

# ALSI/Summit Phosphate Filtration



## System Operation:

An ALSI/Summit pressure filter is simple in design and high in performance providing liquid filtration with advantages not available in other products. It is engineered to function with few moving parts or the troublesome complexities of carrier belts, pulleys, or moving upper shell filter chambers.

Pneumatically driven doors seal the ends of the chamber to sandwich media over a screen within the housing. Unique inflatable side seals prevent filtration bypass along media sides. Contaminated fluid is pumped into the filter chamber and forced through the media. Clean filtrate is discharged from the bottom section under pressure.

When solids accumulate on the filter media, chamber pressure rises to meet a pre-set limit; the pump then stops and an automatic air blow-down is actuated. This dries the solids and the doors open to introduce fresh media at one end, while discharging the spent media and solids out the other end. Solids are scraped and dropped into a receptacle and the used media is re-wound for easy disposal or re-use.

## System Design Review

ALSI application engineers examine the entire system. A review of the chemical program, solids loading, and hydraulics will result in a complete system approach. The analysis will include:

- System throughput characteristics.
- Piping and system flow review.
- Equilibrium solids loading calculation.
- Pressure filter index rate and media consumption calculations.
- ALSI offers detailed CAD design capabilities for complete system installation.



**ALSI/Summit Model KYC15** with media re-use/re-wind and optional block and bleed isolation piping.

## Performance:

- Sludge removal to less than 50 PPM to maintain phosphate bath at required particle concentration.
- Requires minimal operator intervention.
- Special medias available.

## Unique Positive Side Seal



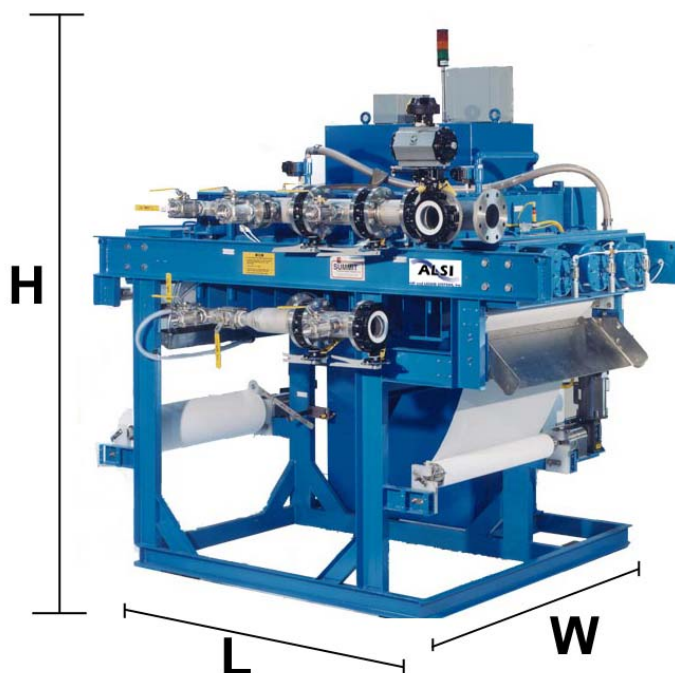
**Deflated**

**Inflated**

- Compatible with phosphate and wash solutions.
- Reinforced EPDM/Viton.
- Retrofit available for existing units.
- Side seal pressure to 100 PSI.
- Includes inflation monitor and alarm.

## ALSI/Summit Specifications

Models KYC	Filter Area (SQ. FT)	Media Width (Inches)	Nominal Dimensions LxWxH (FT)	Nominal Flow (GPM)
KYC1	1	12 ¾	4¾x3x4	20
KYC2	2	12 ¾	6½x3¾x4	40
KYC3½	3 ½	12 ¾	7x3x5½	70
KYC4½	4 ½	12 ¾	8x3x5½	90
KYC6	6	25 ½	6½x4x5½	120
KYC7½	7 ½	25 ½	7¼x4x5½	150
KYC9	9	25 ½	8x4x5½	180
KYC12	12	25 ½	9½x4x5½	240
KYC15	15	36	8½x5¼x6	300
KYC18	18	36	9½x5¼x6	360
KYC21	21	51	8½x6½x6	420
KYC24	24	51	9x6½x6	480
KYC28	28	51	10x6½x6	560
KYC32	32	51	11¼x6½x6	640
KYC36	36	51	12¼x6½x6	720
KYC40	40	51	13x6½x6	800
KYC40	40	70	10x8x6½	800
KYC50	50	51	15½x6½x6	1000
KYC50	50	70	12x8x6¼	1000
KYC60	60	51	18x6½x6	1200
KYC60	60	70	14x8x6¼	1200
KYC75	75	70	16x8x6¼	1500



### Standard Features:

- Electrical Supply Failure Safety: Secures chamber seals and doors during power loss.
- Chamber Evacuation Relief Safety: Evacuates chamber of liquid prior to doors opening.
- ALSI Positive Side Seal (see front).
- Closure pressure to 50 psi.

### Special Features/Optional Accessories:

- Three-Way Bypass Inlet Valve: Maintains pump flow during filter index.
- Reuse-Rewind Assembly: Permits re-use of filter media based on pressure differences and cycle count. Dramatically extends media life and lowers disposal costs.
- Block and Bleed Isolation Piping and Valves: Allows for online acid cleaning.

### ALSI/Summit MicroSheer Media

Weight:	3.0 oz./sq. yd.
Thickness:	7 Mils
Air Permeability:	48 CFM/sq. ft.
Mullen Burst:	60 PSI
Nominal Micron Rating:	7-10 um

### Benefits:

- Strong enough to handle the stress of being re-used and re-wound.
- Resistant to the acid cleaning solutions.
- The slick surface promotes easy release of the filter sludge cake into the hopper.
- The sheer nature and plastic core allow for minimal storage space and cut down on "telescoping" when winding or rewinding.

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### Other ALSI Products:

- Vacuum/Gravity Filter
- Waste Treatment Equipment
- Membrane Filtration
- Dewatering Bags & Media