



AP CONTROLS
YOUR ENGINEERING SOLUTIONS PROVIDER



**Consulting
Designing
Installation
Manufacturing Service**

AP CONTROLS & COMPANY



AP Controls was established in 1997 which specialised in solenoid valves & connectivity as a start. We then enter into the bulk material handling & subsequently dust collector business. Sustainable growth over the years is achievable simply because of the deep cooperation with all our partners & committed employees. As an on going basis, we are committed to provide the best products & services to all our customers.

We partner with Focus at Vietnam with over 10 years of experience in manufacturing Dust Collector and Bulk Material Handling such as Bucket elevator, Chain conveyor, Belt conveyor and other accessories. As an engineering solutions provider, we have the capability to provide engineering services, designs, fabrication, installation and after service.

Our Management is strongly committed to ensure that our products fulfill the highest level on customer satisfaction by constant development and enhancement of our facility and quality controls. Our equipment consist of CNC laser cutting, forming, tube bending and blasting room situated at a 4000m2 factory layout.

Quality Commitment

Our partner Focus was certified by TUV for quality management system ISO 9001:2008, All these are made possible with our committed staff whom maintain and uphold the quality standard at the highest level.

CONTENTS

Company Profile [1], Dust Collector [], Intake Pit Filter [], Sack Tipping And Feeding Filter [], Multiple Application Spot Filter [], Chain Conveyor [], Bucket Elevator [], Screw Conveyor [], Rotary Valve [], Distributor Valve [], Slide Gate Valve [], Diverter Valve [], Industrial Centrifugal Fan [], Application [], Fabrication And Installation [].

DUST COLLECTOR



Application

For general application, Pulse Jet Dust Collector is widely used in pneumatic conveying, air ventilation and dust handling for polluted and hazardous industries like Cement, Fertilizer, Feed mill, Wood processing, Steel mill, Coal power plant, Waste handling. Pulse jet dust collector is a wise choice.

Advantage

It has a reliable & simple design to handle low/high volume dust collection application in a traditional way. With very high efficiency cleaning ability to maintain low pressure lost to save the power and increase productivity in a most energy-saving way. Compact, self-cleaning, continuous-duty, pulse-jet unit. High filtration efficiency of Bag Filter system (up to 99.5%).

INTAKE PIT FILTER

Application

Designed for dust free intake of dry and dusty materials from either power shovels or front-end unloaders. The truck drops its load onto a large limbed grid while air suction keeps the intake building at negative pressure resulted no dust can escape.

Advantage

- Adaptable to any size of intake pit
- Low pressure drop
- No rotary valve
- No dust transport
- Simple and inexpensive installation
- Function well even when the intake pit is overfilled



SACK TIPPING AND FEEDING FILTER



AP Controls sack tipping and feeding stations are ergonomically designed to provide safe handling for all types of sack and boxes whilst controlling and reducing dust emissions.

The operator places the sack onto a rest platform enclosed within an extracted cabinet. The bag is cut open to release the contents into a surge hopper or directly into process machinery. The laminar flow within the station provided by an extract fan ensures that the dust laden air stays away from the operator and back into the enclosure.

