

IPP#	Description
247211	127 MMBTU/hr. (32.01 MMkcal/hr.) Hot Oil Boiler, with an output of 599°F hot oil. Coil rated for 284.5 psi(g) at 842 °F. (20 kg/cm2G at 450 °C.) Designed for fluid Therminol 66, with a rated flow rate of ~5.3MM lb./hr. (~2.4MM kg/hr.). Radiant tube heating area: 9,693 ft² (900.5 m²), Convection tube heating area: 18,046 ft² (1676.5 m²). Inlet operates at 170 psi at 554 °F (12 kg/cm² at 290 °C), Outlet operates at 152 psi at 594 °F (10.71 kg/cm² at 312 °C). Manufactured by Born Heater, Calgary, Alberta. 445" [37ft] diameter x 1698" [141.5ft] overall height (11.3m x 43m). Natural gas-fired, 10 burners, mfg. by John Zinc, model QMR-PC with 0.029 MW continuous natural gas pilots. With an air preheating system including fans.
247208	207,000 lbs./hr. (93,894 kg/hr.) at 700 psi at 550 °F. F (49 kg/cm2 at 288 °C). Packaged "D" type Boiler. Built to ASME code. Manufactured by Foster Wheeler, Model #AG-5195 M. Designed to fire on natural gas with LHV of 20,551 BTU/lb. (11,425 kcal/kg). Burner by Natcom size P-255-G-37-1726. With vertical gas flow, a counter-current finned economizer with an extended surface of 19,741 ft2 (1834 m2). Furnace area: 1313 ft2 (122 m2), Boiler surface area: 7535 ft2 (700 m2). 34' 4" (10.5m) long x 13' 2 3/8" (4m) wide x 15' 9.5" (4.8m) high.
247209	207,000 lbs./hr. (93,894 kg/hr.) at 700 psi at 550 °C. F (49 kg/cm2 at 288 °C). Packaged "D" type Boiler. Built to ASME code. Manufactured by Foster Wheeler, Model #AG-5195 M. Designed to fire on natural gas with LHV of 20,551 BTU/lb. (11,425 kcal/kg). Burner by Natcom size P-255-G-37-1726. With vertical gas flow, a counter-current finned economizer with an extended surface of 19,741 ft2 (1834 m2). Furnace area: 1313 ft2 (122 m2), Boiler surface area: 7535 ft2 (700 m2). 34' 4" (10.5m) long x 13' 2 3/8" (4m) wide x 15' 9.5" (4.8m) high.



IPP#	Description
247324	60" Diameter x 96" Long Bowl, 304 SS product contact, Solid Bowl Decanter Centrifuge. Rated 266 °F. Manufactured by Thomas Broadbent and Sons Ltd. Designed for continuous operation. Rated 1,000 RPM. Max Product Density: 94 lb./Ft³. Maximum Dry Solids Throughput: 40 tons/hr. Internal screw 40,000kg/hr. continuous capacity. Belt driven by foot-mounted AC Motor, 400hp, 3 Phase, 4000V, 60Hz, 51A, Manufactured by ABB; Type HXR 400LH4.
247324	60" Diameter x 96"Long Bowl, 304 SS product contact, Solid Bowl Decanter Centrifuge. Rated 266 °F. Manufactured by Thomas Broadbent and Sons Ltd. Designed for continuous operation. Rated 1,000 RPM. Max Product Density: 94 lb./Ft ³ . Maximum Dry Solids Throughput: 40tons/hr. Internal screw 40,000kg/hr. continuous capacity. Belt driven by foot-mounted AC Motor, 400hp, 3 Phase, 4000V, 60Hz, 51A, Manufactured by ABB; Type HXR 400LH4.
247324	60" Diameter x 96" Long Bowl, 304 SS product contact, Solid Bowl Decanter Centrifuge. Rated 266 °F. Manufactured by Thomas Broadbent and Sons Ltd. Designed for continuous operation. Rated 1,000 RPM. Max Product Density: 94 lb./Ft³. Maximum Dry Solids Throughput: 40 tons/hr. Internal screw 40,000kg/hr. continuous capacity. Belt driven by foot-mounted AC Motor, 400hp, 3 Phase, 4000V, 60Hz, 51A, Manufactured by ABB; Type HXR 400LH4.
247367	42" diameter x 80' high, 316L SS, Packed Bed Column. Built to ASME Code. Vessel rated 102psi/FV @ 302 °F. Manufactured by Drummond Welding & Steel Works. CS Skirt Mounted. 3 Packing Beds; Bed 1 Packing Material: 316L SS, Type: SP350Y, 16'H; Bed 2 Packing Material: 316L SS, Type: SP-300Y, 16' H; Bed 3 Packing Material 316L SS, Type: SP300Y, 16'H. 3'4" from top bed to top head; 7' between beds. Shell thickness: 1/2"(12.7mm) / 3/8"(9.52mm) / 5/16"(7.94mm); Head thickness: 3/8"(9.52mm).
247369	75" diameter x 24' 6" high, 316L SS, Tray Column. Rated 30psi @ 302 °F. Manufactured by Drummond Welding & Steel Works. 316L SS, Welded, Elliptical Heads. CS Skirt Mounted. (26) 316L SS, Baffle Trays. Trays Manufactured by Koch. Shell thickness: 1/4" (6.35mm), Head Thickness: 3/8" (9.52mm), Tray Thickness: >3/8" (10mm).



