Custom engineering ensures the right equipment for your application.

More than 19 years experience creating thousands successful applications, in diffrent industries around the world.
We make our living solving material handling problems that no other valve can handle. Its the onlything we do.

Our organization concentrates on designing, engineering, building and delivering the best Equipment in the world.
Miteck systems is indias leading organization for the design, engineering, manufacturing and support of material handling technologies for the bulk processing industry.
With over 19 years of experience to draw on, we can provide the system solutions
your company needs to help maximize production and minimize downtime.
Our products are used in a wide variety of process industries.

BULK MATERIAL HANDLING EQUIPMNENTS

Miteck Systems Pvt. Ltd.

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Kalyan Shill Road, Dombivli (East).
Dist. Thane. -421204
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sales@mitecksystems.com

MITECK SYSTEMS

MITECK SYSTEMS

About us

Miteck systems is india's leader for the design, engineering, manufacturing and support of airlock feeder technologies for the bulk processing industry. With over 19 years of experience to draw on, we can provide the system solutions your company needs to help maximize production and minimize downtime.
Our products are used in a wide variety of industries, including:

- Cement
- Power
- Steel
- Paper
- Wastewater
- Agriculture
- Mining
- Petrochem

WHY US ?

- ON TIME - With miteck systems, Your schedule is what matters the most meaning that you can count on hassel free deliveries on time ,on every continent.
- PRICE - The most cost effective Rotary airlock valve solution available with us, We assure you, you won't be disappointed.
- QUALITY - We gain customers trust through our quality product ,we always keep this fundamental mission on our mind when responding to customes needs and provide reliable quality.
- MAINTENANCE - While manufacturing we keep that in mind our product should require no maintnance throughout life of rotary airlock valve.
- SERVICE- Our highly qualified technician are commited to provide you highest level of service.

CONTENT

PULSE JET BAGHOUSE DUST COLLECTORS

MODULAR BAGHOUSEDUST COLLECTORS

COMPACT, MODULAR DESIGN

Compact Baghouse (MB) delivers reliable, efficient, continuous-duty, pulse-jet operation. The MB advantage is found in the break-through technology of High efficient bag filters.
High efficient bags offer longer bag life and reduced emissions.
This MB provides reliable service with easy maintenance. Computer designed inlets and deflector plates, coupled with maximized bag spacing, result
in optimal airflow with minimal abrasion. Advanced valves, providing 50% more cleaning air, result in a
more efficient operation. Over the life of the collector, no other bag house can provide this much value.

Pulse Jet Bag Filter [ON-LINE , OFF- LINE]

■ Regular Hopper Entry

The pulse jet bag filter in its most rudimentary form basically consists of the filtration elements housed in a casing. Below this casing is a hopper with a discharge valve, to continuously remove the dust that is collected on the bags. The entire unit is supported from the ground on structural legs. A caged ladder provides access to the top of the unit for maintenance. The dust laden air enters through the hopper by suction (normally) or (positive pressure). The heavier dust particles fall off at the entry itself,Because of baffle plate with service platform while the lighter dusts get carried upward to the bags.

Typically installs to isolate & control flue gases

■ Flush Mounted - Insertable

Transfer points involving two conveyors or from one conveyor to / from other material handling equipment often involve isolated point(s) where free stand alone bag filter(s) can be an expensive proposition. Space availability on ground is also an issue at times. Typically, these insertable bag filters units are without any hopper. The unit can be suitably positioned on the conveyor directly. On pulsing, dust falls back onto this conveyor, thus avoiding a need for a separate dust discharge hopper.

Depending on the height of fall of dust, two such insertable bag filters may be required – one at the end of the discharging conveyor and one on the receiving conveyor. When a single unit is used, it is normally on the receiving conveyor – as shown in the adjoining figure – this being where generation of dust is higher due to impact. These type of units are also optimal solutions for venting of bins / silos / hoppers. The units in this construction are mostly standardized and pre-engineered, though customized variations can be offered where necessary.

