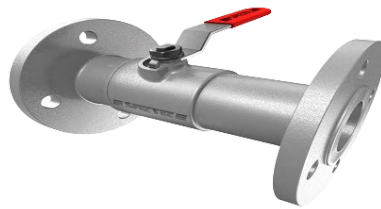




**HEAT EXCHANGER,
MATERIAL HANDLING,
STORAGE SOLUTION,
SPARE & PLC**



www.spectecindia.com



Industry We Cater:

- Breweries
- Dairy Industry
- Water Industry
- Chemical Industry
- Edible Oil Industry
- Waste Water Industry
- Food & Beverage Industry



Content

READ IN DETAILS	PAGE NO.
Heat Exchanger Shell & Tube Heat Exchanger Plate & Frame Heat Exchanger	3
Filters Vertical Pressure Leaf Filter (VPLF) Horizontal Pressure Leaf Filter (HPLF) Micro Polishing Filter Automatic Gravity Filter Membrane Filter Press Strainer	4-5
Valves , Gages & Instrumentation Equipment's	6
Material Handling Equipment's Screw Conveyor Bulk Flow Conveyor Belt Conveyor Bucket Elevator Pipes Weigh Bridge	7-8
Automation Semi-Automatic PLC PLC with SCADA	8
Storage Tank Farm Silo	8
Spares Filter Leaf & Filter Elements Knife Mixer Site Glass Bellows	9

Heat Exchanger

Heat Exchangers:

Heat exchangers are devices that transfer heat between fluids without mixing or blending them. The fluids are separated by a wall that has high thermal conductivity.

Spectec Manufactures & supplies two kinds of Heat Exchangers:

- 1) Shell & Tube Heat Exchanger
- 2) Plate Heat Exchanger

SHELL & TUBE HEAT EXCHANGER:

Shell & Tube heat exchanger consists of a shell with a bundle of tubes inside it. The operating principal of Shell & Tube Heat Exchanger is that One fluid runs through the tubes, and another fluid flows over the tubes (through the shell) to transfer heat between the two fluids. Thus The exchanger helps in transferring thermal energy from one fluid to another. Shell and Tube Heat Exchangers are widely used in high pressure applications.



Plate Heat Exchangers:

A plate heat exchanger is a type of heat exchanger that uses metal plates to transfer heat between two fluids. In PHE, fluids are exposed to a much larger surface area because the fluids are spread out over the plates.

Plate Heat Exchangers (PHE) are widely used in the following industries:

- Food & Beverage Industries
- Edible Oil Industries
- Breweries
- Chemical
- Waste Heat Recovery
- Oil & Gas



FILTERS

Vertical Pressure Leaf Filter (VPLF):

VPLF are used for filtration of liquids with suspended solid contents upto 7%. Vertical Pressure leaf filter the conical tank structure and is constructed in carbon steel. The filter elements are in stainless steel. The filter elements are of 5-layer construction with filter screen made of 24 x 110 meshes, Hollander wave. The filter leafs are vertically mounted inside on a common manifold pipe, through which the filtered liquid flows out. Vertical Pressure leaf filter have varied application in multiple industries Viz : Edible oil Industry, Food & Beverage Industry, Mineral Oil Industry and chemical industry.

Salient Features:

- More filtration rate,
- Avoids Chocking,
- Lower down time for cleaning
- Automated cake discharge,
- Easy to maintain,
- Highly cost effective

Horizontal Pressure Leaf Filter (HPLF):

Horizontal Pressure Leaf Filters are required for filtration of liquid with higher solid content in edible oil, chemical food and pharmaceutical industry, Conventionally, It was also used for filtration of Wax . The structure of the HPLF typically consists of a horizontal cylindrical vessel containing multiple filter leafs arranged parallel to each other vertically on a common manifold. These filter leaves, are made of 5 or 3 layers of metal meshes covered with woven wire mesh or a filter cloth that serves as a filtering medium.

Salient Features:

- Big filtration surface
- Easy to clean filter plates
- Heating jacket to prevent solidification
- Minimum maintenance
- Low maintenance cost
- Less time consumption to start filtration

Micro Polishing Filter:

Micro Polishing filter are basically used for post primary filtration. The baskets have a quickopening type arrangement. Filter bags used are in Polyester, Polypropylene, Ryton, Nylon & other special material depending on specific application.

