

Component Tag List: Rev 0

Project #: 190019 P&ID #190019P1r 0		Project Name: Ineos Condensate Polish Water System TXCM-1608-1551174, PO#4500346625	
CARBON FILTER D-437A (P&ID PAGE 3 OF 8)			
TAG #	DESCRIPTION	MFG.	PART # \ SERIAL # \ MODEL #
ARV-301	Automatic Air Release Valve 1" threaded VAL-MATIC # 22.9DISV , DI Body, 316 SS trim & hardware, EPDM seating and NSF fusion epoxy interior & exterior , 300 psi CWP	Val-Matic	22.9SV
Sight	8" -150# Sight Flow Indicator, Full View, 316SS, Heavy Wall Borosilicate/Lexan,	John Ernst Co, Inc	255S-8.00L
D-437A	144" DIA. X 108" SIDE SHELL, 200 PSI @ 280F, ASME Code, 304 SS, 2:1 elliptical heads, lift lugs and ground lugs, 24" top manway, 24" side manway w/davits	Ross Engineering	NA
PI-829	Pressure Gauge, 2-1/2" Dial x 1/4" MNPT Connection, Back Mount, PLUS Performance (XLL) Materials of Construction: Case, Tube & Socket: SS Range: 0-160 PSI	Ashcroft	25-1009SW-02B-XLL-160#
PI-830	Pressure Gauge, 2-1/2" Dial x 1/4" MNPT Connection, Back Mount, PLUS Performance (XLL) Materials of Construction: Case, Tube & Socket: SS Range: 0-160 PSI	Ashcroft	25-1009SW-02B-XLL-160#
PRV-301	Pressure Relief Valve, Bronze, 2", MNPT X 2"FNPT Connections, SS Trim, ASME code Liquid Service, Set @ 200PSI	Kunkle	913BGHM01-JE-200
PRV-302	Pressure Regulator, AIR, 1/4" NPT, bracket and 0-15 psi gauge	Wilkerson	Wilkerson Regulator# B-08-02-FK00, Bracket # GRP-95-147, Noshok Gauge 0-15psi
PRV-303	Pressure Regulator, AIR, 1/4" NPT, bracket and 0-140 psi gauge	Wilkerson	Wilkerson Regulator# B-08-02-FK00, Bracket # GRP-95-147, Bimba Gauge 0-140psi
PT-828A	Pressure Transmitter, 1/4"-18 MNPT, 316SS process conn. , silicone fill, 0-150 psi range, aluminum housing, 4-20mA, with digital Hart signal, pipe mount bracket, calibration cert and LCD local display	Rosemount	3051TG2A2A21AB4Q4M5 S/N: 0150612
PT-828B	Pressure Transmitter, 1/4"-18 MNPT, 316SS process conn. , silicone fill, 0-150 psi range, aluminum housing, 4-20mA, with digital Hart signal, pipe mount bracket, calibration cert and LCD local display	Rosemount	3051TG2A2A21AB4Q4M5 S/N: 0150613
SV-301	Ball Valve, 1-Piece, Reduced Port, 316SS, 1", NPT Connections, ASTM A351 Gr.CF8M Body/Ball, ASTM A276 Gr.316 Blowout Proof Stem, PTFE Seats	Ta-Chen	TC-01TK-1"
SV-302	Ball Valve, 1-Piece, Reduced Port, 316SS, 1", NPT Connections, ASTM A351 Gr.CF8M Body/Ball, ASTM A276 Gr.316 Blowout Proof Stem, PTFE Seats	Ta-Chen	TC-01TK-1"
SV-303	Ball Valve, 1-Piece, Reduced Port, 316SS, 1", NPT Connections, ASTM A351 Gr.CF8M Body/Ball, ASTM A276 Gr.316 Blowout Proof Stem, PTFE Seats	Ta-Chen	TC-01TK-1"
TI-831/ TW-831	Temperature Thermometer, 3" dial, SS case and stem, 1/2" NPT , 50-400F, vari-angle adjustment. Silicone filled, 18" insertion, with thermowell	Ashcroft	30EL60E180-50/400
V-301	Butterfly Valve, 10", Viton Seat,316 SS Disc & Stem, CI Lug Body, with Manual Handle	ABZ	397-806-10"
V-302	Butterfly Valve, 10", Viton Seat,316 SS Disc & Stem, CI Lug Body, with Manual Handle	ABZ	397-806-10"
V-303	Butterfly Valve, 10", Viton Seat,316 SS Disc & Stem, CI Lug Body, with Manual Handle	ABZ	397-806-10"
V-304	Ball Valve, 2", 3-Piece, Full Port, 316SS, Socket Weld Connections	Tru-Flo	EA33-NF-SW-20