IPP#	Description
247370	56" diameter x 86' high, 316L SS, Tray Column. Built to ASME Code. Vessel rated 100psi/FV @ 302 °F. Manufactured by Drummond Welding and Steel Works. CS Skirt Mounted. (40) 316L SS Trays: Reaction Section- (Trays 1-15): Tray Type: AMT Catalytic Distillation, 2'(610mm) Spacing; Distillation Section- (Trays 16-40): Tray Type: AMT ADV Valve w/ Movable Valves. Shell Thickness: 5/8"(15.88mm) / 1/2" (12.7mm) / 3/8"(9.52mm) / 5/16" (7.94mm); Head Thickness: 1/2"(12.7mm).
247368	36"diameter x 54' high, 316L SS, Packed Bed Column. Built to ASME Code. Vessel rated 81psi/FV @ 302 °F. Manufactured by Drummond Welding & Steel Works. 316L SS, Welded Heads. CS Skirt Mounted. (2) Packing Beds: 316L SS, Packing Type: AMT SP-300Y, Packing Height: 16'3"(5000mm) H; 7'3"(2200mm) between beds, 3'3"(1000mm) from top packing to head. Shell Thickness: 3/8'(9.52mm) / 5/16" (7.94mm); Head Thickness: 3/8"(9.53mm).
247216	316L SS (product contact), Rotary Steam Tube Dryer, 1,176 meter ² Heat Transfer Surface Area, 150" diameter x 964.5". Tube length (3800mm x 24,500mm), Single pass counterflow. Manufactured by Tianhua Institute of Chemical Machinery and Automation Co., LTD. Shell designed for -0.2 to +1.4 psi(g) at 329 °F (-0.015 to +0.1 kg/cm2(g) at 165 °C). Tubes designed for 185 psi(g) / FV at 426 °F. (13 kg/cm2(g) at 219 °C). Bulk density feed: 60 lb./ft³ (961 kg/m³), product: 65 lb./ft³ (1041 kg/m³). Circulating nitrogen gas. Feed design flow rate: 190,512 lb./hr. (86,415 kg/hr.). Heat transfer area 12,658 ft² (1176 m²), Dryer slopes 0.79" (20mm) per 39.4" (1m). Tube rotating at 3.4 RPM. Main drive motor mfg. by TECO: 375.5HP (280 kW) at 1190 RPM, 4160 v, 60Hz, 3 Ph.



IPP#	Description
247217	304L SS (product contact), Rotary Steam Tube Dryer, 1,739 meter ² Heat Transfer Surface Area. 141" diameter x 1220" long (3600mm x 31000mm), Single pass counterflow. Manufactured by Tsukishima Kikai Co., LTD. Shell designed for -0.2 to +1.4 psi(g) at 329 °F (-0.015 to +0.1 kg/cm2(g) at 165 °C). Tubes designed for 185 psi(g) / FV at 426 °F. (13 kg/cm2(g) at 219 °C). Bulk density feed: 60 lb./ft³ (961 kg/m³), product: 69 lb./ft³ (1100 kg/m³). Circulating nitrogen gas. Feed design flow rate: 164,493 lb./hr. (74,613 kg/h). Heat transfer area: 18,718 ft² (1739 m²). Dryer slopes 0.79" (20mm) per 39.4" (1m). Tube rotating at 4.4 rpm. Main drive motor is a 430 HP (320 kW) at 1190 RPM, 4160 V, 60Hz, 3 Ph. Overall length: 1580" [132ft] (40,125mm).
247212	39.4" x 39.4" (1000mm x 1000mm), Filter Press. Recessed non-gasketed polypropylene plates in CS Frame. 532 ft² (49.4 m2) filtration area. 20.3ft3 Cake Capacity. 32 chambers, 1" (25mm) thick. Operating at 14 psi to 142 psi between 86 to 140 °F (1-10 kg/cm2 at 30-60 °C). Maximum feed flow rate: 3963 gal/hr. (15 m3/hr.). Feed TSS concentration 1-3%wt. Manufactured by Andritz. Automatic plate shifter, bomb bay doors, light curtain, safety pull wire. Auto wash, cake wash, cake blow, core blow.
247213	39.4" x 39.4" (1000mm x 1000mm), Filter Press. Recessed non-gasketed polypropylene plates in CS Frame. 532 ft² (49.4 m2) filtration area. 20.3 ft³ Cake Capacity. 32 chambers, 1" (25mm) thick. Operating at 14 psi to 142 psi between 86 to 140 °F (1-10 kg/cm² at 30-60 °C). Maximum feed flow rate: 3963 gal/hr. (15 m3/hr.). Feed TSS concentration 1-3%wt. Manufactured by Andritz. Automatic plate shifter, bomb bay doors, light curtain, safety pull wire. Auto wash, cake wash, cake blow, core blow.



IPP#	Description
247214	194 ft. Sq., (18 m²), 316 SS (product contact), Pre-coat, Rotary Vacuum Filter, with advancing knife discharge. Submergence by externally adjustable weir: 10-18% of drum diameter. Hood designed for -1 to +3.84 psi(g) at 302°F (-0.07 to +0.27 kg/cm² (g) at 150 °C). Manufactured by Mitsubishi-Young, Model YF51/2X10. 65" [5.4ft] diameter x 118" [9.8ft] long (1650mm x 3000mm). Five wash pipes full cone nozzle. Drum speed is adjustable from 1.3 to 13 RPM by VFD. Driven by a 30 HP (22.4 kW) motor, with a gear reducer by chain & sprocket. Overall: 309.5" [25.8ft] long X 115" [9.6ft] wide X 122" [10ft] high (7861mm L x 2920mm W x 3100mm H). With hood and sight glass.
247215	194 ft², (18 m²), 316 SS (product contact), Pre-coat, Rotary Vacuum Filter, with advancing knife discharge. Submergence by externally adjustable weir: 10-18% of drum diameter. Hood designed for -1 to +3.84 psi(g) at 302°F (-0.07 to +0.27 kg/cm2(g) at 150 °C). Manufactured by Mitsubishi-Young, Model YF51/2X10. 65" [5.4ft] diameter x 118" [9.8ft] long (1650mm x 3000mm). Five wash pipes full cone nozzle. Drum speed is adjustable from 1.3 to 13 RPM by VFD. Driven by a 30 HP (22.4 kW) motor, with a gear reducer by chain & sprocket. Overall: 309.5" [25.8ft] long X 115" [9.6ft] wide X 122" [10ft] high (7861mm L x 2920mm W x 3100mm H). With hood and sight glass.
247385	188 ft²., 304L SS, Rotary Vacuum Filter, mounted inside 304L SS Pressure Vessel. Steam Pressure 93psi @ 363.2. 8.8m³ Cake Capacity. Manufactured by Bokela. Drum Dimensions: 6' D x 5' L. Hydraulic Driven: filter drive and trough agitator. PTA solids throughput: 90 ton/hr. @ 15%wt residual moisture. 1 Wash step, 4 Filtration Zones, 30 Filter Cells total, @ 2.8RPM. 32m³, Pressure Vessel, Built to ASME Code. Rated 100psi @ 365F. Manufactured by H.C. Vidal Ltee. 11'10"D x 9'7"H. .75"87" Shell Thickness, .50"87" Head Thickness.



