: BS 6755 / API 598 / DIN 3230

REVOTRON ENGINEERING

CHECK VALVES

Revotron Engineering supply Check valves (NRV) are Bolted cover swing type, dual plate type, wafer type, disc type designed from PN 10, PN 16, 150# To 600# .These valves are suitable for vertical and horizontal lines. These check valves are swing type and bolted cover construction. The one piece disc construction is securely fastened to the hinge by means of a lock nut & pin. The disc is free to rotating type to avoid any other wear. The hinge pin offers excellent wear resistance properties.

Material: ASTM A 216 GR WCB, ASTM A 217 GR WC1/WC6/WC9/WC11, ASTM A 352 GR LCB/LC3, IS 210 GR FG 200/220/250/260 Etc

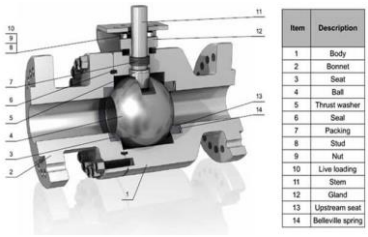
Manufacturing Standard: BS 1868 / API 594

End Connection: Flanged End, Screwed End to BSP, BSP (T), NPT, Socket Weld, Butt-weld End.

Pressure Rating: 150# To 600#

Inspection & Testing: BS 6755 / API 598 / DIN 3230

BALL VALVES



Item	Description
1	Body
2	Bonnet
3	Seat
4	Ball
5	Thrust washer
6	Seal
7	Packing
8	Stud
9	Nut
10	Live loading
11	Stem
12	Gland
13	Upstream seat
14	Belleville spring

At Revotron Engineering ball valves are available in various sizes & operated through lever (Quarter turn valves only) chain wheel, Gear, Electrical Actuator, Pneumatic/ Hydraulic, actuator operated.

MATERIAL

Body: WCB, LCB, LC2, WC-1, WC-6, WC-9, CF8, CF 8M, Other on request.

Seats: 13% CR, 13% CR/ SS 316, 13% CR /Stellite, SS 304, SS316, Other on request.

Trims: 13% CR, 13% CR/ SS 316, 13% CR, SS 304, SS316, Other on request.

BUTTERFLY VALVES

Revotron Engineering offers Wafer type butterfly valve have been developed with extensive application, design and manufacturing expertise. High performance slim seal, concentric design butterfly valves are reliable, maintenance free shutoff with permanently gas tight seal with an integrally moulded or replaceable elastomer body liner. These valves are used in most of industries.

Size Range: 40 NB To 1200 NB.

Design Standard: API 609 category A / BS 5155 / MSS SP - 67

End Connection: Wafer sandwiched / Double Flange type

Pressure Rating: 150# , 300#, PN 10 / PN 16, PN 25 PN 40.

REVOTRON ENGINEERING

CONTROL VALVES

Revotron Engineering offers different type control valves have been developed with extensive application, design and manufacturing expertise.

Size Range: 15 NB To 300 NB.
Body Materials: A216WCB, A351CF8/CF8M, A351CF3/CF3M, H-C, H-B, and so on
End Connection: RF, FF, SW, BW, Screw, RTJ
Pressure Rating: 150# , 300#, 600#, PN 10 / PN 16, PN 25 PN 40

ANGLE VALVES

Revotron Engineering supply different type of angle valves have been developed with extensive application, design and manufacturing expertise.

Size Range: 15 NB To 80 NB.
Body Materials: CF8, SS 304 (optional CF3M, SS 316L) PTFE, NBR (optional PEEK, VITON) Corrosion resistive glass filled Nylon
Fluid Temperature: -10 °C to +180 °C with A (PTFE Seat, NBR Seal), Optionally -10 °C to +220 °C with (PEEK Seat, VITON Seal)
Pressure Rating: 0 - 16 bar/ 0 - 25 bar

PRESSURE SAFETY VALVES

Revotron Engineering supply different type of pressure safety valves like pressure relief valve (PRV), safety relief valve (SRV) have been developed for different fluid applications, design and manufacturing expertise.

