APV 3 Effect Rising Falling Film Plate Evaporator	
Mfg: APV	Model:
Stock No. ENDX956.86	Serial No <u>.</u>

APV 3 Effect Rising Falling Film Plate Evaporator with Horizontal Vapor Separators.

All product surfaces are 304 or 316 SS. Equipped with a horizontal tubular surface condenser and all product, condensate and vacuum pumps. Feed Balance Tank and Plate type preheater This is a very flexible and reliable system that can run food and heat sensitive types of products. It can run other products requiring SS contact surfaces.

Original Feed Rate 15,854 pounds per hour @ 9% solids.

Original evaporation rate 13,000 pounds per hour of water.

Concentrated Product Rate 2853 pounds per hour @ 50% solids.

- CZ-Crystallizer/Evaporator Pan.
- Consisting APV Heat Exchanger and 1 APV Plate Evaporator
- Composed of 1 First Effect Still Unit #26457
- Second Effect Still Unit # 26456
- Third Effect Still Unit #26456.
- Includes 4 Heat Exchangers,
- 10 APV Puma pumps,
- Graham 860 Sq.Ft surface condenser 24 in. x 16 in.,
- SIHI 2 in. x 2 in. C.I.
- 3 Stage 10 hp pump, 6 in. x 6 in. C.I.
- Pump 10 hp and a 8 ft. 4 in. x 40 in. x 66 in.
- Steel Water Tank. 20 ft. L, 12 ft. H, 575 volt, frecuency 60Hz, 3 phase
 Unit was removed from Dairyworld Foods in Oakville, and is now stored at our equipment yard in
 Edinburg, TX











































Note: the following pictures show the exact unit prior to removal.











































APV 3-Effect Rising Falling Film Plate Evaporator.

APV First Effect Plate Evaporator. S/N: 1641. Inlets: (2) 2 in. dia. ACME fittings (product), (1) 12 in. dia. steam port. Outlets: (1) 2 in. dia. condensate port, (1) 21 in. W x 10-1//2 in. H port (product/vapor). Overall dimensions: 11 ft. 2 in. L x 3 ft. W x 8 ft. 1 in. H.

APV First Effect Horizontal Separator. S/N: 26456. Vacuum: 725 mmHg. Inlets: (1) 21 in. W x 10-1/2 in. H vapor port. Outlets: (1) 4 in. dia. ACME fitting (product), (1) 18 in. dia. flanged port (vapor). Overall dimensions: 8 ft. 6 in. L x 8 ft. 5 in. W x 6 ft. H.

APV Second Effect Plate Evaporator. S/N: 1642. Inlets: (2) 2 in. dia. ACME fittings (product), (1) 12 in. dia. steam port. Outlets: (1) 2 in. dia. condensate port, (1) 21 in. W x 10-1//2 in. H port (product/vapor). Overall dimensions: 11 ft. 2 in. L x 3 ft. W x 8 ft. 1 in. H.

APV Second Effect Horizontal Separator. S/N: 26456. Vacuum: 725 mmHg. Inlets: (1) 21 in. W x 10-1/2 in. H vapor port. Outlets: (1) 4 in. dia. ACME fitting (product), (1) 18 in. dia. flanged port (vapor). Overall dimensions: 8 ft. 6 in. L x 8 ft. 5 in. W x 6 ft. H.

APV Third Effect Plate Evaporator. S/N: 164. Inlets: (2) 2 in. dia. ACME fittings (product), (1) 12 in. dia. steam port. Outlets: (1) 2 in. dia. condensate port, (1) 21 in. W x 10-1//2 in. H port (product/vapor). Overall dimensions: 11 ft. 2 in. L x 3 ft. W x 8 ft. 1 in. H.

APV Third Effect Horizontal Separator. S/N: 26456. Vacuum: 725 mmHg. Inlets: (1) 21 in. W x 10-1/2 in. H vapor port. Outlets: (1) 4 in. dia. ACME fitting (product), (1) 18 in. dia. flanged port (vapor). Overall dimensions: 8 ft. 6 in. L x 8 ft. 5 in. W x 6 ft. H.

APV Paraflow Pre-Heater Plate Heat Exchanger. Model: HMB. S/N: M/C 3608. 3-A Sanitary rated. Inlets/Outlets: (2) 2-1/2 in. dia. ACME fittings. Overall dimensions: 8 ft. 8 in. L x 2 ft. 4 in. W x 6 ft. H.

Mueller Steam Jacketed Balance Tank- 100 Gallon. S/N: D2584-4. Nat'l Bd: 8125. Inside straight-wall dimensions: 44 in. dia. x 16 in. H. MAWP: 82 psi @ 400 °F. Inlets: (2) 3/4 in. dia. NPT (jacket), (1) 3/4 in. dia. FNPT (thermowell), (1) 1 in. dia. FNPT (thermowell), (1) 2 in. dia. ACME, (1) 2-1/2 in. dia. S-line, (1) 3 in. dia. S-line, (1) 3 in. dia. ACME. Outlets: (2) 3/4 in. dia. NPT (jacket), (1) 1 in. dia. NPT (jacket). Overall dimensions: 4 ft. 1 in. L x 4 ft. W x 4 ft. H.