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CARBON FILTER D-437A (P&ID PAGE 3 OF 8)			
TAG #	DESCRIPTION	MFG.	PART # \ SERIAL # \ MODEL #
V-305	Ball Valve, 1-Piece, Reduced Port, 316SS, 1", NPT Connections, ASTM A351 Gr.CF8M Body/Ball, ASTM A276 Gr.316 Blowout Proof Stem, PTFE Seats	Ta-Chen	TC-01TK-1"
V-307	Butterfly Valve, 3", Viton Seat, 316SS Disc & Stem, CI Lug Body, with Manual Handle	ABZ	397-812-3"
V-308	Ball Valve, 2", 3-Piece, Full Port, 316SS, Socket Weld Connections	Tru-Flo	EA33-NF-SW-20
Root Valves QTY: 5	Ball Valve, 1-Piece, Reduced Port, 316SS, 1/2", NPT Connections, ASTM A351 Gr.CF8M Body/Ball, ASTM A276 Gr.316 Blowout Proof Stem, PTFE Seats	Ta-Chen	TC-01TK-1/2"
XV-821	Butterfly Valve, 10", Pneumatically Actuated, Spring Return, Fail-Close, Limit Switch with (2) SPDT Switches, VITON Seat, 316SS Disc & Stem, CI Lug Body, 24VDC solenoid	ABZ/ Max Air	397-812-10" (Valve) ABZ 210-SR5 (Actuator) MS45-120M03 (Limit Switch)
XV-822	Butterfly Valve, 10", Pneumatically Actuated, Spring Return, Fail-Close, Limit Switch with (2) SPDT Switches, VITON Seat, 316SS Disc & Stem, CI Lug Body, 24VDC solenoid, with FULL TRAVEL STOPS	ABZ/ Max Air	397-812-10" (Valve) ABZ 210-SR5 (Actuator) MS45-120M03 (Limit Switch)
XV-823	Butterfly Valve, 10", Pneumatically Actuated, Spring Return, Fail-Close, Limit Switch with (2) SPDT Switches, VITON Seat, 316SS Disc & Stem, CI Lug Body, 24VDC solenoid	ABZ/ Max Air	397-812-10" (Valve) ABZ 210-SR5 (Actuator) MS45-120M03 (Limit Switch)
XV-824	Butterfly Valve, 10", Pneumatically Actuated, Spring Return, Fail-Close, Limit Switch with (2) SPDT Switches, VITON Seat, 316SS Disc & Stem, CI Lug Body, 24VDC solenoid, with FULL TRAVEL STOPS	ABZ/ Max Air	397-812-10" (Valve) ABZ 210-SR5 (Actuator) MS45-120M03 (Limit Switch)
XV-825	Butterfly Valve, 10", Pneumatically Actuated, Spring Return, Fail-Close, Limit Switch with (2) SPDT Switches, VITON Seat, 316SS Disc & Stem, CI Lug Body, 24VDC solenoid	ABZ/ Max Air	397-812-10" (Valve) ABZ 210-SR5 (Actuator) MS45-120M03 (Limit Switch)
XV-826	Butterfly Valve, 10", Pneumatically Actuated, Spring Return, Fail-Close, Limit Switch with (2) SPDT Switches, VITON Seat, 316SS Disc & Stem, CI Lug Body, 24VDC solenoid	ABZ/ Max Air	397-812-10" (Valve) ABZ 210-SR5 (Actuator) MS45-120M03 (Limit Switch)
XV-827	Butterfly Valve, 10", Pneumatically Actuated, Spring Return, Fail-Close, Limit Switch with (2) SPDT Switches, VITON Seat, 316SS Disc & Stem, CI Lug Body, 24VDC solenoid	ABZ/ Max Air	397-812-10" (Valve) ABZ 210-SR5 (Actuator) MS45-120M03 (Limit Switch)
XV-832	Butterfly Valve, 10", Pneumatically Actuated, Spring Return, Fail-Close, Limit Switch with (2) SPDT Switches, VITON Seat, 316SS Disc & Stem, CI Lug Body, 24VDC solenoid	ABZ/ Max Air	397-812-10" (Valve) ABZ 210-SR5 (Actuator) MS45-120M03 (Limit Switch)

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CARBON FILTER D-437A (P&ID PAGE 3 OF 8)			
TAG #	DESCRIPTION	MFG.	PART # \ SERIAL # \ MODEL #
CARBON FILTER D-437A - SHIP LOOSE - (P&ID PAGE 3 OF 8)			
TAG #	DESCRIPTION	MFG.	PART # \ SERIAL # \ MODEL #
AIT-850	Multiparameter Monitor, 1/2 DIN, 2-Channel, M800 with Panel Mount Kit, 1/2 DIN, M800	Mettler-Toledo Thornton	58 000 802 (M800) 52 500 213 (Panel Mount Kit)
AE-850	TOC Sensor 6000i Low PPB, 6000TOCi Sensor, low ppb calibration, 110/240 VAC 50/60Hz Patch Cord: 25', M800	Mettler-Toledo Thornton	30 472 151 (Sensor) 58 080 274 (Patch Cord)
FE/FT-820	Vortex Flow Meter, Wafer, 316SS, 6", 150#, 4-20mA, with digital Hart signal, calibration cert , with LCD local display	Rosemount	8800DW060SA1N1D1M5Q4 S/N: 14987481
TE-819 / TW-819	Temperature Transmitter, 2-40mA output, aluminmum housing, 1/2" NPT conduit conn., mounting bracket, with thermowell	Rosemount	3144PD1A1NAB4Q4 S/N:0050916
	Temp Sensor RTD, 4-wire no head, 100 Ohm, .00385 Alpha RTD, 5" "U" length, 316SS, with Thermowell 1" NPT process conn.		0-NUNS-3-ST1-5-R-1.75-PO14SR-FW
FV-820	Bypass Flow Control Valve, 6" , 4-20mA		By Others
V-306	3" SS Ball Valve		Bv Others