IPP#	Description
247386	188 ft², 304L SS, Rotary Vacuum Filter, mounted inside 304L SS Pressure Vessel. Steam Pressure 93psi @ 363.2F. 8.8m³ Cake Capacity. Manufactured by Bokela. Drum Dimensions: 6' D x 5' L. Hydraulic Driven: filter drive and trough agitator. PTA solids throughput: 90 tons/hr. @ 15%wt residual moisture. 1 Wash step, 4 Filtration Zones, 30 Filter Cells total, @ 2.8RPM. 32m², 304L SS, Pressure Vessel. Built to ASME Code. Rated 100psi @ 365F. Manufactured by H.C Vidal Ltee. 11.8' D x 9.61' H. .75"87" Shell Thickness, .50"87" Head Thickness.
247325	11,075 ft², 304 SS Tube, 304 SS Tube sheet, 304 SS Heads, CS Shell, vertical heat exchanger. Shell rated 114 psi @ 400 °F., Tubes rated 128 psi @ 380 °F. Manufactured by ARA. Dimensions: 5' Diameter x 23' overall length. TEMA Type: BEM, Single Pass Shell, Single Pass Tubes. 2,516 straight Tubes, 3/4" OD x 16 BWG x 23' Long. Nozzle Schedule: Shell Side- 1() 16"D 150#/WN/RF; (1) 8"D 150#/WN/RF; (1) 2"D 150#/WN/RF; (2) 1"D 6000#/NPT; (4) 1/2"D 6000#/NPT. Tube Side- (1) 12"D 150#/WN/RF; (2) 3"D 150#/WN/RF; (2) 1"D 150#/WN/RF; (1) 3/4"D 150#/WN/RF; (1) 1"D 6000#/NPT; (3) 1/2"D 6000#/NPT.
247326	3,278 ft²., 304L SS Tube, 304L SS Tube sheet, 304L SS Heads, CS Shell, vertical heat exchanger. Shell rated 100 psi @ 300 °F, Tubes rated 284 psi @ 300 °F. Manufactured by ARA. Dimensions: 2'8" Diameter x 23' overall length. TEMA Type BEM. Single-Pass Shell, Single-Pass Tubes. 740 Straight Tubes, 3/4"OD x 16 BWG x 23' Long. Nozzle Schedule: Shell Side- (2) 8"D 150#/RF; (2) 1/2"D 6000#/NPT. Tube Side- (2) 18"D 300#/RF; (3) 2"D 300#/RF.
247328	1,861 ft², 304 SS Tube, 304 SS Tube sheet, 304 SS Heads, CS Shell, vertical heat exchanger. Shell rated 185 psi @ 426 °F, Tubes rated 455 psi @ 503 °F. Manufactured by ARA. Dimensions: 2' diameter x 20' overall length. TEMA Type: BEM. Single-Pass Shell, Single-Pass Tubes. 485 straight tubes. 3/4"OD x 16 BWG x 20' Long. Nozzle Schedule: Shell Side- (1) 12"D 300#/WN/RF; (1) 8"D 300#/WN/RF; (1) 2"D 300#/WN/RF; (2) 1"D 6000#/NPT; (4) 1/2"D 6000#/NPT. Tube Side- (1) 6"D 600#/WN/RF; (4) 2"D 600#/WN/RF; (1) 1"D 600#/WN/RF; (1) 3/4"D 600#/WN/RF; (1) 1/2"D 600#/WN/RF.



IPP#	Description
247329	13,562 ft², 304/304L SS Tube, 304L SS Clad Tube sheet, 304 SS Heads, CS Shell, vertical heat exchanger. Shell rated 455 psi @ 509 °F, Tubes rated 796 psi @ 509 °F. Manufactured by CCMC. Dimensions: 5'3" diameter x 26'4" overall length. TEMA Type: BEM. Single-Pass Shell, Single-Pass Tubes. 2,814 straight tubes, 3/4"OD x 16 BWG x 26'3"L. Nozzle Schedule: Shell Side- (1) 18"D 300#/WN/RF; (1) 10"D 300#/WN/RF; (1) 2"D 300#/WN/RF; (2) 1"D 6000#/NPT; (3) 1/2"D 6000#/NPT. Tube Side- (1) 10"D 600#/WN/RF; (1) 3"D 600#/WN/RF; (3) 2"D 600#/WN/RF; (1) 3/4"D 600#/WN/RF; (2) 1"D 6000#/NPT; (2) 1/2"D 6000#/NPT.
247330	1,520 ft², 316L SS Tube, 316L SS Tube sheet, 316L SS Head, CS Shell, vertical heat exchanger. Shell rated 100 psi/FV @ 302 °F, Tubes rated 77 psi/FV @ 302 °F. Manufactured by Consolidated Chemquip Corp. Dimensions: 2'3" diameter x 15'3" overall length. TEMA Type: BEM. Single-Pass Shell, Single-Pass Tubes. 406 straight tubes, 1"OD x 16 BWG x 15' Long. Nozzle Schedule: Shell Side- (2) 8"D 150#/RF; (2) 1"D 150#/RF. Tube Side (2) 14"D 150#/RF.
<u>247331</u>	899 ft², Duplex 2205 SS Tube, Duplex 2205 Tube sheet, Duplex 2205 Head, CS Shell, vertical heat exchanger. Built to ASME Code. Shell rated 61 psi/FV @ 351 °F, Tubes rated 53 psi/FV @ 302 °F. Manufactured by H.C. Vidal Ltee. Dimensions: 2'4" diameter x 9'10" overall length. TEMA Type: BEM. Single-Pass Shell, Single-Pass Tubes. 324 straight tubes, 1"(25.4mm) O.D. x 16 BWG x 10' long. Shell thickness: 3/8" (10mm) Head Thickness: 3/8" (.375in). Nozzle Schedule: Shell Side: (1) 6"D 150#/RF; (1) 3"D 150#/RF; (2) 1"D 150#/RF. Tube Side- (1) 8"D 150#/RF; (1) 6"D 150#/RF; (2) 3"D 150#/RF.
247332	663 ft², Duplex 2205 SS Tube, Duplex 2205 Tube sheet, Duplex 2205 Head, CS Shell, vertical heat exchanger. Built to ASME Code. Shell rated 61 psi/FV @ 351 °F., Tubes rated 50 psi/FV @ 302 °F. Manufactured by H.C. Vidal Ltee. Dimensions: 2'4" diameter x 8'3" overall length. TEMA Type: BEM. Single-Pass Shell, Single-Pass Tubes. 324 straight tubes, 1"(25.4mm)O.D. x 16 BWG x 8'3" long. Shell Thickness: >3/8"(10mm). Nozzle Schedule: Shell Side- (1) 4"D 150#/RF; (1) 3"D 150#/RF; (2) 1"D 150#/RF. Tube Side- (1) 6"D 150#/RF; (1) 4"D 150#/RF; (2) 3"D 150#/RF.