Salient Features:

- Automatic Back Flushing
- No frequent changing of cloth
- Compact design
- Can be operated by PLC

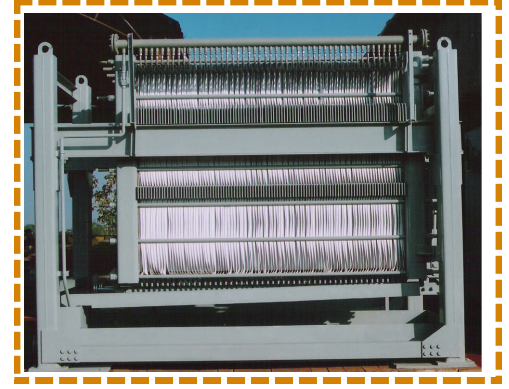


Automatic Gravity Filter:

This SUPER FILTER has been designed for use in the Dewaxing and Winterizing process of vegetable oils. This specially designed SUPER FILTER operates automatically at high efficiency and saves energy to the greater extent. This can be used in processing of all kinds of oil such as Sunflower, Soya Bean, Cotton Seed, Palm and Rice Brain Oil.

Salient Features:

- Seamless Automatic Operation
- Can be operated by PLC
- No manual intervention
- No Need for Opening the Filter after Filtration
- No Spillage
- Filter Elements needs to be changed after 1and half years
- Low Maintenance



Membrane Filter Press

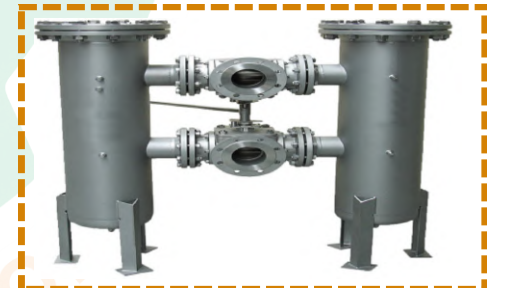
An industrial filter press is a tool used in separation processes, specifically to separate solids and liquids. The machine stacks many filter elements and allows the filter to be easily opened to remove the filtered solids, and allows easy cleaning or replacement of the filter media. A plate and frame filter press is the most fundamental design, and may be referred to as a "membrane plate filter." This type of filter press consists of many alternating plates and frames assembled with the supports of a pair of rails, with filter membranes inserted between each plate-frame pair.

Filter Press has varied application. It is used extensively in sugaring, Beverage Industries, Syrup Industries and Edible Oil Industries.



Strainers:

Strainers are vertical vessels made of either CS (Carbon Steel) or SS (Stainless Steel) with wire filter element in SS and rotating brush inside, made of taflon. The strainers are predominately used for removing unwanted particles from crude oil. After the filtration the sediments are discharged from the bottom of the vessel.



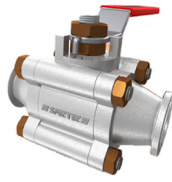
Valves, Gauges and Instrumentations



1 Piece Flange End Full Bore Ball Valve



3 Way Flanged End Ball Valve



Triclover End Ball Valve



Not Slam / Disc Check Valve



Dual Plate Check Valve



Steam Trap F/E



Needle Valve



Butterfly Valves (Geared)



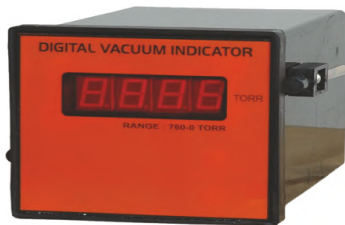
Non Return Valve F/E



3 Way Socket End Ball Valve



Transparent Level Gauge



Digital Vacuum Gauge



Magnetic Level Gauge



McLeod Gauge



Reflex Level Gauge



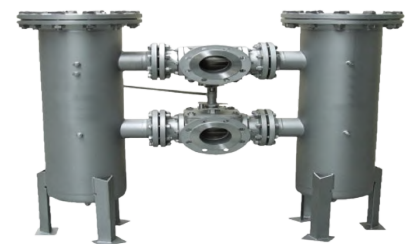
Transparent Level Gauge



Acrylic Body Rotameter



Basket Strainers



Basket Strainers



Tubular Level Indicator



Glass Tube Rotameter(SGTV)