MITECK SYSTEMS

Circulat Tangentional entry & Accesssories

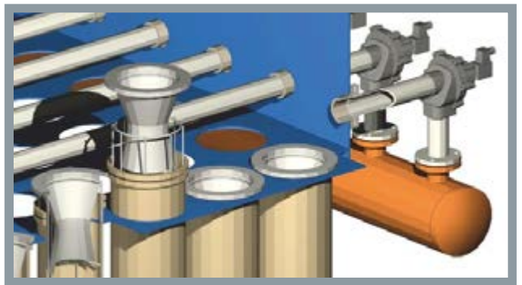
Circular Tangentional entry
[T-BG]

The small footprint of the T-BG combines a cyclone pre-cleaner and a baghouse into one unit. It features a powerful yet energy-efficient cleaning system, eliminating the need for compressed
air to clean the bags. The gas enters into the bag filter tangentially at the bottom of the casing.
This gives the dust laden gas a circular motion which helps in removing the heavy & coarser particles that are present in the gas stream in a manner similar to a cyclonic collector.
These collected particles are directly discharged into the hopper. It is only the very fine particles that get carried to and collected
on the bag surface. Thus the total dust load on bags is reduced making it possible to maintain lower pressure drop across bags.
This also permits the use of lesser frequency of bag pulsing, which in turn increases bag life.
Due to its circular construction, these bag filters can withstand more +/- pressure as compared to normal rectangular bag filters. The circular construction of bag filter also ensures leak proof ness. The possibility of dust accumulation inside casing is eliminated

conguration. in this way the blockage and the friction between the bags are prevented and provided the ideal air flow.

Bag Materials

- Polyester
- Nomex
- P54
- PTFE
- Rayton
- PolyPropilen
- Fiberglass
- Poliacrinitril



The filter materials, providing the ideal cleaning and having practically assembly and dissasembly , are produced by

Electronic Timer controlled by PLC, (Optional Delta ΔP)

The dust collected in the bags are cleaned by high efficient pulse valve

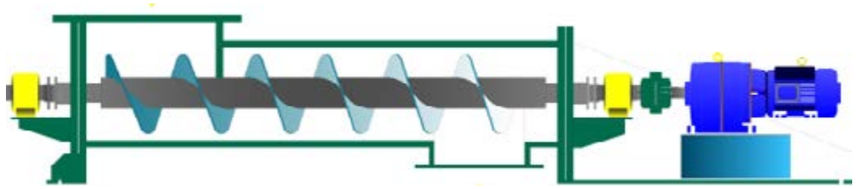
MITECK SYSTEMS

SCREW CONVEYORS

Screw conveyors are bulk material transporting devices capable of handling great variety of materials , The various application of screw conveyor proceed naturally from two factors the characteristics of the material to be conveyed and the operating advantages peculiar to this type of conveyor The style of flighting used in a screw feeder is dependent upon the characteristics of the material being transported and either a regular pitch, modified pitch or a modified diameter flight is used .

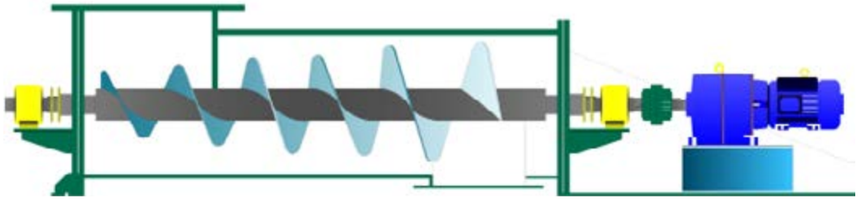
UNIFORM DIAMETER AND PITCH FEEDERS

This type of screw feeder is generally used for handling fine, free flowing material.



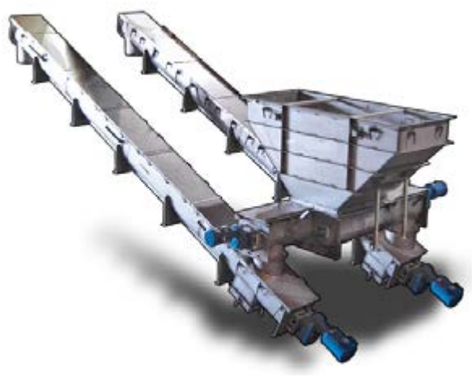
VARIABLE PITCH FEEDERS

Screw feeders having a variable pitch are generally used in conjunction with a screw conveyor in which the material is choke fed from a bin or hopper.



INCLINED SCREW CONVEYOR

Inclined screw conveyors have a greater horsepower requirement and a lower capacity rating than horizontal conveyors. The amounts of horsepower increase and capacity loss depend upon the angle of incline and the characteristics of the material conveyed. Inclined conveyors operate most efficiently when they are of tubular or hanger bearings.