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CARBON FILTER D-437B (P&ID PAGE 4 OF 8)			
TAG #	DESCRIPTION	MFG.	PART # \ SERIAL # \ MODEL #
ARV-401	Automatic Air Release Valve 1" threaded VAL-MATIC # 22.9DISV , DI Body, 316 SS trim & hardware, EPDM seating and NSF fusion epoxy interior & exterior , 300 psi CWP	Val-Matic	22.9SV
Sight	8" -150# Sight Flow Indicator, Full View, 316SS, Heavy Wall Borosilicate/Lexan,	John Ernst Co, Inc	255S-8.00L
D-437B	144" DIA. X 108" SIDE SHELL, 200 PSI @ 280F, ASME Code, 304 SS, 2:1 elliptical heads, lift lugs and ground lugs, 24" top manway, 24" side manway w/davits	Ross Engineering	NA
PI-859	Pressure Gauge, 2-1/2" Dial x 1/4" MNPT Connection, Back Mount, PLUS Performance (XLL) Materials of Construction: Case, Tube & Socket: SS Range: 0-160 PSI	Ashcroft	25-1009SW-02B-XLL-160#
PI-860	Pressure Gauge, 2-1/2" Dial x 1/4" MNPT Connection, Back Mount, PLUS Performance (XLL) Materials of Construction: Case, Tube & Socket: SS Range: 0-160 PSI	Ashcroft	25-1009SW-02B-XLL-160#
PRV-401	Pressure Relief Valve, Bronze, 2", MNPT X 2"FNPT Connections, SS Trim,ASME code for Liquid Service, Set @ 200PSI	Kunkle	913BGHM01-JE-200
PRV-402	Pressure Regulator, AIR, 1/4" NPT, bracket and 0-15 psi gauge	Wilkerson	Wilkerson Regulator# B-08-02-FK00, Bracket # GRP-95-147, Noshok Gauge 0-15psi
PRV-403	Pressure Regulator, AIR, 1/4" NPT, bracket and 0-140 psi gauge	Wilkerson	Wilkerson Regulator# B-08-02-FK00, Bracket # GRP-95-147, Bimba Gauge 0-140psi
PT-858A	Pressure Transmitter, 1/4"-18 MNPT, 316SS process conn. , silicone fill, 0-150 psi range, aluminum housing, 4-20mA, with digital Hart signal, pipe mount bracket, calibration cert and LCD local display	Rosemount	3051TG2A2A21AB4Q4M5 S/N:0150614
PT-858B	Pressure Transmitter, 1/4"-18 MNPT, 316SS process conn. , silicone fill, 0-150 psi range, aluminum housing, 4-20mA, with digital Hart signal, pipe mount bracket, calibration cert and LCD local display	Rosemount	3051TG2A2A21AB4Q4M5 S/N:0150615
Root Valves QTY: 5	Ball Valve, 1-Piece, Reduced Port, 316SS, 1/2", NPT Connections, ASTM A351 Gr.CF8M Body/Ball, ASTM A276 Gr.316 Blowout Proof Stem, PTFE Seats	Ta-Chen	TC-01TK-1/2"
SV-401	Ball Valve, 1-Piece, Reduced Port, 316SS, 1", NPT Connections, ASTM A351 Gr.CF8M Body/Ball, ASTM A276 Gr.316 Blowout Proof Stem, PTFE Seats	Ta-Chen	TC-01TK-1"
SV-402	Ball Valve, 1-Piece, Reduced Port, 316SS, 1", NPT Connections, ASTM A351 Gr.CF8M Body/Ball, ASTM A276 Gr.316 Blowout Proof Stem, PTFE Seats	Ta-Chen	TC-01TK-1"
SV-403	Ball Valve, 1-Piece, Reduced Port, 316SS, 1", NPT Connections, ASTM A351 Gr.CF8M Body/Ball, ASTM A276 Gr.316 Blowout Proof Stem, PTFE Seats	Ta-Chen	TC-01TK-1"
TI-861	Temperature Thermometer, 3" dial, SS case and stem, 1/2" NPT , 50-400F, vari-angle adjustment. Silicone filled, 18" insertion, with thermowell	Ashcroft	30EL60E180-50/400
V-401	Butterfly Valve, 10", Viton Seat,316 SS Disc & Stem, CI Lug Body, with Manual Handle	ABZ	397-806-10"

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CARBON FILTER D-437B (P&ID PAGE 4 OF 8)

TAG #	DESCRIPTION	MFG.	PART # \ SERIAL # \ MODEL #
V-402	Butterfly Valve, 10", Viton Seat, 316 SS Disc & Stem, CI Lug Body, with Manual Handle	ABZ	397-806-10"
V-403	Butterfly Valve, 10", Viton Seat, 316 SS Disc & Stem, CI Lug Body, with Manual Handle	ABZ	397-806-10"
V-404	Ball Valve, 2", 3-Piece, Full Port, 316SS, Socket Weld Connections	Tru-Flo	EA33-NF-SW-20
V-405	Ball Valve, 1-Piece, Reduced Port, 316SS, 1", NPT Connections, ASTM A351 Gr.CF8M Body/Ball, ASTM A276 Gr.316 Blowout Proof Stem, PTFE Seats	Ta-Chen	TC-01TK-1"
V-407	Butterfly Valve, 3", Viton Seat, 316SS Disc & 416 Stem, CI Lug Body, with Manual Handle	ABZ	397-812-3"
V-408	Ball Valve, 2", 3-Piece, Full Port, 316SS, Socket Weld Connections	Tru-Flo	EA33-NF-SW-20
XV-851	Butterfly Valve, 10", Pneumatically Actuated, Spring Return, Fail-Close, Limit Switch with (2) SPDT Switches, VITON Seat, 316SS Disc & Stem, CI Lug Body, 24VDC solenoid	ABZ/ Max Air	397-812-10" (Valve) ABZ 210-SR5 (Actuator) MS45-120M03 (Limit Switch)
XV-852	Butterfly Valve, 10", Pneumatically Actuated, Spring Return, Fail-Close, Limit Switch with (2) SPDT Switches, VITON Seat, 316SS Disc & Stem, CI Lug Body, 24VDC solenoid, with FULL TRAVEL STOPS	ABZ/ Max Air	397-812-10" (Valve) ABZ 210-SR5 (Actuator) MS45-120M03 (Limit Switch)
XV-853	Butterfly Valve, 10", Pneumatically Actuated, Spring Return, Fail-Close, Limit Switch with (2) SPDT Switches, VITON Seat, 316SS Disc & Stem, CI Lug Body, 24VDC solenoid	ABZ/ Max Air	397-812-10" (Valve) ABZ 210-SR5 (Actuator) MS45-120M03 (Limit Switch)
XV-854	Butterfly Valve, 10", Pneumatically Actuated, Spring Return, Fail-Close, Limit Switch with (2) SPDT Switches, VITON Seat, 316SS Disc & Stem, CI Lug Body, 24VDC solenoid, with FULL TRAVEL STOPS	ABZ/ Max Air	397-812-10" (Valve) ABZ 210-SR5 (Actuator) MS45-120M03 (Limit Switch)
XV-855	Butterfly Valve, 10", Pneumatically Actuated, Spring Return, Fail-Close, Limit Switch with (2) SPDT Switches, VITON Seat, 316SS Disc & Stem, CI Lug Body, 24VDC solenoid	ABZ/ Max Air	397-812-10" (Valve) ABZ 210-SR5 (Actuator) MS45-120M03 (Limit Switch)
XV-856	Butterfly Valve, 10", Pneumatically Actuated, Spring Return, Fail-Close, Limit Switch with (2) SPDT Switches, VITON Seat, 316SS Disc & Stem, CI Lug Body, 24VDC solenoid	ABZ/ Max Air	397-812-10" (Valve) ABZ 210-SR5 (Actuator) MS45-120M03 (Limit Switch)
XV-857	Butterfly Valve, 10", Pneumatically Actuated, Spring Return, Fail-Close, Limit Switch with (2) SPDT Switches, VITON Seat, 316SS Disc & Stem, CI Lug Body, 24VDC solenoid	ABZ/ Max Air	397-812-10" (Valve) ABZ 210-SR5 (Actuator) MS45-120M03 (Limit Switch)
XV-862	Butterfly Valve, 10", Pneumatically Actuated, Spring Return, Fail-Close, Limit Switch with (2) SPDT Switches, VITON Seat, 316SS Disc & Stem, CI Lug Body, 24VDC solenoid	ABZ/ Max Air	397-812-6" (Valve) ABZ 210-SR5 (Actuator) MS45-120M03 (Limit Switch)