IPP#	Description
247333	674 ft², 316L SS Tube, 316L SS Tube sheet, 316L SS Head, CS Shell, vertical heat exchanger with integrated 350 Gallon, 316L SS Tank. Built to ASME Code. Shell rated 100 psi @ 158 °F, Tubes rated 77 psi/FV @ 212 °F. Manufactured by Consolidated Chemquip Corp. Dimensions: 2' diameter x 8'3" overall length, (Exchanger), 3' diameter x 6'7" overall length (Top). TEMA Type: BEM. Single-Pass Shell, Single-Pass Tubes. 430 straight tubes, 3/4"(19.05mm)O.D. x 16 BWG, 8'3"long. Shell Thickness: 5/16"(8mm). Nozzle Schedule: Shell Side-(2) 6"D 150#/RF; (2) 1"D 150#/RF. Tube Side- (1) 6"D 150#/RF; (1) 4"D 150#/RF; (2) 1.5"D 150#/RF; (6) 1"D 150#/RF; (1) 24"D 150#/RF (Manway).
247334	25,273 ft², Titanium Tubes, Titanium Clad 316L Tube sheet, Titanium Clad 316L heads, CS with 13'6" section Incoloy 825 Shell, vertical heat exchanger. Built to ASME Code. Shell rated 190 psi/FV @ 423 °F, Tubes rated 285 psi/FV @ 486 °F. Manufactured by Joseph Oat Corp. Overall Dimensions: 8'4"diameter x 24'7" overall length. TEMA Type: BEM. Single-Pass Shell, Single-Pass Tubes. 5540 straight tubes, 3/4"OD x 18 BWG x 24' long. Nozzle Schedule: Shell Side- (1) 14"D 150#/RF; (1) 30"D 150#/RF; (4) 6"D 150#/RF; (8) 1"D 6000#/NPT.
247335	25,134 ft², Titanium SB-338 Seamless Tube, Titanium Clad 316L Tube sheet, Titanium Clad 316L Head, CS with 13' Section Inconel 600 Shell, vertical heat exchanger. Built to ASME Code. Shell rated 190 psi/FV @ 423 °F, Tubes rated 285 psi/FV @ 486 °F. Manufactured by Joseph Oat Corp. Overall Dimensions: 8'4" diameter x 15'9" overall length (Top), 12'4"D x 8'9"L (Bottom). TEMA Type: BEM. 1 Pass Shell, 1 Pass Tubes. 5540 straight tubes, 3/4"OD x 18 BWG x 24' long. Nozzle Schedule: Shell Side- (1) 14"D, 150#/RF; (1) 30"D 150#/RF; (4) 6" 150#/RF; (8) 1"D 6000#/NPT. Tube Side- (1) 28"D 300#/RF; (1) 22"D 300#/RF; (1) 12"D 300#/RF; (2) 1"D 300#/RF; (1) 20"D 300#/RF.



IPP#	Description
247336	16,808 ft², SB-338 Titanium Seamless Tube, Titanium Clad 316L Tube sheet, Titanium Clad 316L Heads, CS Shell, vertical heat exchanger. Built to ASME Code. Shell rated 190 psi/FV @ 423 °F, Tubes rated 285 psi/FV @ 486 °F. Manufactured by Joseph Oat Corp. Dimensions: 6'6" diameter x 16'3" overall length(Top) 9'2" diameter x 8'2" overall length (Bottom). TEMA Type: BEM. Single-Pass Shell, Single-Pass Tubes. 3633 straight tubes, 3/4"OD x 18 BWG x 24' long. Nozzle Schedule: Shell Side- (1) 8"D 150#/RF; (1) 24"D 150#/RF; (4) 6"D 150#/RF; (8) 1"D 6000#/NPT. Tube Side- (1) 22"D 300#/RF; (1) 18"D 300#/RF; (1) 6"D 300#/RF; (1) 3"D 300#/RF; (4) 1"D 300#/RF; (1) 20"D 300#/RF.
247337	16,808 ft², SB-338 Titanium Seamless Tubes, Titanium Clad 316L Tube sheet, Titanium Clad 316L Heads, CS Shell, vertical heat exchanger. Built to ASME Code. Shell rated 190 psi/FV @ 423 °F, Tubes rated 284 psi/FV @ 486 °F. Manufactured by Joseph Oat Corp. Overall Dimensions: 6'6" diameter x 16'5" overall length (Top), 12'4" diameter x 8'10" overall length (Bottom). TEMA Type: BEM. Single-Pass Shell, Single-Pass Tubes. 3633 straight tubes, 3/4"OD x 18 BWG x 24' long. Nozzle Schedule: Shell Side- (1) 8"D 150#/RF; (1) 24"D 150#/RF; (4) 6"D 150#/RF; (8) 1" 6000#/NPT. Tube Side- (1) 22"D 300#/RF; (1) 18"D 300#/RF; (1) 6"D 300#/RF; (1) 3"D 300#/RF; (4) 1"D 300#/RF; (1) 20"D 300#/RF.
247338	1,744 ft², SB-338 Titanium Seamless Tube, Titanium Clad 316L Tube sheet, 317L SS Head, CS Shell, vertical heat exchanger. Built to ASME Code. Shell rated 100 psi @ 302 °F, Shell rated 285 psi @ 486 °F. Manufactured by Joseph Oat Corp. Dimensions: 2'4" diameter x 8'3" overall length (Top), 6'11" diameter x 8'3" overall length (Bottom). TEMA Type: BEM. Single-Pass Shell, Single-Pass Tubes. 560 straight tubes, 3/4"OD x 18 BWG x 16'6" long. Nozzle Schedule: Shell Side-(2) 12"D 150#/RF; (2) 1"D 6000#/NPT. Tube Side- (1) 18"D 300#/RF; (1) 14"D 300#/RF; (1) 3"D 300#/RF; (2) 1.5"D 300#/RF; (1) 20"ID 300#/RF.