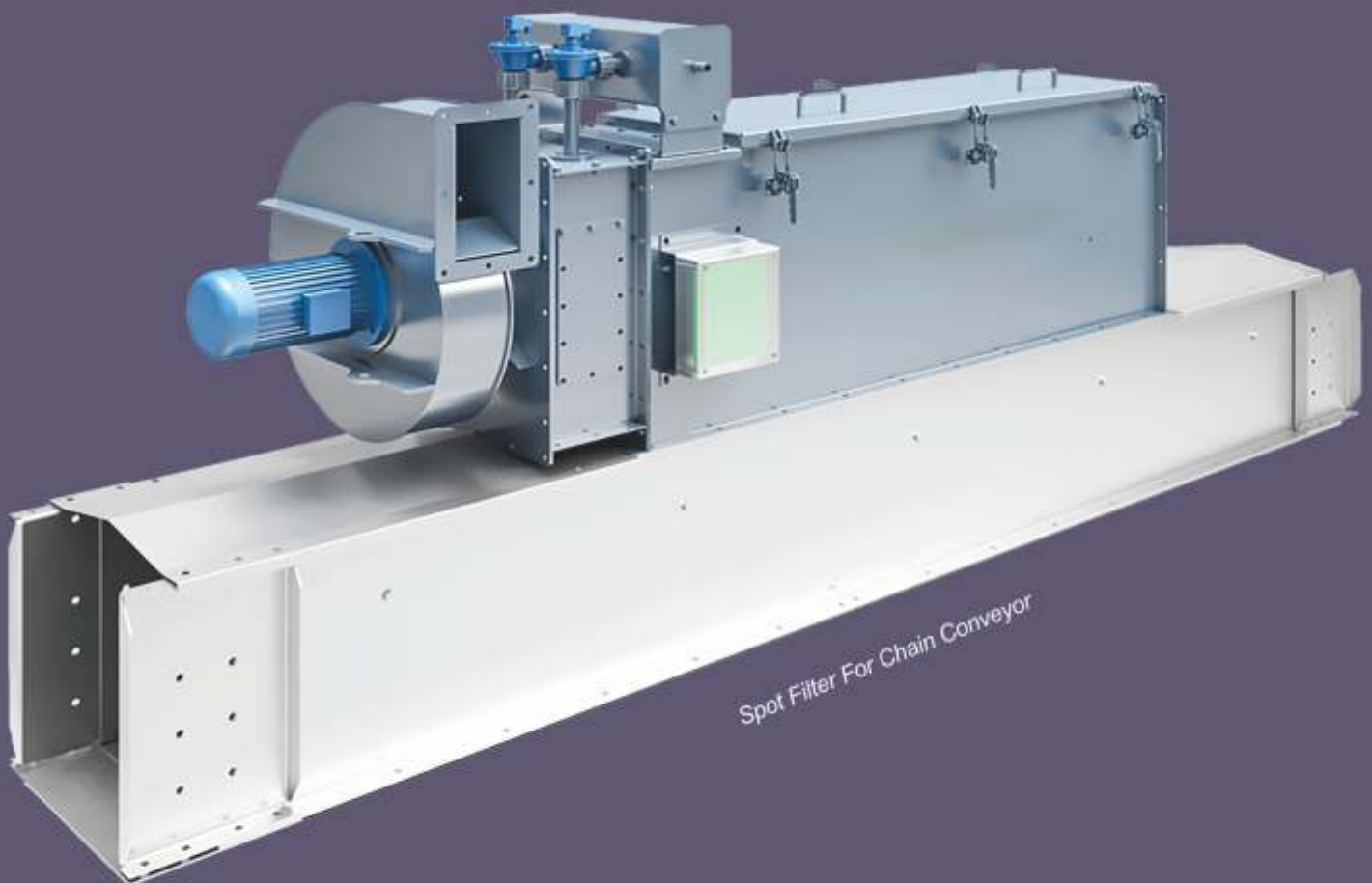
MULTIPLE APPLICATION SPOT FILTER

The bulk handling for powder and granular product conveyed by conveyor belt, chain conveyor, bucket elevator and telescope often created a lot of dust to the surrounding production area. AP Controls Multiple Application Spot Filter is uniquely designed for mounting directly onto the machine operating to deal with dusty products.

Application

The spot filter is a miniature bag filter which suppresses dust emission from machines and silos operating with dusty products. The filter bags are scavenged alternately by applying short compressed-air blasts from a non-relay electronic control.

- On top of raw silo
- On belt conveyor
- On screw conveyor
- On the bucket elevator
- And any spot incurred dust



CHAIN CONVEYOR

Application

Many material handling companies with grain processing facilities have high demands on the gentle conveying of their materials. We cater to wide range of conveyors for intake, distribution, connection and extraction with capacities up to 35 tons/hour using the new conveyor generation. The wide range of accessories ensures gentle handling of grainy and floury products. The chain conveyors are use in collection points and intake facilities for grain and other bulk materials, port terminals, mills, silo and storage plants, seed processing plants as well as malt mills.

Advantage

- The high versatility to work with every belt and bucket elevator designed to achieve customer's optimal conveying requirements.
- Continuous plastic scrapers on every plate link, with special cleaning vanes and low residue tensioning station, troughs with sharp edges for intermediate floor solution offering best sanitation standards using specially designed outlet flaps
- High plant availability owing to safety equipment such as overflow device in the driving station and optional speed control in the tensioning station
- Continuous plastic scrapers on each plate link with a trough bottom of superior quality improve the life span of the chain conveyor considerably
- The return rail reduces noise up to 50% because of a continuous smoother run of the chain in the upper trough section. A continuous smooth run of chain in the upper trough section reduce noise pollution caused by the return rail.