CARBON FILTER D-437B - SHIP LOOSE - (P&ID PAGE 4 OF 8)

TAG #	DESCRIPTION	MFG.	PART # \ SERIAL # \ MODEL #
V-406	3" SS Ball Valve		By Others

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Project #: 190019 P&ID #190019P1r 0		Project Name: Ineos Condensate Polish Water System TXCM-1608-1551174, PO#4500346625	
CONDENSATE POLISHER D-432A (P&ID PAGE 5 OF 8)			
TAG #	DESCRIPTION	MFG.	PART # \ SERIAL # \ MODEL #
ARV-501	Automatic Air Release Valve 1" threaded VAL-MATIC # 22.9DISV , DI Body, 316 SS trim & hardware, EPDM seating and NSF fusion epoxy interior & exterior , 300 psi CWP	Val-Matic	22.9SV
Sight	6" -150# Sight Flow Indicator, Full View, 316SS, Heavy Wall Borosilicate/Lexan,	John Ernst Co, Inc	255S-6.00
AE-1639	Conductivity Sensor, 316SSm extended length, 0.01 Cell Constant 10ft intergral cable	Rosemount	400-11-36
AIT-1639	1057 Triple Channel Transmitter/Monitor, 24VDC with 4 Alarm Relays, (3) COND	Rosemount	1057-02-20-30-48-UL
AE-818	Conductivity Sensor, 316SSm extended length, 0.1 Cell Constant 100ft intergral cable	Rosemount	400-12-36-6
1001	1057 Triple Channel Transmitter/Monitor, 24VDC with 4 Alarm Relays	Rosemount	1057-02-20-30-48-UL
D-432A	84" DIA. X 96" SIDE SHELL, 200PSI @ 280F, ASME Code, 304 SS, 2:1 elliptical heads, lift lugs and ground lugs, 24" top manway, 24" side manway	Ross Engineering	NA
LS-1638	Level Switch, 24VDC, SPDT Relay, 3/4" NPT, 316SS, Teflon insulator, 1/2" dia x 10" probe, alum. NEMA 7/9 housing	Babbitt International	LS2000-24VDC-S-10"-X
PI-1635	Pressure Gauge, 2-1/2" Dial x 1/4" MNPT Connection, Back Mount, PLUS Performance (XLL) Materials of Construction: Case, Tube & Socket: SS Range: 0-160 PSI	Ashcroft	25-1009SW-02B-XLL-160#
PI-1637	Pressure Gauge, 2-1/2" Dial x 1/4" MNPT Connection, Back Mount, PLUS Performance (XLL) Materials of Construction: Case, Tube & Socket: SS Range: 0-160 PSI	Ashcroft	25-1009SW-02B-XLL-160#
PI-1691	Pressure Gauge, 2-1/2" Dial x 1/4" MNPT Connection, Back Mount, PLUS Performance (XLL) Materials of Construction: Case, Tube & Socket: SS Range: 0-30 PSI	Ashcroft	25-1009SW-02B-XLL-30#
PRV-501	Pressure Relief Valve, Bronze, 2", FLG X 2" FLG. , 125# Connections, 316SS Trim,ASME CODE for Liquid Service, Set @ 200PSI	Kunkle	91H-H02AMC-200
PRV-502	Pressure Regulator, AIR, 1/4" NPT, bracket and 0-15 psi gauge	Wilkerson	Wilkerson Regulator# B-08-02-FK00, Bracket # GRP-95-147, Noshok Gauge 0-15psi
PRV-503	Pressure Regulator, AIR, 1/4" NPT, bracket and 0-140 psi gauge	Wilkerson	Wilkerson Regulator# B-08-02-FK00, Bracket # GRP-95-147, Bimba Gauge 0-140psi
PT-1632A	Pressure Transmitter, 1/4"-18 MNPT, 316SS process conn. , silicone fill, 0-150 psi range, aluminum housing, 4-20mA, with digital Hart signal, pipe mount bracket, calibration cert and LCD local display	Rosemount	3051TG2A2A21AB4Q4M5 S/N:0150616
PT-1632B	Pressure Transmitter, 1/4"-18 MNPT, 316SS process conn. , silicone fill, 0-150 psi range, aluminum housing, 4-20mA, with digital Hart signal, pipe mount bracket, calibration cert and LCD local display	Rosemount	3051TG2A2A21AB4Q4M5 S/N:0150617