Control Panels

MATERIAL HANDLING EQUIPMENT

Conveyor :

Screw Conveyor:

Screw conveyors are also called auger conveyors used for bulk handling of semi-solid materials including tea leaves, herbal extraction, food, food waste, wood chips, aggregates, cereal grains, animal feed, boiler ash, meat, bone meal and for many other industrial applications.

Screw conveyors consist of screw blades within a tube for moving semi-solid, powder and granular materials from one end to the other.

Screw Conveyors offered by Spectec are :

- Horizontal Screw conveyor
- Shaft Less Screw Conveyor

Horizontal Screw Conveyors: used extensively in industries for handling bulk materials from one end to the other.

Shaft Less Screw Conveyor: This kind of screw conveyors are generally used to handle bulk materials with high moisture content. A shaftless screw conveyor consists of a non-clogging conveying surface that allows to convey materials with high moisture easily without clogging.

Advantages of Spectec's Screw Conveyors:

- Ideal for handling semi fluid and materials with high moisture content easily
- Compact design
- High Efficient and operator friendly
- Efficient distribution through multiple inlet and discharge point

Bulk Flow Conveyor

A bulk flow conveyor is a conveyor system designed for transporting loose or granular materials in bulk. The conveyor system consists of a continuous belt or chain that moves in a circular or linear path. Bulk material such as grains, powders, pellets are loaded into the conveyor belt or chain at one end of the system and is carried along by the motion of the belt or chain.

Belt conveyors:

Belt conveyors are powered conveyors used in conveying different kinds of materials and components. A belt conveyor is a broad and wide belt attached to rollers in the shape of a loop that is connected to motorized rotors. Conveyor belts are of various forms, sizes, shapes, angles, and materials, designed and manufactured as per specific industrial requirements.

Bucket Elevator:

Bucket elevators are used for bulk material handling. It consists of a series of buckets attached to belts or chains with pulleys or sprockets at the top and bottom of the unit to contain material, bulk material is loaded into each bucket as the bucket moves through the entry point.

Bucket elevators are used for continuous vertical lifting of powders, granules, small lumps and Oil Seeds. It is widely used in feed mills, flour mills, starch factories, grain depots, Food Processing units, Edible oil Industries and other places of various scales to lift bulk materials.

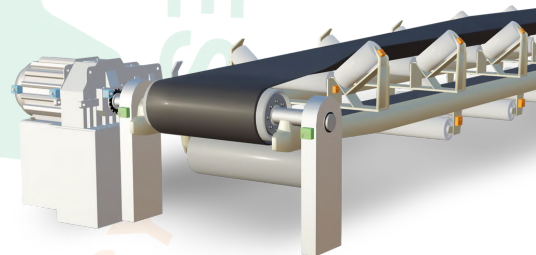
Types of Bucket Elevator:

Spectec can provide two different types of Bucket Elevators as per the need and requirement of Industries:

- 1) Belt Type Bucket Elevator
- 2) Chain Type Bucket Elevator

Advantages of Spectec's Bucket Elevator:

- 100 % customised, tailor made as per the industrial requirement
- Minimum Spill Over
- Highly Efficient and convenient to use
- Low maintenance



Pipes:

Spectec Provides Complete Piping job for Food & Beverage Industry, Distillery Industry, Dairy Industry, Edible Oil Industry and Petro chemical Industry.

Weigh Bridge:

Industrial Weigh Bridges are generally installed at the entry or exit gate of a factory to scale the load of an incoming or outgoing truck to determine the weight of goods loaded in the truck. Spectec can provide Pit weigh bridges and Pit less weigh bridges as per the need and requirement of the industry.