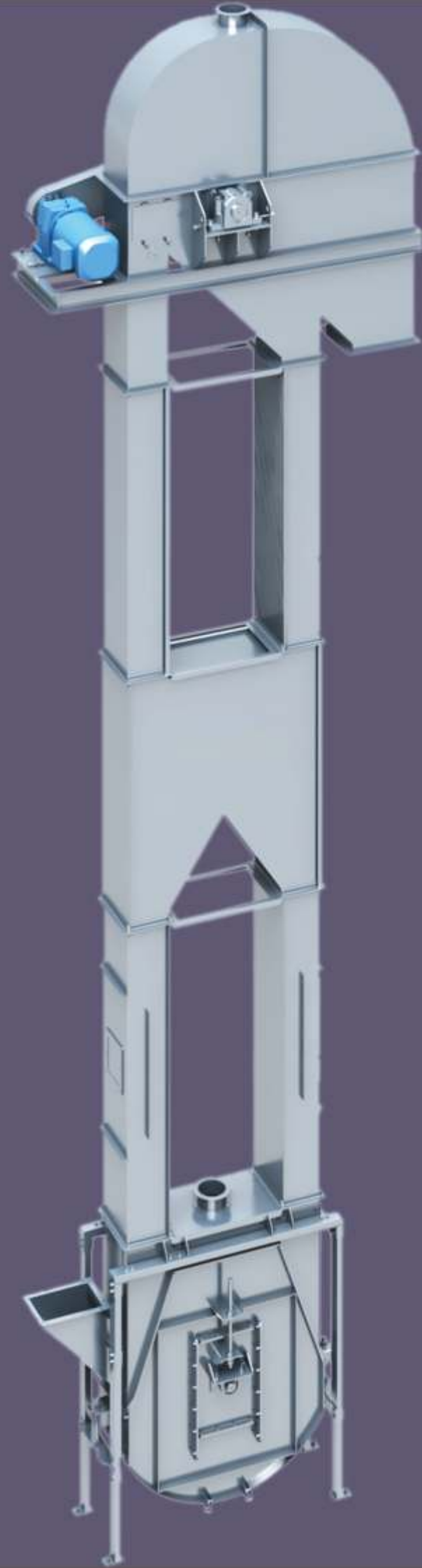
BUCKET ELEVATOR

Application

The bucket elevator is widely used on conveying powder, granular and non-small block mill as well as grinding of small materials like Coal, Cement, Stones, Sand, Clay and Ore, etc.

Advantage

- Depending on the required transmission, there are 2 design options to choose: Bucket elevator using Chain or, Bucket elevator using Conveyor Belt.
- The bucket elevator is the most popular vertical conveyor for delivering powder, pellet and nub type materials. It has self-correction and anti-reverse features with the availability of alarm system.
- It is effective for low powder in terms of flow feeding & guiding discharge, huge-volume hopper with tight arrangement.
- It has good sealing condition which can help to reduce on the environmental pollution efficiently.
- Advanced design & reliable manufacturing way has assured the overall performance of the machine with high stability and better lifting height.



SCREW CONVEYOR

Application

Shafted screw conveyors are used in thousands of industrial applications every day for efficiently conveying a variety of bulk materials. A screw conveyor's main function is to transfer bulk materials from one process to another. Screw conveyors are very cost-effective and require minimal maintenance to operate.

Advantage

- Ideal for handling dry to semi-fluid materials - free - flowing to sluggish.
- Cost-effective when compared to other conveying devices such as: Belt, Pneumatic or Aero-mechanical conveyors
- Efficiently distributes bulk materials to various locations using multiple inlet and discharge points
- Totally enclosed for corrosive or hazardous requirements



ROTARY VALVE

Rotary valves are placed under the hoppers or bins to arrange for uniform feed of material to the conveying equipment. Basically it is a volumetric feeding device which helps in applications where the flow rate of the solids needs to be controlled. They can be designed to have approximately 85% volumetric efficiency.