IPP#	Description
247339	1,744 ft², SB-338 Titanium Seamless Tubes, Titanium Clad 316L Tube sheet, 317L SS Head, CS Shell, vertical heat exchanger. Built to ASME Code. Shell rated 100 psi @ 302 °F, Tubes rated 285 psi @ 486 °F. Manufactured by Joseph Oat Corp. Dimensions: 2'4" diameter x 8'3"overall length (Top), 6'10" diameter x 8'3" overall length (Bottom). TEMA Type: BEM. Single-Pass Shell, Single-Pass Tubes. 560 straight tubes, 3/4"OD x 18 BWG x 16'6" long. Nozzle Schedule: Shell Side- (2) 12"D 150#/RF; (2) 1"D 6000#/RF. Tube Side- (1) 18"D 300#/RF; (1) 14"D 300#/RF; (1) 3"D 300#/RF; (2) 1.5"D 300#/RF; (1) 20"ID 300#/RF Man way.
247341	3,851 ft², 316L SS Tube, 316L SS Tube sheet, 316L SS Heads, CS Shell, vertical heat exchanger. Shell rated 100 psi @ 158 °F, Tubes rated 48 F/FV @ 300 °F. Manufactured by ARA. Dimensions: 3'3" diameter x 16'1" overall length. TEMA Type: BEM. Single-Pass Shell, Single-Pass Tubes. 1250 straight tubes, 3/4"OD x 16 BWG x 16' long. Nozzle Schedule: Shell Side- (2) 12"D 150#/RF; (2) 1/2" 6000#/NPT. Tube Side- (1) 30"D 150#/RF; (1) 6"D 150#/RF; (1) 4"D 150#/RF; (1) 3"D 150#/RF.
247342	4,633 ft², 304L SS Tube, 304L SS Tube sheet, 304L SS Heads, CS Shell, vertical heat exchanger. Shell rated 100 psi @ 158 °F, Tubes rated 30 psi/FV @ 300 °F. Manufactured by ARA. Dimensions: 3'5" diameter x 20' overall length. TEMA Type: BEM. Single-Pass Shell, Single-Pass Tubes. 890 straight tubes, 1"OD x 16 BWG x 20' long. Nozzle Schedule: Shell Side- (2) 8"D 150#/RF; (2) 1"D 6000#/NPT; (4) 1/2"D 6000#/NPT. Tube Side- (2) 24"D 150#/RF; (1) 1.5"D 150#/RF; (2) 1"D 6000/NPT; (2) 1/2"D 6000#/NPT.
247343	854 ft², 316L Tube, 316L Tube sheet, 316L Heads, CS Shell, horizontal "U" tube heat exchanger. Shell rated 100 psi @ 158 °F, Tubes rated 142 psi @ 300 °F. Manufactured by ARA. Dimensions: 2' diameter x 12' long. TEMA Type: BEU. Single-Pass Shell, Four-Pass Tubes. 182 U-Tubes, 3/4"OD x 16 BWG x 12' long. Nozzle Schedule: Shell Side- (2) 8"D 150#/RF. Tube Side- (2) 6"D 150#/RF.



IPP#	Description
247344	708 ft², 316L Tube, 316L Tube sheet, 316L Head, CS Shell, horizontal heat exchanger. Shell rated 114 psi @ 392 °F, Tubes rated 71 psi/FV @ 392 °F. Manufactured by ARA. Dimensions: 1'7" diameter x 18' overall length. TEMA Type: BEM. Single-Pass Shell, Single-Pass Tubes. 130 straight tubes, 1"(30mm) OD x 12 BWG (2.5mm) x 18'long (5500mm). Nozzle Schedule: Shell Side- (1) 3"D 150#/RF; (1) 1"D 150#/RF. Tube Side- (2) 14"D 150#/RF.
<u>247345</u>	92 ft², 316L SS Tube, 316L SS Tube sheet, 316L SS Heads, CS Shell, horizontal "U" tube heat exchanger. Shell rated 100 psi @ 158 °F, Tubes rated 142 psi @ 300 °F. Manufactured by ARA. Dimensions: 2' diameter x 12'2" overall length. TEMA Type: BEU. Single-Pass Shell, Four-Pass Tubes. 105 U-Tubes, 3/4"OD x 16 BWG x 12' long. Nozzle Schedule: Shell Side- (2) 6"D 150#/RF. Tube Side- (2) 4"D 150#/RF.
<u>247346</u>	92 ft², 316L SS Tube, 316L SS Tube sheet, 316L SS Heads, CS Shell, horizontal "U" tube heat exchanger. Shell rated 100 psi @ 158 °F, Tubes rated 142 psi @ 300 °F. Manufactured by ARA. Dimensions: 2'diameter x 12'2" overall length. TEMA Type: BEU. Single-Pass Shell, Four-Pass Tubes. 105 U-Tubes, 3/4"OD x 16 BWG x 12' long. Nozzle Schedule: Shell Side- (2) 6"D 150#/RF. Tube Side- (2) 4"D 150#/RF.
<u>247348</u>	15,600 ft², Titanium Tube, Titanium Clad 316L SS Tube sheet, 317L SS Heads, Inconel 600 Expansion Joint, CS Shell, vertical heat exchanger. Shell rated 114 psi/FV @ 400 °F, Tubes rated 71 psi/FV @ 400 °F. Manufactured by Joseph Oat Corp. Dimensions: 7'6" diameter x 14' overall length. TEMA Type: BEM, Single-Pass Shell, Single-Pass Tubes. 2267 straight tubes, 1"OD x 18 BWG x14' long. Nozzle Schedule: Shell Side- (1) 20"D 150#/RF; (1) 6"D 150#/RF; (2) 1"D 6000#/NPT. Tube Side- (1) 50"D 150#/RF; (1) 30"D 150#/RF; (1) 10"D 150#/RF; (1) 10"D 150#/RF; (1) 4"D 150#/RF.



