PASCO FILTRATION PRODUCT BROCHURE

Process Filtration Systems



Filtration & Separation System Packages VARIOUS TYPE OF FILTERS & COALESCERS AUTOMATIC FILTRATION SYSTEM GAS SEPARATION MEMBRANE PACKAGES DEHYDRATION& DECOLOURING PACKAGES PRESSURE VESSELS & HEAT EXCHANGERS SCR DENOX SYSTEM GAS REFRIGERATION PACKAGES AMINE SWEETENING PACKAGES VARIOUS PROCESS RECOVERY PACKAGES

Filters and Coalescers for Refinery Processes and Petrochemical Plants

We have various type of filters and coalescers to meet the Process Conditions and Purpose









Cartridge Filters & Bag Filters

- Removal of impurities in the process fluids and utility fluids
- Various type and materials of cartridges and bags for wide retentions 0.1micron~100micron & over
- Type of Filter Media Reusable media : Sintered Metal Porous Media, Profile Wedged Wire, Woven Screen & etc Dispasoble media: Cotton, PP, PE, Nylon, Acetate, Rayon, Glass Fiber, Teflon & etc
- Filter Vessels designed and fabricated in accordance with ASME Code and Local Regulations
- Available materials of filter vessels are Carbon steel, Stainless steel, High alloy, Lined rubber, PP & PTFE

Liquid-Liquid Coalescers

- Immiscible liquids separation for refinery and petrochemical process liquids.(Hydrocarbons/Water)
- Various type of cartridges and reparks
 Entrained liquid inlet content : 0.5%~ 3%
- Entrained liquid outlet content : 5ppm~ 30ppm Type of Coalescer
- Vertical single stage/Vertical double stage , Horizontal single stage/Horizontal Double stage
- Coalescing media: Glass fiber , PP, PE, Rayon Excelsior, Stainless steel, Carbon steel, Combination

Gas-Liquid Coalescers & Mist Eliminators

- Liquid droplet removal for refinery and petrochemical process gases.
- Various type of cartridges, vane and reparks Liquid removal efficiency : 0.1micron 99.95% Solid removal efficiency : 0.3micron 99.98%
- Type of Coalescer Vertical single stage/Vertical double stage , Horizontal single stage/Horizontal double stage
- Coalescing media: Glass fiber , PP, PE, Rayon Stainless steel, Carbon steel, Combination

Self Cleaning Filters

- Self cleaning by electric or pneumatic driver
- Mechanical knife, Brush cleaning type and Backwash rotating arm type.
- Solid retention range : 40micron ~ 1mm & over

Strainers

- Bucket type, Tee type, Y type, Cone type
- Welded Piping and Casting body



Fabricated Strainers



Simplex Strainers



Duplex Strainer



Automatic Self Cleaning Strainer

AUTOMATIC FILTRATION SYSTEMS

Automatic Filtration System for Refinery Processes and Petrochemical Plants We have four(4) types of Automatic Filtration Systems to meet the Process Conditions and Purpose







CakeBack[™] Filter System Application

Recovery of precious metal catalysts on carbon (Pt, Pd, Rh, Ru)and Raney nickel after reaction
Recovery of organic products from industrial

- waste streams for recycling
- Removal of impurities in the production of ferric chloride
- Various separation steps in the production of titanium dioxide
- Separation of solids(Me-Ohx, gypsum, etc) from gas scrubbing plants in power plants & incineration
 Recovery of polymer granulates from waste stream
 Clarification of brines in the chlor-alkai plant

DepthBack™ Filter System Application

- Industrial raw water filtration for refinery
- Steam condensate filtration for petrochemical plant
- · Potable water and swimming pool water filtration
- · Waste water filtration for recycling
- Type of granular filter media:
- Sand, Garnet, Anthracite, Activated Cabon, Birm Organo-Clay, Multi-Media

MetalBack[™] Filter System Application

- Slurry oil filtration for RFCC process in refinery
- Guard filtration for FCC reactor in refinery
 Recovery of precious metal catalysts on carbon
- (Pt, Pd, Rh, Ru)and Raney nickel after reaction
- Removal of contaminants from high temperature fluids
- Type of filter media
- Sintered Metal Powder, Sintered Metal Screen Sintered Metal Fiber, Woven Metal Screen

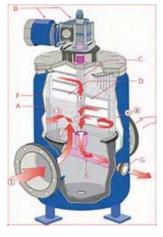
MultilBack™ Filter System Application

- Vacuum residuum(VRDS) process in refinery
 Atmospheric residuum(ARDS) process in refinery
- Atmospheric residuum(ARDS) process in refinery
 Coker Gas Oils(CGO) process in refinery
- Vacuum Gas Oils(VGO) process in refinery
- Removal of contaminants from Diesel
- Removal of contaminants from Naphthas
- Removal of contaminants from Amines
- Type of filter media