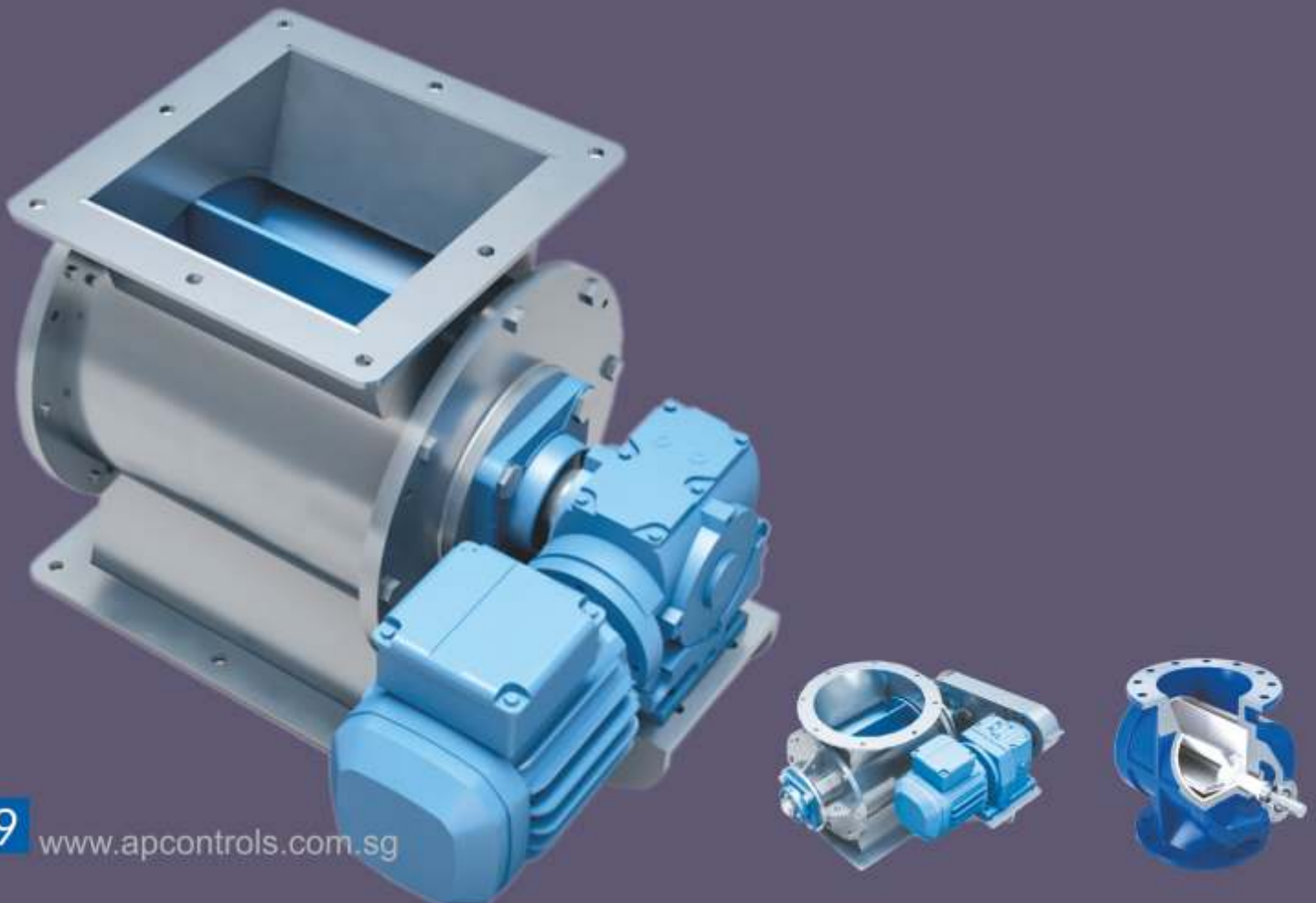
Rotary Valves have wide application in industry wherever dry free-flowing powders, granules, crystals, or pellets are used. It can be used to handle bulks even under high temperature.

Application

- Used to feed dry free-flowing powders, granules, crystals, or pellets
- Economical solution for automated handling of most discharge dust
- Used to control product flow rate to the required rate (fixed or variable)
- Can be used to handle bulks even under high temperature
- Most common means of feeding pneumatic conveying systems
- Also an act as process isolator