LIVE BOTTOM FEEDERS

Live bottom feeders are used to discharge materials from straight sided bins and are composed of several horizontal screws side by side which cover the complete area of the bin bottom.

MITECK SYSTEMS

BUCKET ELEVATOR

BUCKET ELEVATORS

Chain type bucket elevators, Central chain bucket elevator, Belt type bucket elevators

Miteck systems bucket elevators offer optimal solutions for vertical transportation of fertiliser, potash and salt, cement, sand or gravel, among other materials, We have experties to convey material Upto 15 Meter height

Thanks to our wealth of experience in transporting cement, lime, gypsum, salt and fertiliser, all our bucket elevator components are always perfectly coordinated to provide a reliable, long-lasting system

HIGH CAPACITY CENTRAL CHAIN BUCKET ELEVATORS

The design and construction of Miteck systems bucket elevators is based on the operating experiences of many thousands of bucket elevators being in operation at our customers throughout the world.

Beside the bucket elevator casings, the essential components are the head units and the boot units with their specific conveying components.

Bucket elevator head unit

Beside the housing as an essential part, the bucket elevator head unit comprises the drive wheel with shaft and the material discharge. The transmission of power onto the central chain is effected via friction through a drive wheel with a tooth- less exchangeable sliding surface. The chain support rollers are partially surface hardened on the basis of CrMo to guarantee an optimum chain guidance

The drive unit is equipped with aFliid coupling as a starting aid and overload protection. An adjustable discharge lip in the area of the material discharge minimizes the material residue falling back

BUCKET ELEVATOR BOOT UNIT

The central chain and the buckets are guided through a return chain wheel and a tension chain wheel during the loading process in the bucket elevator boot.

The gravity loaded parallel tensioning device guarantees optimum running and guidance conditions of the chain on the return chain wheel and the tension chain wheel in the bucket elevator boot.

The chain support roller of the tension chain wheel on the basis of CrMo is split and fitted with partially hardened sliding surfaces.

A filling level detector which is inte- grated in the bucket elevator boot works as a safety element to protect against overfilling by uncontrolled feed of material into the bucket elevator boot.

CENTRAL CAHIN DRIVEN

BELT DRIVEN

MITECK SYSTEMS

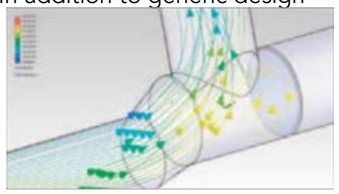
WORLD OF DAMPERS

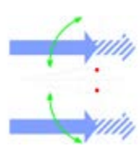
We have a good reputation of providing our customers with dampers they can trust to work properly. Cooperating with the world-leaders of Boiler,Steel,Cement industry

(Such as Isgec john thompson, ThyssenKrupp Industries ,Jsw Steels, ACC cements , Thermax, Alstom)

R&D is a continuous process

Our own R&D team, research projects in cooperation with the customer feedback all guarantee that we will keep on innovating , Among the main areas of study are developing flow character and improving tightness level of dampers. Thanks to the long-term work, as well.Innovations in everyday design It all starts with Miteck systems's semi-automated 3D engineering process which is a combination of experience, innovations and latest technology. In addition to generic design software, Miteck systems's uses many specific applications for ex.g. flow and strength calculation, Solid works , This is to ensure that the design will fulfill, Customer's technical specification up to the smallest detail. Carefull but effective engineering and manufacturing process ensures faultless products and fast delivery times.

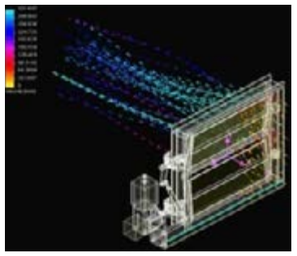




NON -RETURN FLAPS
For geometric reason these are two bladed and open toward center of duct

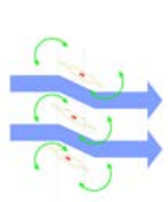
GUILLOTION DAMPERS
For shut off use

3-WAY DIVERTER DAMPERS
For changing over gas flow or simultaneously isolating one duct.

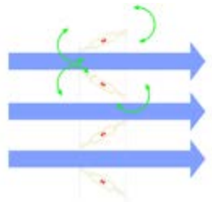


BIPLANE DAMPERS
Two dampers are in one blade sealing provide tight ness upto 99 %.