Sintered Metal Screen, Wedged Profile Screen, Woven Screen, Woven Fiber



Automatic Self Cleaning Strainer





Membrane Packages for Gas Separation

Gas Separation Membrane Package for Refinery and Petrochemical Plants Gas Purification & Fuel Gas Conditioning, Emission Control, Product Recovery



Gas Purification : Nitrogen Membrane Generators, Air Drying , High Pressure Air Drying Hydrogen Recovery and Purification for Refinery

Fuel Gas Conditioning: Natural Gas Dehydration, CO2 Removal and H2S Removal **Emission Control:** Vapour Recovery for Tank Farms and Refinery

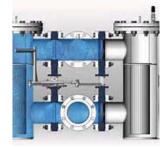
Marine Vapour for Product Loading into Ships and sea going Vessels Vent Recovery for Emission Control at Petrol Service Stations



Product Recovery : Valuable Ethylene Recovery from Polyethylene Plant, EO or VAM plant Valuable Propylene Recovery from Polypropylene Plant Valuable Hydrocarbon Recovery from Production and Storage







Temporarty Strainer in Specialty Alloy's

Pressure Vessels and Heat Exchangers Dehydration Packages SCR DeNOx System Packages



Pressure Vessels

- ASME Sec. I or Sec. VIII, NACE MR-0175
- National Board Registration
- Gas Processing Column
- Fractionation Towers, Regeneration Towers
- Pressure Vessels for Amine Treating Units
- Pressure Vessels for Sulphur Recovery Units
- Pressure Vessels for Waste Heat Recovery
- Drums for Gas Compression
- Various Type of Reactors, Columns, Towers and Drums for Refinery & Petrochemical Plants
- ASME Code Stamp and Local Regulations Stamps
- Available materials of Vessels are Carbon steel, Stainless steel, High alloy, Lined rubber, PP & PTFE

Shell & Tube Heat Exchangers

- ASME Sec. I or Sec. VIII, TEMA, NACE MR-0175
- National Board Registration
- TEMA C & R construction
- Fixed and Floating Head Designs
- U tube, Straight tubes or Finned double pipe
- Gas/Gas Exchangers, Gas Chillers
- Fractionation Reboilers, RegenerationGas Cooler
- Amine Reboilers, Rich/Lean Amine Exchangers Lean Coolers, Reflux Condensers
- Sulphur Condensers, Waste Heat Boilers
- Waste Heat Recovery Exchangers
- ASME Code Stamp and Local regulations Stamps
- Available materials of Exchangers are Carbon steel, Stainless steel, High alloy, Overlay

Dehydration & Amine Sweetening Packages

- Gas Dehydration Packages
- Removal of Water, CO2, H2S from Gases such as Air,Hydrogen,Oxygen, Nitrogen, Ammonia, Ethylene Mixed Hydrocarbon Gases, Natural Gas, Propane
- Removal of Water from Solvents such as Acetone, Toluene, Benzene, Xylene, Methanol Ethanol, Trichloroethylene, Isopropanol, Cyclohexane
- Removal of Water, CO2, H2S from Liquefied Gases Propane, Butane, Naphtha, Ethane, Ethylene

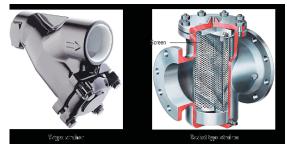
SCR DeNOx System

- Selective Catalytic Reduction(SCR) for De-NOx
- Technial relation with Hyundai Heavy Industries(HHI) for Marine Engine
- Ceramic Honeycomb Catalyst
- Superior NOX removal, High thermal stability
- Long life time, Low catalyst consumption
- Simple module design, Self-cleaning nozzle
- Precision automatic injection system
- Flue Gases & Marine Engines









Y Strainer

Lined Strainer

Gas Refrigeration Packages





Main Compressor Skid

Condenser Skid





Liquid Cooler Skid

Oil Cooler Skid



Pump & Filter Skid



Receiver Skid



Knock Out Drum



Duplex Bag Filtration



Bag Filters



Metal /Mesh Filters



Cartridge Pleated

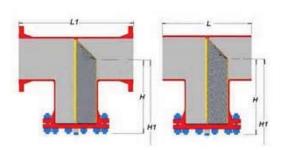
Amine Treating Packages



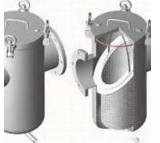
Fully Automatic Amine Treating Package







Tee Type Strainer





L Type Strainer

Sanitary Strainer

Various Process Recovery Packages



Natural Gas Liquid Recovery Package



Carbon Absorption Package for VOC



Nitrogen Rejection PSA for Natural Gas

PASCO 100 Lancing Drive, Unit #5 Hamilton, Ontario, L8W 3L6, CANADA Ph# 289-335-0331 Toll# 855-855-0926



Waste Heat Refrigeration Package



Desalination Package for Brine



Carbon Dioxide Removal Package for Natural Gas