Advantage

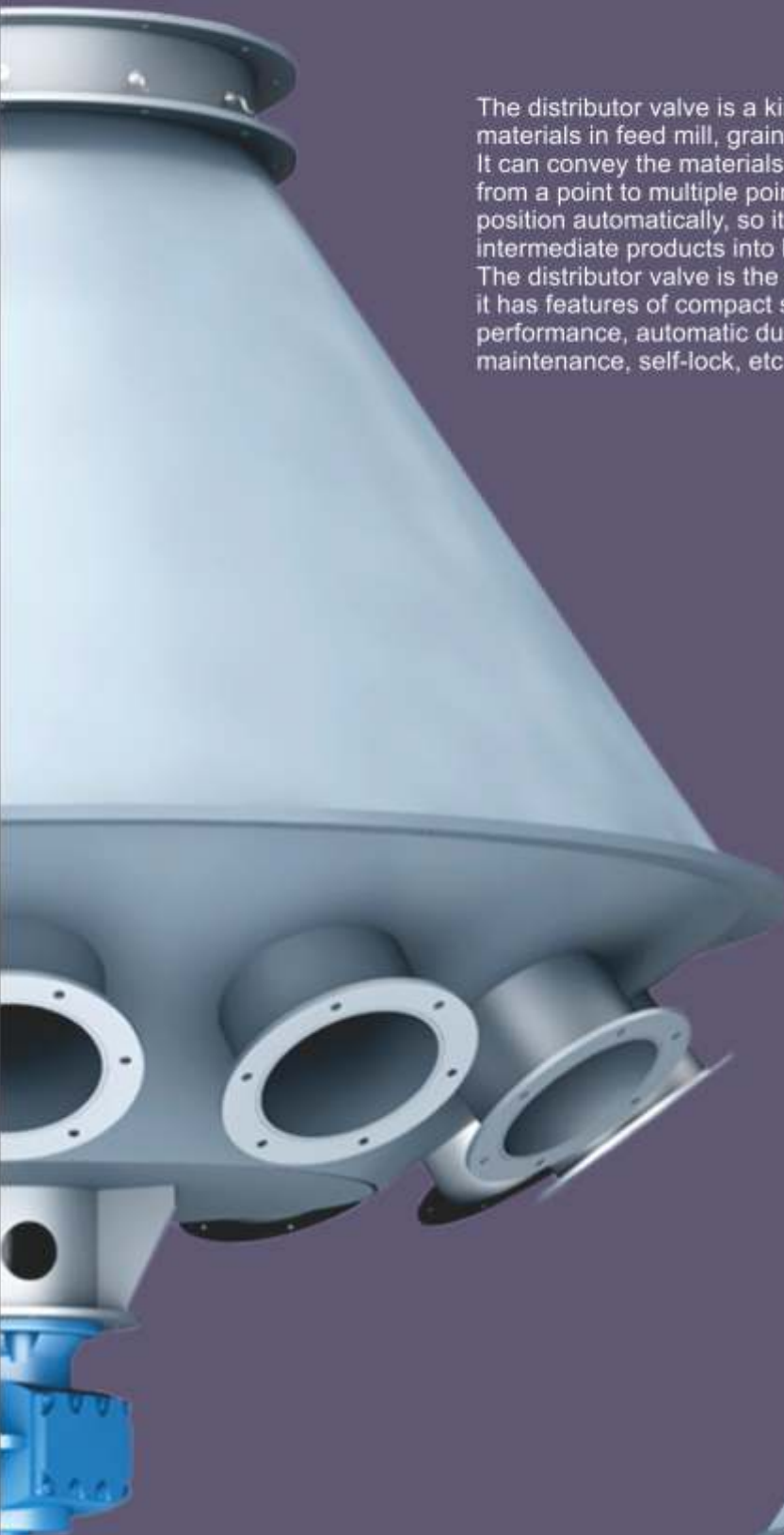
- Low cost
- Easy to install, operate and maintain
- Wide range available depending on application and need
- Useful as an explosion and flame barrier
- Help in reducing hazards from explosive dust and volatile material due to air tight construction



DISTRIBUTOR VALVE

The distributor valve is a kind of ideal ancillary equipment used for distributing materials in feed mill, grain processing plant, silo, etc. It can convey the materials to a predetermined location, or convey the materials from a point to multiple points by remote control. And it can adjust position and fix position automatically, so it is widely used to distribute the raw materials or intermediate products into bins.

The distributor valve is the best automation equipment to replace screw conveyor. It has features of compact structure, high positioning accuracy, stable and reliable performance, automatic dust collection, automatic positioning, easy operation and maintenance, self-lock, etc.