IPP#	Description
247349	15,600 ft², Titanium Tube, Titanium Clad 316L SS Tube sheet, 317L SS Heads, Inconel 600 Expansion Joint, CS Shell, vertical heat exchanger. Shell rated 114 psi/FV @ 400 °F, Tubes rated 71 psi/FV @ 400 °F. Manufactured by ETM. Dimensions: 7'6" diameter x 14' overall length. TEMA Type: BEM, Single-Pass Shell, Single-Pass Tubes. 2267 straight tubes, 1"OD x 18 BWG x14'long. Nozzle Schedule: Shell Side- (1) 20"D 150#/RF; (1) 6"D 150#/RF; (2) 1"D 6000#/NPT. Tube Side- (1) 50"D 150#/RF; (1) 30"D 150#/RF; (1) 10"D 150#/RF; (1) 4"D 150#/RF; (2) 1"D 150#/RF.
247350	2,458 ft², 304L SS Tube, 304SS Tube sheet, 304SS Heads, CS Shell, vertical heat exchanger. Shell rated 100 psi @ 158 °F, Tubes rated 71 psi/FV @ 300 °F. Dimensions: 2'7" diameter x 14' overall length. TEMA Type: BEM, Single-Pass Shell, Single-Pass Tubes. 905 straight tubes, 3/4"OD x 16 BWG x 14' long. Nozzle Schedule: Shell Side- (2) 12"D 150#/RF; (2) 3"D 150#/RF; (2) 2"D 150#/RF; (2) 1/2"D 6000#/NPT. Tube Side- (1) 20"D 150#/RF; (1) 12"D 150#/RF; (1) 3"D 150#/RF.
247351	1,466 ft², 304 SS Tube, 304 SS Tube sheet, 304 SS Heads, CS Shell, horizontal "U" tube heat exchanger. Shell rated 114 psi/FV @ 400 °F, Tubes rated 1,990 psi/FV @ 331 °F. Manufactured by Joseph Oat Corp. Dimensions: 1'6" diameter x 32' overall length. TEMA Type: BJM, Single-Pass Shell, Two-Pass Tubes. 238 U-Tubes, 3/4"OD x 16 BWG(1.651mm) x 32' long. Nozzle Schedule: Shell Side- (2) 10"D 150#/WN/RF; (1) 6"D 150#/WN/RF; (1) 1.5"D 150#/WN/RF. Tube Side- (2) 8"D 1500#/WN/RF; (1) 1.5"D 1500#/WN/RF.
247352	2,116 ft², Seamless Titanium Tube, Titanium Clad Tube sheet, 304 SS Heads, CS Shell, horizontal "U" tube heat exchanger. Shell rated 185 psi/FV @ 426 °F, Tubes rated 1,990 psi @ 388 °F. Manufactured by Joseph Oat Corp. Dimensions: 1'7" diameter x 32' overall length. TEMA Type: BJM. Single-Pass Shell, Two-Pass Tubes. 348 U-Tubes, 3/4"OD x 11 BWG x 32' long. Nozzle Schedule: Shell Side- (3) 6"D 300#/WN/RF; (1) 1.5"D 300#/WN/RF. Tube Side- (2) 8"D 1500#/WN/RF; (1) 1.5"D 1500#/WN/RF.



IPP#	Description
247353	2,749 ft², Seamless Annealed Titanium Tube, Titanium Clad Tube sheet, CS Shell, horizontal heat exchanger. Shell rated 1,322 psi @ 600 °F, Tubes rated 1990 psi @ 600 °F. Manufactured by Tricor. Dimensions: 2'2" diameter x 34' overall length. TEMA Type: BEM. Single-Pass Shell, Two-Pass Tubes. 368 straight tubes, 3/4"OD x 13 BWG x 39' long.
247355	2,840 ft², Seamless Annealed Titanium Tube, Titanium Clad Tube sheet, CS Shell, horizontal heat exchanger. Shell rated 1,322 psi @ 600 °F, Tubes rated 1990 psi @ 600 °F. Manufactured by Tricor. Dimensions: 2'2" diameter x 34' overall length. TEMA Type: BEM. Single-Pass Shell, Two-Pass Tubes. 380 straight tubes, 3/4"OD x 13 BWG x 39' long.
247356	2,915 ft², Seamless Annealed Titanium Tube, Titanium Clad Tube sheet, CS Shell, horizontal heat exchanger. Shell rated 1,322 psi @ 600 °F, Tubes rated 1990 psi @ 600 °F. Manufactured by Tricor. Dimensions: 2'2" diameter x 34' overall length. TEMA Type: BEM. Single-Pass Shell, Two-Pass Tubes. 390 straight tubes, 3/4"OD x 13 BWG x 39' long.
247357	2,113 ft², Seamless Titanium Tube, Titanium Clad Tube sheet, 304 SS Heads, CS Shell, horizontal heat exchanger. Shell rated 711 psi/FV @ 552 °F, Tubes rated 1,990 psi @ 518 °F. Manufactured by Joseph Oat Corp. Dimensions: 1'8" diameter x 32' overall length. TEMA Type: BJM, Single-Pass Shell, Two-Pass Tubes. 348 straight tubes, 3/4"OD x 11 BWG x 32' long. Nozzle Schedule: Shell Side- (3) 6"D 600#/WN/RF; (1) 1.5"D 600#/WN/RF. Tube Side- (2) 8"D 1500#/WN/RF.
237359	963 ft², 304 SS Tube, 304 SS Tube sheet, 304 SS Heads, CS Shell, horizontal "U" tube heat exchanger. Shell rated 156 psi @ 158 °F, Tubes rated 235 psi @ 266 °F. Manufactured by ARA. Dimensions: 1'7" diameter x 20' overall length. TEMA Type: BEU. Single-Pass Shell, Two-Pass Tubes. 108 U-Tubes, 3/4"OD x 16 BWG x 20' long. Nozzle Schedule: Shell Side- (2) 6"D 150#/RF; (2) 1"D 6000#/NPT; (2) 1/2"D 6000#/NPT. Tube Side- (2) 4"D 300#/RF; (2) 1"D 6000#/NPT; (2) 1/2"D 6000#/NPT.



IPP#	Description
247360	2,803 ft², 304 SS Tube, 304 SS Tube sheet, 304 SS Heads, CS Shell, vertical heat exchanger. Shell rated 100 psi @ 158 °F, Tubes rated 30 psi/FV @ 266 °F. Manufactured by ARA. Dimensions: 2'3" diameter x 16' overall length. TEMA Type: BEM. Single-Pass Shell, Single-Pass Tubes. 905 straight tubes. 3/4"OD x 16 BWG x 16' long. Nozzle Schedule: Shell Side- (2) 8"D 150#/WN/RF; (2) 1"D 6000#/NPT; (4) 1/2" 6000#/NPT. Tube Side- (1) 34"D 150#/WN/RF; (3) 3" 150#/WN/RF; (3) 1"D 6000#/NPT; (3) 1/2"D 6000#/NPT.
247218	18,500-gallon (70 m3), Hastelloy C276 Clad, vertical hydrogenation reactor. Built to ASME code. Rated for 1422 psi at 600 °F. (100 kg/cm2 at 315 °C). Designed and constructed Coek Engineering N.V -Geel Belgium. 114" diameter x 342.5" [28.5ft] straight side, (2900mm x 8700mm) with welded hemi heads. Mounted by lugs. One 24" (610mm) manway, one 20" (508mm) manway, two 10" (254mm) nozzles, two 3" (76.2mm) nozzles, one 2" (50.8 mm) nozzle, and two 1" (25.4mm) nozzles. With lifting and tailing lugs.
247361	44,000-gallon, Titanium SB-265 Clad, vertical pressure tank with mixing. Built to ASME Code. Vessel rated 219 psi/FV @ 429.8 °F. Manufactured by Coek Engineering NV. Dimensions: 17'5" diameter x 23'4" tangent to tangent. Titanium SB-265 Clad, Welded, 2:1 Elliptical Heads. Skirt Mounted. Agitated by Ekato drive with Mechanical Seal, Type H3 SV 10 B, Input: 1,775 rpm, Output: 40.44rpm; DS Tech Gearbox; driven by 125hp, TECO- Westinghouse Induction Motor, 575V, 113A, 60Hz, 1760rpm, 3 Phase, 4 Pole, Frame: 444T. Titanium SB-265, Single Tier Agitator with Bottom Steady Bearing, (4) Titanium SB-265, Sidewall Mounted Straight Baffles, 18" W x 3/8" T x 22'3" L.