Size Range: 15 NB To 300 NB.
Body Materials: WCB/WC6/WC9 S.S: SS304/316/304L/3 16L C.I: SG 240 Alloy steel, Monel, LF2, Lcb
End Connections: S/E,SW,BW, Flanged end
Pressure Rating: 150# /300# /600#

REVOTRON ENGINEERING

PRESSURE GAUGES

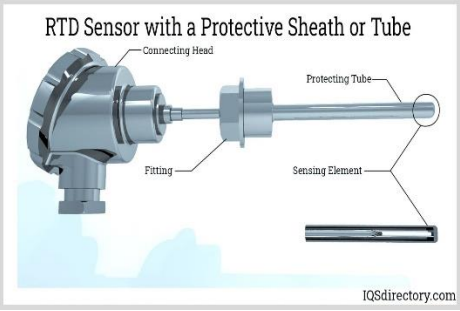
Revotron Engineering supply Pressure Gauges intended for Process Industries such as Chemicals, Petro-chemicals, Energy or Gas industry, Food processing, Nuclear etc. to measure fluid pressure during the process in closed conduits. These pressure gauges have been designed to satisfy requirements to operate in aggressive environment.

TEMPERATURE GAUGES

Revotron Engineering supply the Bimetal thermometer employs a bimetal strip in the form of helix (it works on the principle of thermal expansion - two metals having different coefficient of expansions are joined to form a bimetal. The resultant expansion of bimetal is proportional to temperature). Bimetal dial thermometers are simple in construction, yet rugged. They are used for measurement of temperature in most of the industrial o applications. They are offered in the range of (-) 50 C to 600 C. With rigid stem having bottom or back entry. It can also be offered in every angle rotatable construction.

TEMPERATURE SENSORS

Revotron Engineering supply the different types of temperature sensors of reputed makes, for various applications to meet industrial applications requirements.



REVOTRON ENGINEERING

STRAINERS

At Revotron Engineering various types of strainers are available. Strainers are devices used to separate unwanted solid particles from gas, liquid or steam flowing in a pipe. They derive their name from their shape.

Y Type Strainer

The Y-type strainer is commonly applied in pressurized fluid lines as well as in vacuums and suction conditions. This product is designed for remove foreign matter from pipe lines and provides protection for pumps, meters, valves, and other similar mechanical equipment,

SPECIFICATIONS

Line Size: ½ ” To 24”
Body: WCB, LCB, LC2, WC-1, WC-6, WC-9, CF8, CF 8M, Other on request.
Screens: SS 304, SS 316 mesh & hole size as per requirement.
Pressure Rating: 150# To 1500#
End Connection: Flanged, Other on request

T Type Strainer

Tee-type strainers are designed to eliminate particles from pipelines where a compact accessible strainer is needed for protection of pumps, valves and similar equipment. Tee Type Strainers are a low cost solution to large nominal bore. T Type Strainer can be used in both vertical and horizontal installations

SPECIFICATIONS

Line Size: 3” To 40”
Body: CS / SS 304 / SS 316, Other on request.
Screens: SS 304, SS 316 mesh & hole size as per requirement.
Pressure Rating: 150# To 1500#
End Connection: Flanged, Other on request

REVOTRON ENGINEERING

STEAM TRAP

Revotron Engineering supplies wide range of steam traps. A **steam trap** is used to discharge condensates and non-condensable gases. Types available are Thermodynamic, Horizontal float type, Inverted bucket type.

THERMODYNAMIC STEAM TRAPS

These are simple, robust and reliable and can operate up to very high temperatures and pressures. This will flash steam to create higher pressure to close a valve (disc) or slow the discharge speed of the trap.

SPECIFICATIONS

Line Size: 15 NB To 25 NB
MOC: CA15 /CF8/ CF 8M/ CI/ FORGED
End Connection: Screwed/ Socket/ Flanged
Pressure Rating: 600 psig

INVERTED BUCKET STEAM TRAPS

Inverted bucket steam trap is a mechanical trap classified as a density operated steam trap which operates on the difference in density between steam and water. Trap consists of an Inverted Bucket attached through a lever mechanism to a valve.

SPECIFICATIONS

Line Size: 15 NB To 50 NB
MOC: CA15 /CF8/ CF 8M/ CI/ FORGED
End Connection: Screwed/ Socket/ Flanged
Pressure Rating: 600 psig, Higher on request

REVOTRON ENGINEERING

ROTAMETERS

Revotron has supply high quality multiple types of rotameters like Low flow rotameters, Glass tube rotameters, Metal tube rotameters, Bi-pass rotameters for various types of fluids & pipeline sizes.

GLASS TUBE ROTAMETERS

Mainly used for measuring rated flow of liquid and gases.