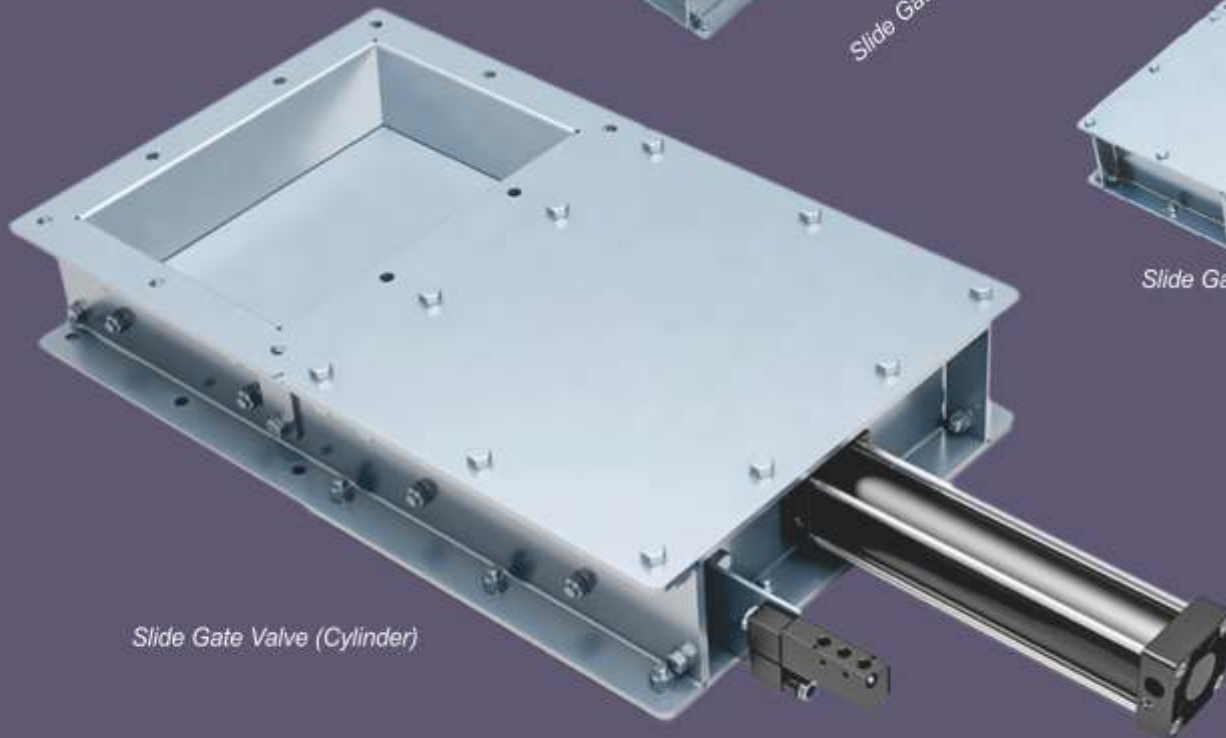
SLIDE GATE VALVE



Slide Gate Valve (Gear Motor)



Slide Gate Valve (Manual)



Slide Gate Valve (Cylinder)

▪ Adjustable Rollers

Externally greased hardened steel adjustable rollers are used to keep the blade dust tight

▪ Abrasion Resistance

Replaceable abrasion resistant liners and blade extend the service life of the valve by reducing wear

▪ Displacement Pocket

Slide gate is engineered with a displacement end pocket to help prevent material packing

▪ Actuation Options

Slide gate can be actuated with the following options: Gear motor, Actuator, Pneumatic Cylinders, Hydraulic Cinders and Manual

▪ Bonnet Purge

The optional bonnet purge is utilized to keep material out of the body of the valve and in the material stream

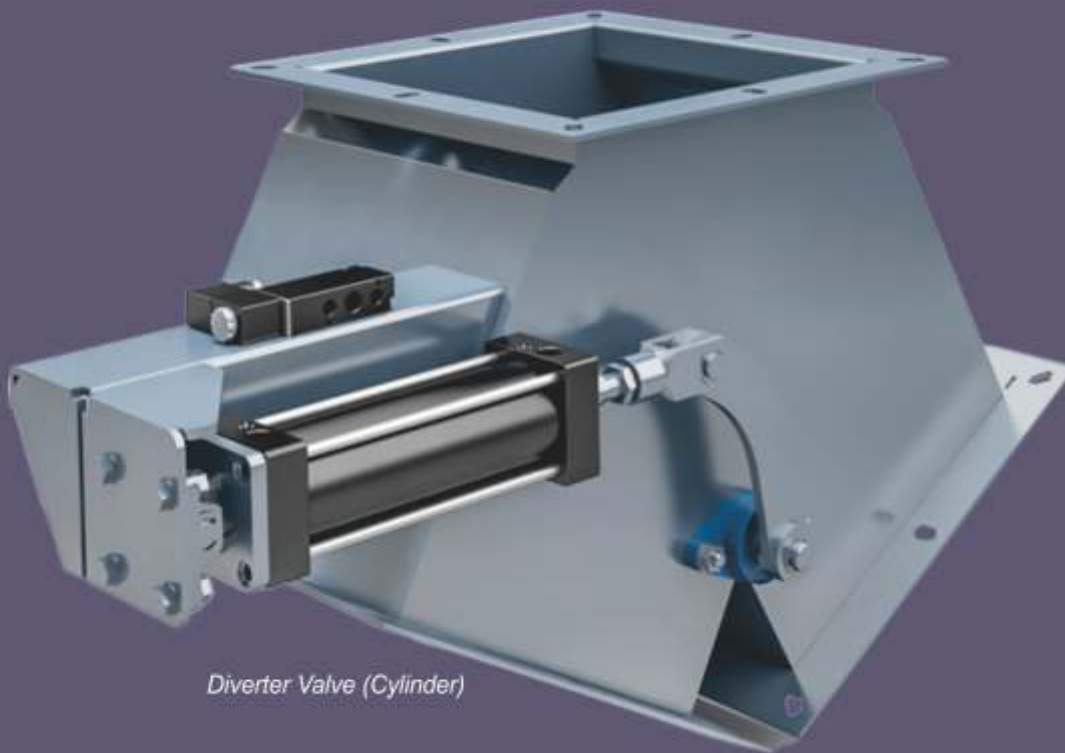
▪ Replaceable Seals

Wear compensating hard polymer seals help prevent material leakage

DIVERTER VALVE



Diverter Valve (Gear Motor)