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CONDENSATE POLISHER D-432A (P&ID PAGE 5 OF 8)			
TAG #	DESCRIPTION	MFG.	PART # \ SERIAL # \ MODEL #
ROOT VALVES (QTY: 5)	Ball Valve, 1-Piece, Reduced Port, 316SS, 1/2", NPT Connections, ASTM A351 Gr.CF8M Body/Ball, ASTM A276 Gr.316 Blowout Proof Stem, PTFE Seats	Ta-Chen	TC-01TK-1/2"
SV-501	Ball Valve, 1-Piece, Reduced Port, 316SS, 1", NPT Connections, ASTM A351 Gr.CF8M Body/Ball, ASTM A276 Gr.316 Blowout Proof Stem, PTFE Seats	Ta-Chen	TC-01TK-1"
SV-502	Ball Valve, 1-Piece, Reduced Port, 316SS, 1", NPT Connections, ASTM A351 Gr.CF8M Body/Ball, ASTM A276 Gr.316 Blowout Proof Stem, PTFE Seats	Ta-Chen	TC-01TK-1"
SV-503	Ball Valve, 1-Piece, Reduced Port, 316SS, 1", NPT Connections, ASTM A351 Gr.CF8M Body/Ball, ASTM A276 Gr.316 Blowout Proof Stem, PTFE Seats	Ta-Chen	TC-01TK-1"
TI-1636	Temperature Thermometer, 3" dial, SS case and stem, 1/2" NPT , 50-400F, vari-angle adjustment. Silicone filled, 4" insertion, with thermowell	Ashcroft	30EL60R040-50/400, 75W0250ST260c 1/2" x 3/4" Thermowell
TT-1633	Temperature Transmitter, 2-40mA output, HART protocol, aluminum housing, 1/2" NPT conduit conn., mounting bracket	Rosemount	3144PD1A1NAB4Q4 S/N:0050917
	Temp Sensor RTD, 4-wire no head, 100 Ohm, .00385 Alpha RTD, 12" "U" length, 316SS, with Thermowell 1" NPT process conn.		0-NUNS-3-ST1-12-R-1.75-PO14SR-FW
TT-1634	Temperature Transmitter, 2-40mA output, HART protocol, aluminum housing, 1/2" NPT conduit conn., mounting bracket	Rosemount	3144PD1A1NAB4Q4 S/N:0050918
	Temp Sensor RTD, 4-wire no head, 100 Ohm, .00385 Alpha RTD, 12" "U" length, 316SS, with Thermowell 1" NPT process conn.		0-NUNS-3-ST1-12-R-1.75-PO14SR-FW
V-501	Butterfly Valve, 10", Viton Seat, 316SS Disc & 416 Stem, CI Lug Body, with Manual Handle	ABZ	397-812-10"
V-502	Butterfly Valve, 2", Viton Seat, 316SS Disc & 416 Stem, CI Lug Body, with Manual Handle	ABZ	397-812-2"
V-503	Butterfly Valve, 10", Viton Seat, 316SS Disc & 416 Stem, CI Lug Body, with Manual Handle	ABZ	397-812-10"
V-504	Butterfly Valve, 10", Viton Seat, 316SS Disc & 416 Stem, CI Lug Body, with Manual Handle	ABZ	397-812-10"
V-505	Ball Valve, 1-Piece, Reduced Port, 316SS, 1", NPT Connections, ASTM A351 Gr.CF8M Body/Ball, ASTM A276 Gr.316 Blowout Proof Stem, PTFE Seats	Ta-Chen	TC-01TK-1"
V-506	Ball Valve, 2", 3-Piece, Full Port, 316SS, Socket Weld Connections	Tru-Flo	EA33-NF-SW-20
V-507	Ball Valve, 2", 3-Piece, Full Port, 316SS, Socket Weld Connections	Tru-Flo	EA33-NF-SW-20
V-508	Ball Valve, 2", 3-Piece, Full Port, 316SS, Socket Weld Connections	Tru-Flo	EA33-NF-SW-20
XV-1621	Butterfly Valve, 10", Pneumatically Actuated, Spring Return, Fail-OPEN (F.O.) , Limit Switch with (2) SPDT Switches, VITON Seat, 316SS Disc & Stem, CI Lug Body, 24VDC solenoid	ABZ/ Max Air	397-812-10" (Valve) ABZ 210-SR5 (Actuator) MS45-120M03 (Limit Switch)
XV-1622	Butterfly Valve, 10", Pneumatically Actuated, Spring Return, Fail-Close, Limit Switch with (2) SPDT Switches, VITON Seat, 316SS Disc & Stem, CI Lug Body, 24VDC solenoid, with FULL TRAVEL STOPS	ABZ/ Max Air	397-812-10" (Valve) ABZ 210-SR5 (Actuator) MS45-120M03 (Limit Switch)
XV-1623	Butterfly Valve, 10", Pneumatically Actuated, Spring Return, Fail-Close, Limit Switch with (2) SPDT Switches, VITON Seat, 316SS Disc & Stem, CI Lug Body, 24VDC solenoid	ABZ/ Max Air	397-812-10" (Valve) ABZ 210-SR5 (Actuator) MS45-120M03 (Limit Switch)
XV-1624	Butterfly Valve, 10", Pneumatically Actuated, Spring Return, Fail-Close, Limit Switch with (2) SPDT Switches, VITON Seat, 316SS Disc & Stem, CI Lug Body, 24VDC solenoid	ABZ/ Max Air	397-812-10" (Valve) ABZ 210-SR5 (Actuator) MS45-120M03 (Limit Switch)