Graham Manufacturing Horizontal Shell and Tube Condenser. S/N: 9660K-73. S/N (bundle): 9105-79. Heat transfer surface area: 860 sq. ft. Shell side MAWP: Full Vac. & 20 psig. Shell test pressure: 30 psig. Shell design temperature: 150 °F. Tube side MAWP: 75 psig. Tube side test pressure: 113 psig. Inlets: (1) 2 in. dia. flanged port (product), (1) 6 in. dia. flanged port (media), (1) 18 in. dia. flanged port. Outlets: (2) 3/4 in. dia. FNPT (product), (1) 2 in. dia. bevel with hex nut, (1) 6 in. dia. flanged port. Overall dimensions: 16 ft. 4 in. L x 4 ft. 8 in. W x 8 ft. 5 in. H.

APV Puma Centrifugal Pump. Model: V. S/N: R1403. Size: 3x2. Impeller diameter: 5-1/2 in. Brook Hansen Motor, 5.0 hp, 3460 rpm, 575 V, 4.6 amps, 60 Hz, 3 phase. Inlets: (1) 3 in. dia. S-line. Outlets: (1) 2 in. dia. S-line. Overall dimensions: 2 ft. 1 in. L x 1 ft. 5 in. W x 1 ft. 3 in. H.

APV Puma Centrifugal Pump. Model: V. S/N: 20018. Size: 3x2. Impeller diameter: 4-1/2 in. Brook Hansen Motor, 3 hp, 3480 rpm, 575 V, 2.80 amps, 60 Hz, 3 phase. Inlets: (1) 3 in. dia. ACME. Outlets: (1) 2 in. dia. ACME. Overall dimensions: 2 ft. 1 in. L x 1 ft. 5 in. W x 1 ft. 3 in. H.

APV Puma Centrifugal Pump. Model: V. S/N: R1404. Size: 2x2. Impeller diameter: 5-1/2 in. Brook Hansen Motor, 5.0 hp, 3460 rpm, 575 V, 4.6 amps, 60 Hz, 3 phase. Inlets: (1) 2 in. dia. ACME. Overall dimensions: 2 ft. 1 in. L x 1 ft. 5 in. W x 1 ft. 3 in. H.

Ampco Centrifugal Pump. Model: 1-1/2x1-1/4 KC2. S/N: CC-20363-1-1. Impeller diameter: 6.5 in. WEG Motor, 7.5 hp, 3490 rpm, 575 V, 7.64 amps, 60 Hz, 3 phase. Inlets: (1) 1-1/2 in. dia. FNPT. Outlets: (1) 1-1/4 in. dia. FNPT. Overall dimensions: 1 ft. 9-1/2 in. L x 12 in. W x 12 in. H.

APV Puma Centrifugal Pump. Model: V. S/N: R1402. Size: 2x2. Impeller diameter: 4-1/2 in. Brook Hansen Motor, 3.0 hp, 3480 rpm, 575 V, 2.80 amps, 60 Hz, 3 phase. Inlets: (1) 2 in. dia. ACME. Outlets: (1) 2 in. dia. ACME. Overall dimensions: 2 ft. 1 in. L x 1 ft. 5 in. W x 1 ft. 3 in. H.

APV Puma Centrifugal Pump. Model: VI. S/N: 20019. Size: 3x2. Impeller diameter: 5-1/2 in. Brook Hansen Motor, 5.0 hp, 3460 rpm, 575 V, 4.6 amps, 60 Hz, 3 phase. Inlets: (1) 3 in. dia. S-line. Outlets: (1) 2 in. dia. S-line. Overall dimensions: 2 ft. 1 in. L x 1 ft. 5 in. W x 1 ft. 3 in. H.

APV Puma Centrifugal Pump. Model: V. S/N: R1405. Size: 3x2. Impeller diameter: 4-1/2 in. Brook Hansen Motor, 3.0 hp, 3480 rpm, 575 V, 2.80 amps, 60 Hz, 3 phase. Inlets: (1) 3 in. dia. S-line. Outlets: (1) 2 in. dia. S-line. Overall dimensions: 2 ft. 1 in. L x 1 ft. 5 in. W x 1 ft. 3 in. H.

Ampco Centrifugal Pump. Model: 3x2-1/2 DC2. S/N: CC-20571-1-1. Impeller diameter: 6.5 in. WEG Motor, 15.0 hp, 3520 rpm, 575 V, 14.1 amps, 60 Hz, 3 phase. Inlets: (1) 3 in. dia. S-line. Outlets: (1) 2-1/2 in. dia. S-line. Overall dimensions: 2 ft. 1 in. L x 1 ft. 1 in. W x 1 ft. 4 in. H.

APV Puma Centrifugal Pump. Model: III. S/N: U5739M. Size: 2-1/2x2. Impeller diameter: 4-1/2 in. Brook Crompton Motor, 3.0 hp, 3480 rpm, 575 V, 3.2 amps, 60 Hz, 3 phase. Inlets: (1) 2-1/2 in. dia. ACME. Outlets: (1) 2 in. dia. ACME. Overall dimensions: 2 ft. 4 in. L x 1 ft. 3 in. W x 1 ft. 6-1/2 in. H.