Diverter Valve (Cylinder)

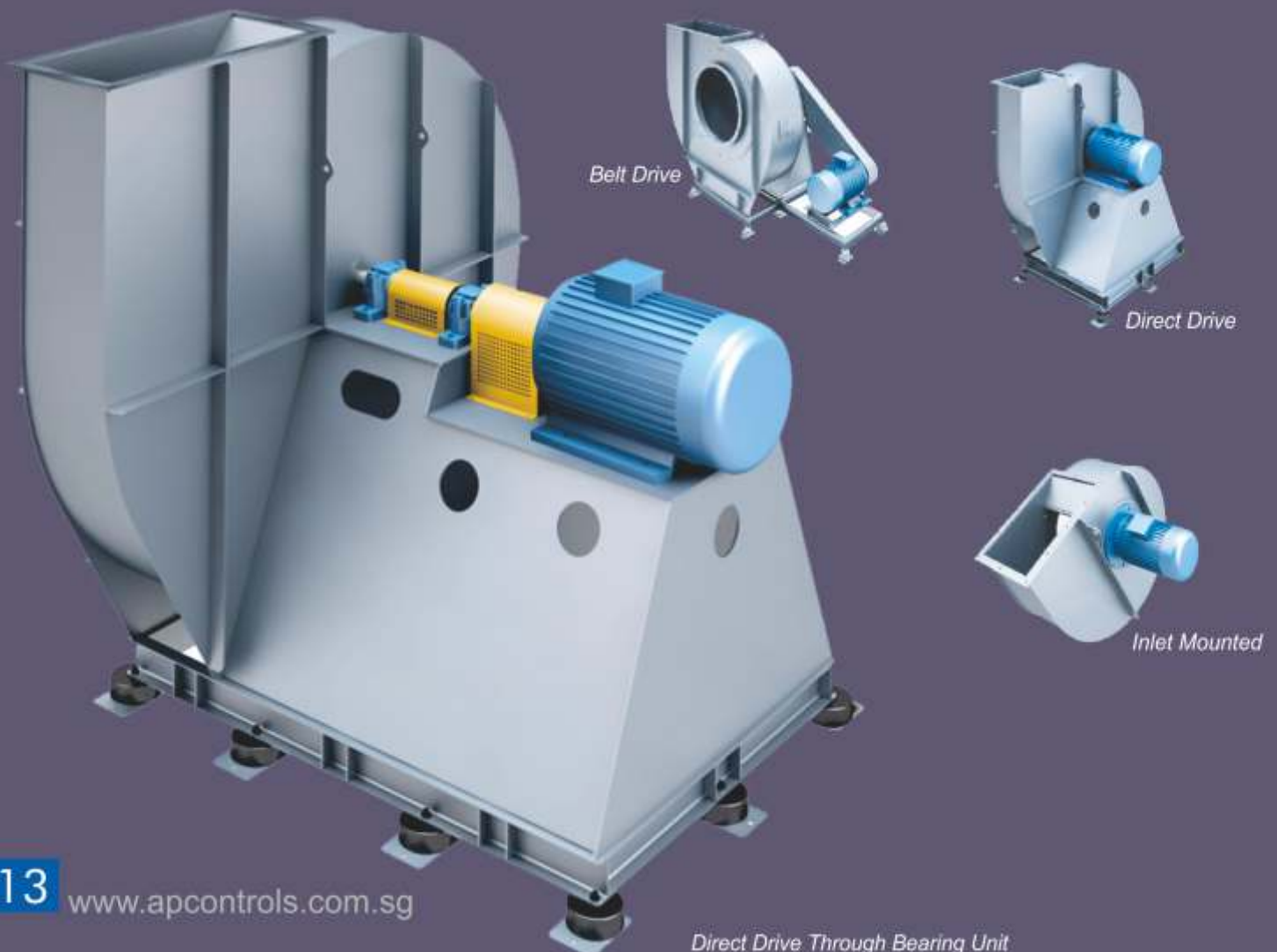
- The features of high capacity, low energy consumption, easy maintenance, convenient and safe operation, etc
- As it can switch and invert the conveying direction of materials, this distributor is widely used for distributing grain, feed, flour, etc
- Gravity flow
- Design allows for total material flow control
- Wear compensating hard polymer seals
- Seals protected from material flow stream
- Positive seal of dust and fine powders

INDUSTRIAL CENTRIFUGAL FAN

AP Controls Fans are designed and selection using copyright software from Centrix Australia. It has multiple impeller designs with different impeller blade types to suit the application, all designs can be engineered to meet you exact requirements and give optimal fan efficiency. Centrix is a centrifugal fan selection program that enables a fan manufacture to select design, cost quote fans for application. For your inquiry, it requires three majors information included Volume, Pressure and Temperature, we would select the most suitable fan from ranges. Based on your application and specification we tailor make the fan with the right features, materials and documentation for you.