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CONDENSATE POLISHER D-432A (P&ID PAGE 5 OF 8)			
TAG #	DESCRIPTION	MFG.	PART # \ SERIAL # \ MODEL #
XV-1625	Butterfly Valve, 10", Pneumatically Actuated, Spring Return, Fail-Close, Limit Switch with (2) SPDT Switches, VITON Seat, 316SS Disc & Stem, CI Lug Body, 24VDC solenoid	ABZ/ Max Air	397-812-10" (Valve) ABZ 210-SR5 (Actuator) MS45-120M03 (Limit Switch)
XV-1626	Butterfly Valve, 10", Pneumatically Actuated, Spring Return, Spring Return, Fail-OPEN (F.O.) , Limit Switch with (2) SPDT Switches, VITON Seat, 316SS Disc & Stem, CI Lug Body, 24VDC solenoid	ABZ/ Max Air	397-812-10" (Valve) ABZ 210-SR5 (Actuator) MS45-120M03 (Limit Switch)
XV-1627	Butterfly Valve, 10", Pneumatically Actuated, Spring Return, Fail-Close, Limit Switch with (2) SPDT Switches, VITON Seat, 316SS Disc & Stem, CI Lug Body, 24VDC solenoid, with FULL TRAVEL STOPS	ABZ/ Max Air	397-812-10" (Valve) ABZ 210-SR5 (Actuator) MS45-120M03 (Limit Switch)
XV-1628	Ball Valve, 2", 3-Piece, Full Port, 316SS, SW Conn., Pneumatically Actuated, Spring Return, Fail-Close, with (2) SPDT Limit Switches	Tru-Flo/MaxAir	EA33-NF-SW-20 (valve) MT36- SR (actuator) MS45- 120M03 (Limit Switches) SV61- 24D-5-STD (solenoid)
XV-1629	Ball Valve, 2", 3-Piece, Full Port, 316SS, SW Conn., Pneumatically Actuated, Spring Return, Fail-Close, with (2) SPDT Limit Switches	Tru-Flo/MaxAir	EA33-NF-SW-20 (valve) MT36- SR (actuator) MS45- 120M03 (Limit Switches) SV61- 24D-5-STD (solenoid)
XV-1630	Butterfly Valve, 2", Pneumatically Actuated, Spring Return, Fail-Close, Limit Switch with (2) SPDT Switches, VITON Seat, 316SS Disc & Stem, CI Lug Body, 24VDC solenoid	ABZ/ Max Air	397-812-2" (Valve) ABZ 210-SR5 (Actuator) MS45-120M03 (Limit Switch) SV61-24D-5-STD (Solenoid)
XV-1631	Butterfly Valve, 2", Pneumatically Actuated, Spring Return, Fail-Close, Limit Switch with (2) SPDT Switches, VITON Seat, 316SS Disc & Stem, CI Lug Body, 24VDC solenoid	ABZ/ Max Air	397-812-2" (Valve) ABZ 210-SR5 (Actuator) MS45-120M03 (Limit Switch) SV61-24D-5-STD (Solenoid)
BLOWER UNIT CM-432 (P&ID PAGE 5 OF 8)			
CM-432	Blower Unit, 300 SCFM @8 psi, ROOTS Uiversal RAI Rotary Positive Blower, 480VAC, 3ph, 60hz, 20 HP Motor.	Howden	Model PD, 45 URAI Pressure
V-509	Butterfly Valve, 3", Viton Seat, 316SS Disc & Stem, CI Lug Body, with Manual Handle	ABZ	397-812-3"
CONDENSATE POLISHER D-432A - SHIP LOOSE - (P&ID PAGE 5 OF 8)			
FE/FIT-1620	Vortex Flow Meter, Wafer, 316SS, 8", 150#, 4-20mA, with digital Hart signal, calibration cert , local LCD display	Rosemount	8800DW080SA1N1D1M5Q4 S/N:14972268

Component Tag List: Rev 0

Project #: 190019 P&ID #190019P1r 0		Project Name: Ineos Condensate Polish Water System TXCM-1608-1551174, PO#4500346625	
CONDENSATE POLISHER D-432B (P&ID PAGE 6 OF 8)			
TAG #	DESCRIPTION	MFG.	PART # \ SERIAL # \ MODEL #
ARV-601	Automatic Air Release Valve 1" threaded VAL-MATIC # 22.9DISV , DI Body, 316 SS trim & hardware, EPDM seating and NSF fusion epoxy interior & exterior , 300 psi CWP	Val-Matic	22.9SV
Sight	6" -150# Sight Flow Indicator, Full View, 316SS, Heavy Wall Borosilicate/Lexan,	John Ernst Co, Inc	255S-6.00
AE-1659	Conductivity Sensor, 316SSm extended length, 0.01 Cell Constant 10ft intergal cable	Rosemount	400-11-36
D-432B	84" DIA. X 96" SIDE SHELL, 200PSI @ 280F, ASME Code, 304 SS, 2:1 elliptical heads, lift lugs and ground lugs, 24" top manway, 24" side manway	Ross Engineering	NA
LS-1658	Level Switch, 24VDC, SPDT Relay, 3/4" NPT, 316SS, Teflon insulator, 1/2" dia x 10" probe, alum. NEMA 7/9 housing	Babbitt International	LS2000-24VDC-S-10"-X
PI-1655	Pressure Gauge, 2-1/2" Dial x 1/4" MNPT Connection, Back Mount, PLUS Performance (XLL) Materials of Construction: Case, Tube & Socket: SS Range: 0-160 PSI	Ashcroft	25-1009SW-02B-XLL-160#
PI-1657	Pressure Gauge, 2-1/2" Dial x 1/4" MNPT Connection, Back Mount, PLUS Performance (XLL) Materials of Construction: Case, Tube & Socket: SS Range: 0-160 PSI	Ashcroft	25-1009SW-02B-XLL-160#
PRV-601	Pressure Relief Valve, Bronze, 2", FLG X 2" FLG. , 125# Connections, 316SS Trim,ASME CODE for Liquid Service, Set @ 200PSI	Kunkle	91H-H02AMC-200
PRV-602	Pressure Regulator, AIR, 1/4" NPT, bracket and 0-15 psi gauge	Wilkerson	Wilkerson Regulator# B-08-02-FK00, Bracket # GRP-95-147, Noshok Gauge 0-15psi
PRV-603	Pressure Regulator, AIR, 1/4" NPT, bracket and 0-140 psi gauge	Wilkerson	Wilkerson Regulator# B-08-02-FK00, Bracket # GRP-95-147, Bimba Gauge 0-140psi
PT-1652A	Pressure Transmitter, 1/4"-18 MNPT, 316SS process conn. , silicone fill, 0-150 psi range, aluminum housing, 4-20mA, with digital Hart signal, pipe mount bracket, calibration cert and LCD local display	Rosemount	3051TG2A2A21AB4Q4M5 S/N: 0150618
PT-1652B	Pressure Transmitter, 1/4"-18 MNPT, 316SS process conn. , silicone fill, 0-150 psi range, aluminum housing, 4-20mA, with digital Hart signal, pipe mount bracket, calibration cert and LCD local display	Rosemount	3051TG2A2A21AB4Q4M5 S/N: 0150619
ROOT VALVES (QTY: 4)	Ball Valve, 1-Piece, Reduced Port, 316SS, 1/2", NPT Connections, ASTM A351 Gr.CF8M Body/Ball, ASTM A276 Gr.316 Blowout Proof Stem, PTFE Seats	Ta-Chen	TC-01TK-1/2"
SV-601	Ball Valve, 1-Piece, Reduced Port, 316SS, 1", NPT Connections, ASTM A351 Gr.CF8M Body/Ball, ASTM A276 Gr.316 Blowout Proof Stem, PTFE Seats	Ta-Chen	TC-01TK-1"
SV-602	Ball Valve, 1-Piece, Reduced Port, 316SS, 1", NPT Connections, ASTM A351 Gr.CF8M Body/Ball, ASTM A276 Gr.316 Blowout Proof Stem, PTFE Seats	Ta-Chen	TC-01TK-1"
SV-603	Ball Valve, 1-Piece, Reduced Port, 316SS, 1", NPT Connections, ASTM A351 Gr.CF8M Body/Ball, ASTM A276 Gr.316 Blowout Proof Stem, PTFE Seats	Ta-Chen	TC-01TK-1"