BUTTERFLY DAMPERS
Typically installs to isolate & control flue gases



LOUVRE DAMPERS
With parallel blade motion used for isola-tion & flow control ,The blade rotate in same direction



LOUVRE DAMPERS WITH OP-POSED BLADE MOTION
Typically installs to isolate & control flue gases

DAMPERS IN RANGE

BUTTERFLY DAMPER

Butterfly dampers have broad application versatility by employing a center mounted rotating disc that produces near equal flow characteristics on each side of the blade for modulating applications, while offering a simple and reliable means for on-off shutoff service.

Applications

- Thermal oxidizers
- Fan inlet flow control
- Stack isolation
- System isolation
- Boiler breaching
- Incinerators
- Combustion air
- Pressure relief

Louver dampers employ fast acting single or dual rows of rectangular blades, mounted within a rigid frame for installation in round and rectangular flanged ducting. Louvers are particularly well suited for flow modulation, bypass, isolation and backflow prevention applications.

Applications

- Pressure control
- Fan isolation
- Combustion air control
- HRSG flow control
- Fan inlet spin control

GUILLOTINE DAMPER

MULTI-LOUVER DAMPER

Guillotines employ a sliding blade inserted into the duct from an external frame to block flow in rectangular and round ducting. Guillotines provide a mechanized means of inserting a duct blanking plate and offer superior isolation of flue gas applications containing heavy particulate loads and are ideal for tight shut off

Applications

- Scrubbers
- Precipitators
- Oxidizers
- Bag houses
- Heaters

- THREE- WAY DIVERTER DAMPER
- COFFE POT DAMPER
- POPPET DAMER

THREE-WAY DIVERTERTTER DAMPER

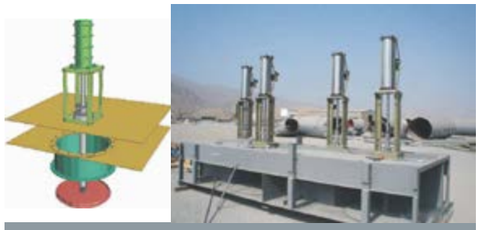
Diverter dampers are available in three configurations: butterfly tee, multi-louver and flap diverter.Tee-diverter dampers extend the capabilities of the butterfly damper design by combining two butterfly dampers into a common wye or tee fitting, primarily for isolation/bypass applications. In a wye configuration, diverters can allow synchronized actuation of each blade for the purpose of splitting and modulating flow.

Applications

- Stack diversion
- Tempering air
- Flow bypass
- Gas turbine
- HRSG bypass

Motorised Coffee Pot Damper is tailor made equipment used in mainly Hot Air Generator to inject cold are whenever want to reduce gas temp.or also used to take fresh air in system. These Dampers are operated by Electrical Liner Actuator.

COFFE POT DAMPER



POPPET DAMER

For isolation purposes, poppet dampers are normally fitted to modular duct sections.

A pneumatic cylinder drives the damper disc.Each isolation poppet damper may be operated remotely from the PLC or locally with a lower actuator. Cylinder mounted limit switches allow PLC indication of damper position.

A pin allows mechanical locking of each damper in either the Open or Closed position. Note: Damper closure only is not sufficient for internal filter access below the tube sheet. For positive isolation, the slip plate must also be installed. At all times entry into these areas must conform to confined space entry regulations.

OPTIONS & ACCESSORIES

Dampers can be provided with a wide array of options and accessories designed to improve performance, automate operation, provide system feedback, increase safety or create redundancy for critical applications. The following is a sampling of devices

1- MOTORIZED ACTUATOR -Dampers can utilize manual hand wheels or chain falls. Automated actuators include electric, pneumatic and hydraulic. Electric actuators

2- POSITIONERS AND POSITIONER FEEDBACK

-Control dampers require an input signal to position the blade(s) correctly. Signals are either electric (4-20 mA), pneumatic (3-15 psi or 3-30 psi) or digital. Positioners are a required accessory for

DESIGN FEATURES

Miteck Industries offers four seal designs for butterfly dampers:

SWING-THROUGH SEAL

Used in extremely dirty applications where tight shut-off is not required

STEP SEAT

Standard for butterfly dampers. Recommended for relatively clean flue gas applications, with up to 98% sealing efficiency

TADPOLE SEAL

Also recommended for relatively clean applications - when tighter leakage rates are required

STEP SEAT WITH PERIMETER SEAL

Similar to the step seat, with the addition of an elastomeric perimeter seal bolted onto the blade.