IPP#	Description
247362	44,000-gallon, Titanium SB-265 Clad, vertical pressure tank with mixing. Built to ASME Code. Vessel rated 79.7 psi/FV @ 244.4 °F. Manufactured by Coek Engineering NV. Dimensions 17'5" diameter x 23'4" tangent to tangent. Titanium SB-265 Clad, Welded, 2:1 Elliptical Heads. Skirt Mounted. Agitated by Ekato drive with Mechanical Seal, Type HWL 2140 N, Output: 40.3rpm; Nord Drive systems gearbox, Type: 9307VFK N400TC; driven by 100hp TECO-Westinghouse Induction Motor, 575hp, 90A, 60Hz, 3 Phase, 4 Pole, Frame 405TC. Titanium SB-265, Single Tier Agitator with Bottom Steady Bearing, (4) Titanium SB-265, Sidewall Mounted Straight Baffles, 18" W x 3/8" T x 22'3" L.
247363	57,642-gallon, Titanium SB-265 Gr1 Clad, vertical pressure tank with mixing (used as a steam-traced Reactor). Built to ASME Code. Vessel rated 285 psi/FV @ 486 °F. Manufactured by Coek Eng. N.V. 19'6"diameter x 29' tangent to tangent. Welded Elliptical Heads. Mounted on Lugs. Ekato Agitator with Mechanical Seal, driven by a Two Speed Induction Motor manufactured by TECO Westinghouse in 2015, rated 4000V, 3Phase, 60Hz, 4/6 pole, 128/90A, 1000/670HP, 1785/1185RPM; Type AECO-LD, Frame: 500CB. Gearbox manufactured by Ekato, Type H4- LV-18-C with dual pump remote oil injection skid, driving a Titanium SB-265 two-tier, 6 turbine blade, agitator; (4) Titanium SB-265, Sidewall Mounted Straight Baffles.
247364	57,642-gallon, Titanium SB-265 Gr1 Clad, vertical pressure tank with mixing (used as a steam-traced Reactor). Built to ASME Code. Vessel rated 285 psi/FV @ 486 °F. Manufactured by Coek Eng. N.V. Dimensions: 19'6" diameter x 29' tangent to tangent. Welded Elliptical Heads. Mounted on Lugs. Ekato Agitator with Mechanical Seal, driven by a Pole-Change Induction Motor manufactured by TECO Elec. & Mach. Co., rated 4000V, 3 Phase, 1000HP, M; Type AECO-LD001, Frame: 500CB. Gearbox manufactured by Siemens, with dual pump remote oil injection skid, driving a Titanium SB-265 two-tier, 6-turbine blade, agitator; (4) Titanium SB-265 Sidewall Mounted Straight Baffles.



IPP#	Description
247365	37,000-gallon, 316L SS, vertical pressure tank with mixing. Built to ASME Code. Steam Coil Tracing, rated 356 psi @ 491 °F. Manufactured by Robert Mitchell Inc. Dimensions: 16'4" diameter x 21'9" tangent to tangent. 316L SS, Welded, 2:1 Elliptical Heads. Skirt Mounted. Agitated by Ekato with Mechanical Seal, Type: H3SV 09 B, Input: 1770rpm, Output: 55.44rpm; driven by 100hp, TECO-Westinghouse Induction Motor, 575V, 89.6A, 60Hz, 3 Phase, 4 Pole, Frame: 405TC. 316L SS, Single Tier Agitator, with Bottom Steady Bearing, (4) 316L SS, Sidewall Mounted Straight Baffles, 1'6"W x 3/8"T x 19'6"L.
247366	3,750-gallon, 316L SS, vertical pressure tank with mixing. Vessel rated 30 psi/FV @ 300 °F. Manufactured by EDB. Dimensions: 8'4" diameter x 7'10" tangent to tangent. 316L SS, 2:1 Elliptical Heads. Skirt Mounted. 316L SS, Single Tier Agitator with Bottom Steady Bearing. (4) 316L SS, Sidewall Mounted Straight Baffles, 9" W x 3/8" T x 7'3" L.
247371	3,750-gallon, 316L SS, vertical pressure tank with mixing. Vessel rated 30 psi/FV @ 300 °F. Manufactured by EDB. Dimensions: 8'4" diameter x 7'10" tangent to tangent. 316L SS, 2:1 Elliptical Heads. Skirt Mounted. 316L SS, Single Tier Agitator with Bottom Steady Bearing. (4) 316L SS, Sidewall Mounted Straight Baffles, 9" W x 3/8" T x 7'3" L.
247372	44,000-gallon, 317L SS, vertical pressure tank with mixing. Built to ASME Code. Vessel rated 36 psi/FV @ 302 °F. Manufactured by Robert Mitchell Inc. Dimensions: 17'5" diameter x 23'4" tangent to tangent. 317L SS, Welded, 2:1 Elliptical Heads. Skirt Mounted. Agitated by Ekato drive with Mechanical Seal, Type: HWL 2140 N, Output: 40.3rpm; DS Tech gearbox Type: H3 SV 10 B, Input: 1770rpm, Gear Reduction: 43.897, Output: 40.32rpm; driven by 100hp, Toshiba Induction Motor, 575V, 95A, 60Hz, 3 Phase, 4 Pole, Frame: 405T. 317L SS, Single Tier Agitator with Bottom Steady Bearing, (4) 317L SS, Sidewall Mounted Straight Baffles, 18" W x 3/8" T x 22'3" L.