Advantages:

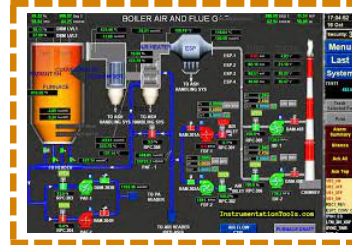
- 100 % customised
- Less space consumption
- Less Civil expenses
- Less Maintenance



AUTOMATION

AUTOMATION:

Spectec, provides both Semi-Automatic and Fully Automatic PLC Automation System as per the need and requirement of the customer. Fully Automatic PLC Automation Systems are offered with SCADA.



STORAGE

TANK FARM:

Tank Farms are storage terminals for liquid storage, generally used in storage of Milk, Fruit juice and edible oil. Spectec has the experience of supplying, installing and commissioning of Tank Farms for Food & Edible oil industries in the overseas market.

SILO:

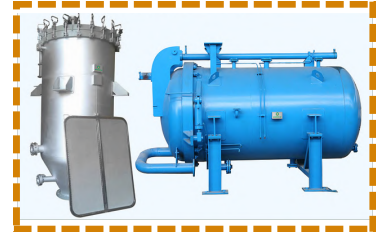
Silos are the bulk storage medium for grains, cereals powder, etc. Spectec can provide customized Silos as per requirement of the industry with SS, MS or GI as material of construction.



SPARES

Filter Leafs and Filter Elements:

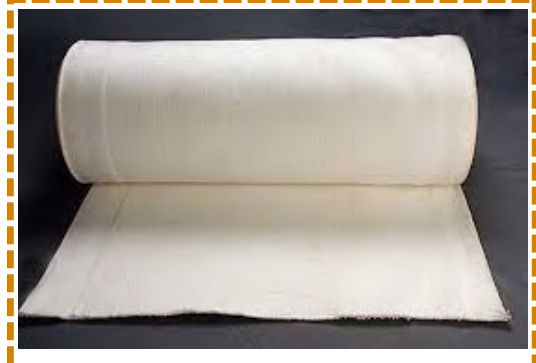
Spectec manufactures and supply Filters Leafs for both PLF & HPLF. Apart from the Filter leaves, Spectec also provides different kind of Filter Elements, which includes: Filter candle, Filter Cloth, Filter Cone, Filter Bag, Filter Basket, Leaf Disc, Filter Disc and O-ring.



Magnetic Filter Elements

Candle Filter Element

Candle Element



Stainless Steel Cartridge

Bag filter Element

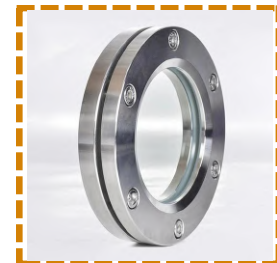
Filter Cloth

Knife Mixers:

Knife Mixers are fitted with high speed blades and are generally used in oil industry for blending two liquids uniformly.

Sight Glass offered by Spectec includes:

- Level Gauge
- Sight Flow Indicator
- Circular Flange Type Site Glass
- Fused Sight Glass