- Available in C.S., SS-304, SS-316, Poly Propelene, P.T.F.E. lined
- Flanged, Screwed, Hose Nipple & TC Joint connections
- Available from 15 NB to 100 NB pipe size and ranges between 30 to 30,000 LPH of water at ambient temperature and Linear
- Scale having Accuracy of ± 2% FSD
- High & low flow switches

METAL TUBE ROTAMETERS (MAGNETIC)

Suitable to measure flow rate of opaque / translucent liquid, gases, steam and vapour under critical operating conditions.

- Available in SS-316 / SS-304 / P.P. construction and flanged from 25 NB to 150 NB pipe size and PTFE Lined
- High & low flow switches on request
- Accuracy ± 2% FSD
- Available in 350, 450 and 500 mm
- Available from 15 NB to 150 NB and flow 500 LPH to 50,000 LPH
- Flanged, Screweded, TC Joint, SMS Union
- Flow Transmitter with Digital Display, Totalized with Batch Controller on request

ACRYLIC BODY ROTAMETERS

Precisiously machined from Imported Transparent Solid Acrylic Block,Tapering tube is done by special tools.

- Suitable for water, saline water, air, N2, H2 and natural gases
- Available from 15 NB to 100 NB pipe size and ranges between 30 to 80,000 LPH of water at ambient temperature
- Accuracy ± 2% FSD
- High & low flow switches on request
- Flanged, Screwed, Hose Nipple & TC Joint connections

REVOTRON ENGINEERING

LOW FLOW ROTAMETERS (ACRYLIC / GLASS TUBE)

Suitable for low flow rate of Gas or liquid measurement.

- Available in SS-316 / SS-304 / P.P. / P.T.F.E. lined construction
- Generally screwed with flow control valve at inlet
- 10 LPH to 160 LPH of water at ambient temperature & 20 to 5000 NLPH of air at NTP condition
- Accuracy ± 2% FSD
- Panel mounted with high & low flow switches available
- Flanged, Screwed, Hose Nipple & TC Joint connections

BY-PASS ROTAMETERS

Suitable for pipeline of 50 NB and above (upto 1000 NB)

- The flow rate through the rotameter is proportional to the pressure drop across the orifice plate
- Available in SS-316 / SS-304 / P.P. material
- Available in Corner tapping (carrier ring), Flange Tapping or D and D/2 Tapping
- Accuracy ± 2% FSD
- High & low flow switches on request
- Installed in both vertical & horizontal Pipe line

SUGAR & DISTILLERY ADSORBENTS

Revotron has supply high quality molecular sieves which used in separating ethanol water mixture & can be used for dehydration of polar liquids such as ethanol.

Molecular Sieves

REVOTRON ENGINEERING

WATER TREATMENT PLANTS & WTP SPARES

REVERSE OSMOSIS PLANT

Reverse osmosis (RO) is a water purification technology based on “membrane filtration “that can remove many types of molecules and ions from solutions. Hence this technology is used in both industrial processes as well as production of drinking water. It is also widely used in waste water treatment.
We provide RO plants of capacity ranging from 25 LPH to 10,000 LPH meeting commercial as well as industrial requirements.

WATER SOFTNING PLANT

The presence of as Ca & Mg (Known as hardness) lead to the formation of scale which in turn results in to clogging of pipelines & fixtures, scaling of boiler tubes, heat exchangers, etc.
This softener contains cation exchange resin which removes cations (positively charged ions) from the water & prevent scale formation which in turn ensures optimum heat transfer & efficient performance.
Available in range of diameters to meet different requirements of flow rate, output & quality.

REVOTRON ENGINEERING

DM WATER PLANT

Demineralized water treatment plant is based on Ion Exchange technology. It comprises of minimum two vessels filled with cation & anion exchange resin respectively. It may remove 99% of ions present in water hence reduces TDS/EC by 99%.
Mixed bed plant contains single vessel filled with cation as well as anion exchange resin.
This system works as a polisher unit and provides ultra-pure water of IP grade.
Available in range of diameters to meet different requirements of flow rate, output & quality.

Our Clients:

Esbee Power Solutions, Kelvion India, Shri Gajanan Maharaj Sugar, Raj Process Equipment's, Kute Group Dairy, B.S. Engineers Chennai, Om Industrial Corporation Gujarat, Reliance life sciences pvt ltd Mumbai, Wockhardt Ltd Aurangabad, Castrol ltd Chennai, Goodyear Tyres Faridabad, Deepak Nitrite Taloja, Supreme Engineering Mumbai, Dorf Cettle, Mundra, BASF Gujarat, Laxmi industries Gujarat, zydus healthcare, Etc.