

Nutshell Filter Systems

Applied Systems nutshell filtration systems are utilized as a water treatment solution for the pretreatment of water softening equipment for the removal of suspended solids and hydrocarbons. This line of filtration systems is also effective in oily residues, ash and metallic hydroxides from Industrial liquids.

Systems can be custom engineered dependent on water quality, flow and pressure.

Contact Applied Systems for system selection, sizing or technical questions.

OPERATIONAL PROCESS

During the filtration process water enters the vessels through the inlet manifold and traverses through the media bed and exits the outlet manifold. As the media becomes fouled it will require backwashing by manual or automatic automation. During a backwash event the media bed is hydraulically reverse flowed to lift and release

entrapped particulates resulting in the backwash water exiting the backwash manifold. Our systems operate on the basis of remaining on line while an external scrub tube is serviced resulting in no loss of production or processed water. If plugging occurs a scrub tube screen allows for quick service.

MATERIAL CONSTRUCTION

- Carbon steel
- Stainless steel

• Fiberglass reinforced plastic (FRP)

FEATURES

- Skid mounted system
- Recirculation pump
- Sample cocks for water testing
- Viewports to verify operation levels
- 316 stainless steel non-lined wetted materials
- Class 1, Division 2, Group C or D area usage
- ASME U stamp on carbon and stainless steel vessels
- External scrub tube
- 316 stainless steel lateral assemblies
- Solenoid operated automatic valves actuated by local programmable controller
- External polyurethane paint
- Internal epoxy coated

OPTIONS

- Seismic and wind loads
- · High pressure
- Corrosion allowance
- · Epoxy lined piping
- · Polymer injection system