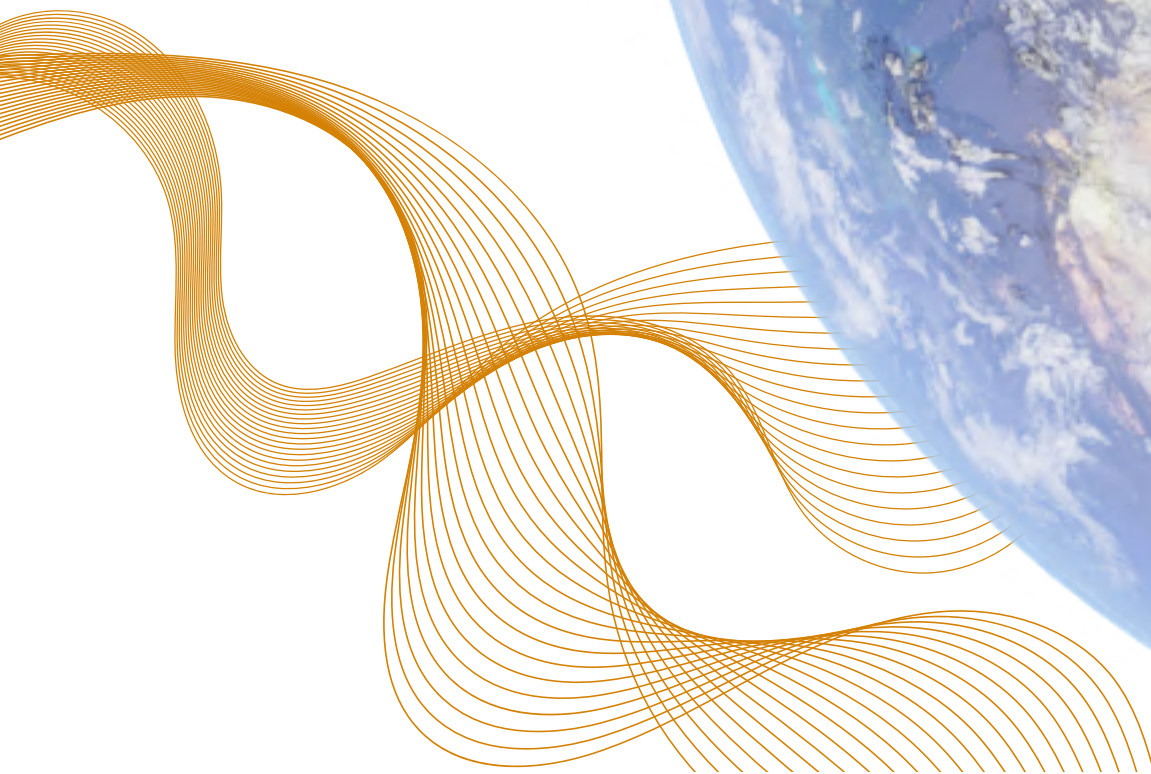
Bellows:

Spectec Manufactures & Supplies Bellows, which are widely used in Food & Beverage Industry, Dairy Industry, Edible Oil Industry etc.



OUR GLOBAL PRESENCE

- MALAWI
- MOZAMBIQUE
- KENYA
- TURKEY
- GHANA
- NIGERIA
- NEPAL
- CHAD
- IVORY COAST
- UKRAINE





About Spectec

Spectec” started its journey with a very humble beginning in 2007 in Mumbai, India, as a project consulting firm with specialization in Edible oil Projects. With the background, experience & expertise of successful project execution from conceptualization stage to successful running of the plant after commissioning, Soon Spectec realised there is high demand of factory spares, Heat Exchangers, Material Handling Equipment’s, Filters and Automation that are regularly required in the factory. With the objective of becoming a one stop solution provider for different industries, Viz : Edible Oil Industry, Food & Beverage Industry, Dairy Industry, Water Industry, Waste Water Industry, Breweries and chemical Industries, Spectec started to manufacture Shell & Tube Heat Exchangers, Plate & Frame Heat Exchangers, Screw Conveyor, Bulk Flow Conveyor, Conveyor Belt, Bucket Elevator, Filter and Filter Elements, Valves, Gages & Instrumentation Equipment’s, Mixers, Bellows and Site Glass, etc. Spectec also manufactures and supply Tank Farm and Silo. With respect to Industry Demand, Spectec can also supply PLC Automation. Since Spectec is a OEM, supplies of Spectec are customised as per the need and requirement of the industry.

Spectec is not just supporting the industries in the domestic market, but it is also exporting across the globe in 15 countries.



Head Office: Office no.905,9th Floor, Ansal Bhawan Kasturba Gandhi Marg, Connaught Place, New Delhi-110001.(INDIA)
Tel.:+911123712125,23352125



Corporate Office & Factory : Office no.: 19, Udyog kshetra, Linkroad, Mulund(w) Mumbai 400080 (INDIA)
Tel.:+912225682125,25912125



REGD.OFFICE: CB-254,Off.No.1, 1st Floor, Ring Road, Naraina, New Delhi-110028.INDIA)
Tel.:+911125777393,25774125



Email : info@spectecindia.com, info@spectecgroup.com



Contact Number : +918470042125 +918178786725 +919311502125

(HotLine,24*7)