MITECK SYSTEMS

SLIDE GATE VALVE

MOTORIZED SLIDE GATE VALVE

The MSG model Slide gate gatevalve is a square /Round port low-pressure valve for highly solid loaded fluids or solids, mainly used in bulk handling and silo outlet applications in industries such as:

- Isolation of Silo & hoppers
- Cement industry
- Wastewater treatment Plants
- Power plants Mining
- Food and Beverage
- Steel industry etc.

SLIDE GATE WITH LINEAR ACTUARTOR

STANDARD STYLE ELECTRICAL OPERATOR AND POSITION INDICATORS

Gates that use a rack and pinion to control movement of the slide can be ordered with an electric drive to provide for remote operation. This is accomplished by a . Two Class IIG limit switches are standard and are set to indicate the fully open and fully closed position of the slide. Separate position indicators are optional for use on any manual, air, hydraulic or standard electrically-operated slide gate.

Consult the factory for more information on these.

We make a great variety of other sizes that are custom-built to your particular needs and requirements. All hole layouts are based on our standards and can be changed to meet your specifications. Round inlet plates, square to rounds and companion flanges are available to help fit these gates into your applications.

KNIFE GATE VALVE

KNIFE GATE WITH PNEUMATIC CYLINDER

The MSKG model knife gate is a uni-directional wafer valve designed for general industrial service applications. The design of the body and seat assures non-clogging shutoff on suspended solids in industries such as:

- Pulp and Paper
- Power plants
- Wastewater treatment plants
- Chemical plants
- Food and Beverage
- Bulk handling
- Miningetc.

Sizes: 150 mm to 800 mm (larger diameters on request).

Working pressure:
1.150 mm to 250 mm: 10 kg/cm²
2.150 mm to 400 mm: 6 kg/cm²
3.450 mm: 5 kg/cm²
4.500 mm to 600 mm : 4 kg/cm²
5.700 mm to 1200 mm : 2 kg/cm²

MANUAL KNIFE GATE VALVE

MITECK SYSTEMS

ROTARY AIRLOCK VALVE

OVERVIEW

Miteck systems Rotary Valves and Airlocks are designed to handle the various types of product & various application from metering duties , pneumatic conveying and Rigid quality control and machining tolerances to suit specific Operational conditions. The heavy duty construction & perfect Metallurgy assures highest efficiency and years of trouble free operation. A wide range of rotary valves are available for use in Dust collector, Presipitator , Cyclone ,Blending,Coal ,Cement, Steel Industry, dairy, food,pharmaceutical, nutritional products and other dry bulk materials.Also available are options and adaptations to suit every application from general industrial duties, to hygienic processes. Miteck systems have developed an extensive range of options to ensure that the optimum configuration is supplied to meet the specific requirements.

FUNCTION

A rotary valve or airlock is used to feed powdered or granular solids between areas of differing pressure while still maintaining the pressure differential and product flow

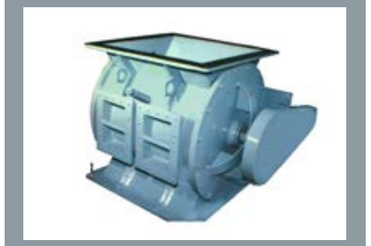
- Precision Engineering
- Quality Manufacturing
- Service
- Experience
- Commitment
- Reliability

Drop Thru Rotary airlock valve

Blow-Thru Roatary valve

Quick-Clean Roatary valve

Side Entry – Side discharge



Fabricated Roatary valve

Roatary Plug valve

TWO WAY DIVERTOR VALVE

Single Blade type diverter

Model SBD Single Blade Diverter

Single Blade type Diverter offers positive in-line product routing of granular and powdered bulk materials. The heavyduty plate construction and abrasion-resistant blade design provide long service life in even the most severe conditions. Manual or automatic actuation systems are available to meet your process requirements.