Component Tag List: Rev 0

Project #: 190019 P&ID #190019P1r 0

Project Name: Ineos Condensate Polish Water System TXCM-1608-1551174, PO#4500346625

CONDENSATE POLISHER D-432B (P&ID PAGE 6 OF 8)

TAG #	DESCRIPTION	MFG.	PART # \ SERIAL # \ MODEL #
TI-1656	Temperature Thermometer, 3" dial, SS case and stem, 1/2" NPT , 50-400F, vari-angle adjustment. Silicone filled, 4" insertion, with thermowell	Ashcroft	30EL60R040-50/400, 75W0250ST260c 1/2" x 3/4" Thermowell
TT-1653	Temperature Transmitter, 2-40mA output, HART protocol, aluminum housing, 1/2" NPT conduit conn., mounting bracket	Rosemount	3144PD1A1NAB4Q4 S/N: 0050919
	Temp Sensor RTD, 4-wire no head, 100 Ohm, .00385 Alpha RTD, 12" "U" length, 316SS, with Thermowell 1" NPT process conn.		0-NUNS-3-ST1-12-R-1.75-PO14SR-FW
TT-1654	Temperature Transmitter, 2-40mA output, HART protocol, aluminum housing, 1/2" NPT conduit conn., mounting bracket	Rosemount	3144PD1A1NAB4Q4 S/N: 0050920
	Temp Sensor RTD, 4-wire no head, 100 Ohm, .00385 Alpha RTD, 12" "U" length, 316SS, with Thermowell 1" NPT process conn.		0-NUNS-3-ST1-12-R-1.75-PO14SR-FW
V-601	Butterfly Valve, 10", Viton Seat, 316SS Disc & Stem, CI Lug Body, with Manual Handle	ABZ	397-812-10"
V-602	Butterfly Valve, 2", Viton Seat, 316SS Disc & Stem, CI Lug Body, with Manual Handle	ABZ	397-812-2"
V-603	Butterfly Valve, 10", Viton Seat, 316SS Disc & Stem, CI Lug Body, with Manual Handle	ABZ	397-812-10"
V-604	Butterfly Valve, 10", Viton Seat, 316SS Disc & Stem, CI Lug Body, with Manual Handle	ABZ	397-812-10"
V-605	Ball Valve, 1-Piece, Reduced Port, 316SS, 1", NPT Connections, ASTM A351 Gr.CF8M Body/Ball, ASTM A276 Gr.316 Blowout Proof Stem, PTFE Seats	Ta-Chen	TC-01TK-1"
V-606	Ball Valve, 2", 3-Piece, Full Port, 316SS, Socket Weld Connections	Tru-Flo	EA33-NF-SW-20
V-607	Ball Valve, 2", 3-Piece, Full Port, 316SS, Socket Weld Connections	Tru-Flo	EA33-NF-SW-20
V-608	Ball Valve, 2", 3-Piece, Full Port, 316SS, Socket Weld Connections	Tru-Flo	EA33-NF-SW-20
XV-1641	Butterfly Valve, 10", Pneumatically Actuated, Spring Return, Fail-OPEN (F.O.) , Limit Switch with (2) SPDT Switches, VITON Seat, 316SS Disc & Stem, CI Lug Body, 24VDC solenoid	ABZ/ Max Air	397-812-10" (Valve) ABZ 210-SR5 (Actuator) MS45-120M03 (Limit Switch)
XV-1642	Butterfly Valve, 10", Pneumatically Actuated, Spring Return, Fail-Close, Limit Switch with (2) SPDT Switches, VITON Seat, 316SS Disc & Stem, CI Lug Body, 24VDC solenoid, with FULL TRAVEL STOPS	ABZ/ Max Air	397-812-10" (Valve) ABZ 210-SR5 (Actuator) MS45-120M03 (Limit Switch)
XV-1644	Butterfly Valve, 10", Pneumatically Actuated, Spring Return, Fail-Close, Limit Switch with (2) SPDT Switches, VITON Seat, 316SS Disc & Stem, CI Lug Body, 24VDC solenoid	ABZ/ Max Air	397-812-10" (Valve) ABZ 210-SR5 (Actuator) MS45-120M03 (Limit Switch)
XV-1645	Butterfly Valve, 10", Pneumatically Actuated, Spring Return, Fail-Close, Limit Switch with (2) SPDT Switches, VITON Seat, 316SS Disc & Stem, CI Lug Body, 24VDC solenoid	ABZ/ Max Air	397-812-10" (Valve) ABZ 210-SR5 (Actuator) MS45-120M03 (Limit Switch)
XV-1646	Butterfly Valve, 10", Pneumatically Actuated, Spring Return, Spring Return, Fail-OPEN (F.O.) , Limit Switch with (2) SPDT Switches, VITON Seat, 316SS Disc & Stem, CI Lug Body, 24VDC solenoid	ABZ/ Max Air	397-812-10" (Valve) ABZ 210-SR5 (Actuator) MS45-120M03 (Limit Switch)
XV-1647	Butterfly Valve, 10", Pneumatically Actuated, Spring Return, Fail-Close, Limit Switch with (2) SPDT Switches, VITON Seat, 316SS Disc & Stem, CI Lug Body, 24VDC solenoid, with FULL TRAVEL STOPS	ABZ/ Max Air	397-812-10" (Valve) ABZ 210-SR5 (Actuator) MS45-120M03 (Limit Switch)
XV-1648	Ball Valve, 2", 3-Piece, Full Port, 316SS, SW Conn., Pneumatically Actuated, Spring Return, Fail-Close, with (2) SPDT Limit Switches	Tru-Flo/MaxAir	EA33-NF-SW-20 (valve) MT36-SR (actuator) MS45-120M03 (Limit Switches) SV61-24D-5-STD (solenoid)