IPP#	Description
247373	22,802-gallon, 317L SS, vertical pressure tank with mixing. Built to ASME Code. Vessel rated 31 psi @ 302 °F. Manufactured by Robert Mitchel Inc. Dimensions: 14'6" diameter x 18'9" tangent to tangent. 317L SS, Welded, 2:1 Elliptical Heads. Lug-mounted. Agitated by and Ekato Drive with Mechanical Seal and DS Tech Gearbox, Type H3 SV 06, Input: 1756rpm, Output: 45.7rpm; driven by 60hp, TECO Westinghouse Induction Motor, 575V, 55A, 60Hz, 1775rpm, Frame: 365TC. 317L SS, Single Tier Agitator with Bottom Steady Bearing, (4) 317L, Sidewall Mounted Straight Baffles, 1'4" W x 3/8" T x 17'6" L.
247374	25,500-gallon, 316L SS, vertical pressure tank with mixing. Built to ASME Code. Vessel rated 49 psi/FV @ 329 °F. Steam Coil Tracing, rated 356 psi @ 491 °F. Manufactured by Robert Mitchell Inc., Dimensions 15' diameter x 17'4" tangent to tangent. 316L SS, Welded, 2:1 Elliptical Heads. Lug-mounted. Agitated by Ekato drive with Mechanical Seal, Type: HWL 2120 N, Ekato Gearbox Type: H2 SV 06 R1, driven by 75hp, Toshiba Induction Motor, 575V, 71A, 60Hz, 1775rpm, Frame: 365T. 316L SS, Single Tier Agitator with Bottom Steady Bearing, (4) 316L SS, Sidewall Mounted Straight Baffles, 1'4" W x 5/8" T x 14' L.
247375	12,688-gallon, 317L SS, vertical pressure tank with mixing. Vessel rated 43 psi/FV @ 329 °F. Manufactured by Robert Mitchel Inc. Dimensions: 12'3" diameter x 14'6" tangent to tangent. 317L SS, Welded, 2:1 Elliptical Heads. Lug-mounted. 316L SS, Two Tier Agitator spaced 7'3" with Bottom Steady Bearing, (4) 317L SS, Sidewall Mounted Straight Baffles, 1' W x 3/8" T x 14'6" L.
247376	28,314-Gallon, 304 SS, vertical pressure tank with mixing. Built to ASME Code. Vessel rated 30 psi @ 266 °F. Manufactured by Robert Mitchel Co. Dimensions: 13'9" diameter x 21'4" tangent to tangent. 304SS, Welded, 2:1, Elliptical Heads. CS Skirt Mounted. Agitated by Ekato drive with Mechanical Seal, Type: HWL 2120, rated 93kW (124hp), 101 RPM Output, driven by ~75hp, TECO-Westinghouse Motor. 304 SS, Single Tier Agitator with Bottom Steady Bearing, (4) Sidewall Mounted Straight Baffles, 13" W x 19'4" L.



IPP#	Description
247378	65,390-Gallon, 304L SS Clad, vertical pressure tank with mixing. Built to ASME Code. Vessel rated 796.8 psi @ 545 °F. Steam Tracing rated 597 psi @ 487 °F. Manufactured by Coek Engineering NV. Dimensions: 17'4" diameter x 32' 4" tangent to tangent. 304SS Clad, Welded, 2:1 Elliptical Heads. Lug-mounted. Agitated by Ekato drive with Mechanical Seal, Type: H3 RV 09 B, Input: 1770rpm, Output: 28.07rpm, 74hp (55kW); driven by 75hp, Toshiba Induction Motor, 575V, 71A, 60Hz, 4 Pole, 3 Phase, Frame 365TC, M/N: B0754FLF30MHJ01. Single Tier Agitator w/ Bottom Steady Bearing, (4) 304 SS Clad, Sidewall Mounted Straight Baffles, 16" W x 15 L.
247379	65,390-Gallon, 304L SS Clad, vertical pressure tank with mixing. Built to ASME Code. Vessel rated 455 psi @ 504 °F. Manufactured by Coek Engineering NV. Dimensions: 17'3"diameter x 32'4" tangent to tangent. 304L Clad, 2:1 Elliptical Heads. Lug-mounted. Agitated by Ekato drive with Mechanical Seal, Type: H3 RV 09 B, Input 1770rpm, Output 28.07rpm, driven by 75hp, TECO-Westinghouse Induction Motor, 575V, 69A, 60Hz, 3 Phase, Frame: 365TC. Single Tier Agitator with Bottom Steady Bearing, (4) 304L SS Clad, Sidewall Mounted Straight Baffles, 16" W x 15' L.
247380	65,390-Gallon, 304L SS, vertical pressure tank with mixing. Built to ASME Code. Vessel rated 270 psi @ 453 °F. Steam Coil Traced, rated 356 psi @ 491 °F. Manufactured by Robert Mitchell Inc. Dimensions: 17'4" diameter x 32' 4" tangent to tangent. 304L SS, 2:1 Elliptical Heads. Lug-mounted. Agitated by Ekato drive with Mechanical Seal, Type: HWL 2160 N, 74hp (55kW), Output: 28.1rpm; driven by 75hp, TECO-Westinghouse Induction Motor, 575V, 69A, 60Hz, 4 Pole, 3 Phase, 1775rpm, Frame: 365TC. 304L SS, Single Tier Agitator with Bottom Steady Bearing.



IPP#	Description
247382	65,390-Gallon, 304L SS, vertical pressure tank with mixing. Built to ASME Code. Vessel rated 199 psi @ 424 °F. Manufactured by Robert Mitchell Inc. Dimensions: 17'4" diameter x 32' 4" tangent to tangent. 304L SS, 2:1 Elliptical Heads. Lug-mounted. Agitated by Ekato drive with Mechanical Seal, Type: HWL 2160 N, 74hp (55kW), Output: 28.1rpm; driven by 75hp, TECO-Westinghouse Induction Motor, 575V, 69A, 60Hz, 4 Pole, 3 Phase, 1775rpm, Frame: 365TC. 304L SS, Single Tier Agitator with Bottom Steady Bearing.
247383	65,390-Gallon, 304 SS, vertical pressure tank with mixing. Vessel rated 85 psi @ 354 °F. Manufactured by Robert Mitchell Inc. Dimensions: 17'4" diameter x 32' 4" tangent to tangent. 304 SS, 2:1 Elliptical Heads. Lug-mounted. 304, SS Single Tier Agitator with Bottom Steady Bearing.
247384	10,322-Gallon, 304L SS, vertical pressure tank with mixing. Vessel rated 128 psi @ 379 °F. Manufactured EDB. Dimensions: 10' diameter x 15' tangent to tangent. 304L SS, 2:1 Elliptical Heads. Lug-mounted. Single Tier Agitator with Bottom Steady Bearing, (4), 304L SS, Sidewall Mounted Straight Baffles, 9" W x 13' L.