STANDARD FEATURES SBD:

- Heavy steel plate jig-built housing
- Continuous welding
- Anti-friction flange bearings
- Lever Arm actuator
- SPC-SP3 surface preparation
- Square inlet and outlet flanges
- Blade shaft seals
- 250 Bhn Diverter Blade
- Complete factory assembly
- Grey enamel external coating

Dual Channel Diverter Valve

Dual Channel type diverter valves are used in the pneumatic conveying industry to re-route powder, pellets or granules from one discharge point to another.
The Miteck Dual Channel Diverter can be used where Flap Valves are unsuitable due to high pressures or abrasive duties.
Plug Valves are ideal for use in high vacuum conveying systems or where severe leakage or cross contamination cannot be tolerated.
The valve consists of a rugged cast body which houses a cast plug between a pair of end covers. The material handled passes from one line through a tunnel within the plug to either of the two outlet lines. The material stream is diverted to the selected outlet by rotating the plug through 150°. Rotation is alternately clockwise and counter-clockwise and is achieved by means of a double acting torque actuator.

TWO WAY DIVERTOR

PUG MILL/ ASH CONDITIONERS

The Pugmill/Ash conditioner is applicable to many industries. Where pollu- tion control is a factor, the mill effectively blends dust recovered from such equipment as electrostatic precipitators, mechanical collectors and bag houses with various

liquids, thus allowing transport without the particulate matter escaping into the air.The Pugmaster also lets you recover valuable elements such as lead, iron and copper and return them to the process stream. This is especially beneficial in sintering, as it returns the recovered dust to the process providing a closed circuit.

The conditioners are designed to work on a continuous basis accepting a controlled feed of material from either a

screw feeder, or rotary valve etc.

Paddle blade formation is set to give the most efficient mixing action with water being added by an arrangement of

atomised spray nozzles up to 30% by weight.

All Conditioners are of heavy duty design, of single or twin shaft formation, material of construction can be mild

steel or stainless steel.

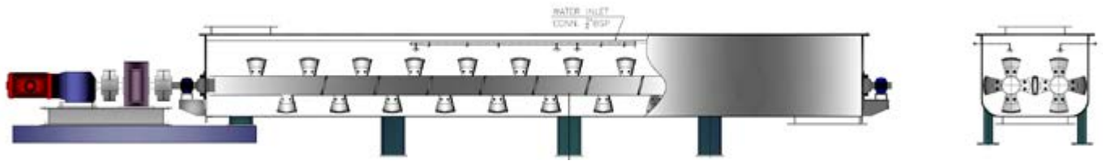
Throughput rates depend upon the type and properties of the product being handled. Cleeve will specify the

machine size, length, speed and power to suit the actual plant and capacity requirements.

Pugmill mixer /Ash conditioner

Hard faced baldes

Replacebale blades



DESIGN FEATURES AND BENEFITS

- Top feed opening can be modified to mate with equipment supplied by other manufactures.
- Paddle shafts, flanged at both ends, simplify maintenance; permit removal of entire assembly
- Timing gears are sealed in a heavy duty oil bath case which features fill and drain points and an oil level gauge. These gears allow for paddle intermeshing which provides a vigorous mixing action
- The four spray pipes are connected to a common header and are equipped with spray nozzles. Individual control valves meter the proper amount of various wetting agents to each pipe.

MITECK SYSTEMS

FALP GATE VALVE

The Double-Flap gate Airlock Valve is specifically designed to control the rate of material flow through a system, while at the same time preventing air leakage by isolating the processing system's pressures.

Unlike a rotary valve that inevitably has some air leakage because of the clearance required between the blades and the housing, The Double-Flap gate Airlock Valve is designed to seal completely and isn't subject to the kind of wear that rotary valves would endure under extreme application conditions

MOTORIZED DOUBLE FLAP GATE VALVE

The Double-Flap gate Airlock Valves are designed for high-pressure applications up to 20 psi and temperature extremes up to900˚C or higher depending upon the application.

Double-flap gate product that can operate reliably in pneumatic conveying systems at these pressures. All models are offered with a choice of pneumatic, electro-mechanical or gravity/counterweight actuation. A triple flap gate configuration is also available if better suited to your particular application.

The Pneumatic -Series-Double Flapgate Airlock Valves are designed for medium-pressure applications and standard temperatures to 400°C These units are an excellent, economical alternative to rotary valves. All models match the standard industry flange pattern and height.

PNEUMATIC DOUBLE FLAP GATE VALVE

DOUBLE CONE GATE VALVE

Miteck's Heavy duty series ensure a reliable, long-lasting seal even when the material is abrasive or corrosive.This type units are suitable for pressure differentials of up to 20 inches water gauge. However with special consideration to the contact points between the inlet and the cone, a seal can be incorporated to allow pressures up to 15 psi.

MITECK SYSTEMS