Basic Fan Arrangements

Below are our basic fan arrangements. Many more arrangements are available like between-bearings and multi-stage.



INDUSTRIAL CENTRIFUGAL FAN

Impeller ranges

The impellers are dynamically and statically balanced in accordance with BS.6861:Part 1: 1987 and ISO 1940/1:1986.

They are precision-built components typically made up of blades welded between a substantial back plate and conical shroud. The precision laser cut back plate with blade slots ensures utmost accuracy in the angle and position of blades.

Impellers are fitted with a machining center boss, precision bored with a standard keyway to suit.

Casings

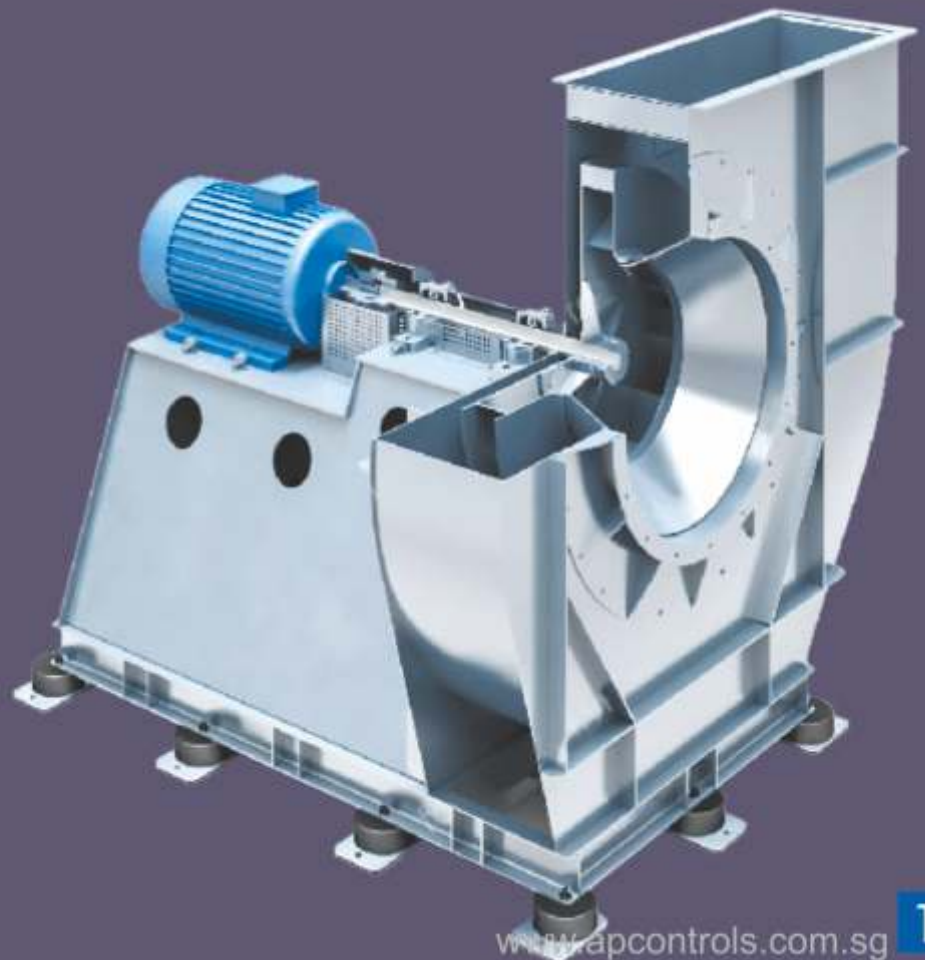
The fan casings are of an all welded construction and substantially braced for extra rigidity.

Casings up to and including size 39 are made in one piece.

Standard sizes 42 and larger are made in two pieces and these pieces are flanged, drilled and bolted together (known as a spit case).

Above a size 60, the casings are in three parts with the top section being divided.

The impellers can be removed from the inlet side after taking off the front plate.



APPLICATION



MAINTENANCE





Singapore :

📍 2 Jurong East St 21 #04-28K,
IMM Building, Singapore (609601)
☎ +65 6563 2098, 📞 +65 6562 6083
✉ sales@apcontrols.com.sg

Indonesia :

📍 Jl. Dr. Ratna No.1A Bekasi 17421 Indonesia
☎ +6221 8499 6745 📞 +6221 8499 5151
✉ indo.support@apcontrols.com.sg
🌐 www.apcontrols.com.sg