Component Tag List: Rev 0

Project #: 190019 P&ID #190019P1r 0		Project Name: Ineos Condensate Polish Water System TXCM-1608-1551174, PO#4500346625	
CONDENSATE POLISHER D-432B (P&ID PAGE 6 OF 8)			
TAG #	DESCRIPTION	MFG.	PART # \ SERIAL # \ MODEL #
XV-1649	Ball Valve, 2", 3-Piece, Full Port, 316SS, SW Conn., Pneumatically Actuated, Spring Return, Fail-Close, with (2) SPDT Limit Switches	Tru-Flo/MaxAir	EA33-NF-SW-20 (valve) MT36-SR (actuator) MS45-120M03 (Limit Switches) SV61-24D-5-STD (solenoid)
XV-1650	Butterfly Valve, 2", Pneumatically Actuated, Spring Return, Fail-Close, Limit Switch with (2) SPDT Switches, VITON Seat, 316SS Disc & Stem, CI Lug Body, 24VDC solenoid	ABZ/ Max Air	397-812-2" (Valve) ABZ 210-SR5 (Actuator) MS45-120M03 (Limit Switch) SV61-24D-5-STD (Solenoid)
XV-1651	Butterfly Valve, 2", Pneumatically Actuated, Spring Return, Fail-Close, Limit Switch with (2) SPDT Switches, VITON Seat, 316SS Disc & Stem, CI Lug Body, 24VDC solenoid	ABZ/ Max Air	397-812-2" (Valve) ABZ 210-SR5 (Actuator) MS45-120M03 (Limit Switch) SV61-24D-5-STD (Solenoid)
XV-1653	Butterfly Valve, 10", Pneumatically Actuated, Spring Return, Fail-Close, Limit Switch with (2) SPDT Switches, VITON Seat, 316SS Disc & Stem, CI Lug Body, 24VDC solenoid	ABZ/ Max Air	397-812-10" (Valve) ABZ 210-SR5 (Actuator) MS45-120M03 (Limit Switch)
CONDENSATE POLISHER D-432B - SHIP LOOSE - (P&ID PAGE 6 OF 8)			
TAG #	DESCRIPTION	MFG.	PART # \ SERIAL # \ MODEL #
FE-1640	Vortex Flow Meter, Wafer, 316SS, 8", 150#, 4-20mA, with digital Hart signal, calibration cert , local LCD display	Rosemount	8800DW080SA1N1D1M5Q4 S/N: 14971510

Component Tag List: Rev 0

Project #: 190019 P&ID #190019P1r 0		Project Name: Ineos Condensate Polish Water System TXCM-1608-1551174, PO#4500346625	
CONDENSATE POLISHER D-432C (P&ID PAGE 7 OF 8)			
TAG #	DESCRIPTION	MFG.	PART # \ SERIAL # \ MODEL #
ARV-701	Automatic Air Release Valve 1" threaded VAL-MATIC # 22.9DISV , DI Body, 316 SS trim & hardware, EPDM seating and NSF fusion epoxy interior & exterior , 300 psi CWP	Val-Matic	22.9SV
Sight	6" -150# Sight Flow Indicator, Full View, 316SS, Heavy Wall Borosilicate/Lexan,	John Ernst Co, Inc	255S-6.00
AE-1679	Conductivity Sensor, 316SSm extended length, 0.01 Cell Constant , 10ft intergral cable	Rosemount	400-11-36
D-432C	84" DIA. X 96" SIDE SHELL, 200PSI @ 280F, ASME Code, 304 SS, 2:1 elliptical heads, lift lugs and ground lugs, 24" top manway, 24" side manway	Ross Engineering	
LS-1658	Level Switch, 24VDC, SPDT Relay, 3/4" NPT, 316SS, Teflon insulator, 1/2" dia x 10" probe, alum. NEMA 7/9 housing	Babbitt International	LS2000-24VDC-S-10"-X
PI-1675	Pressure Gauge, 2-1/2" Dial x 1/4" MNPT Connection, Back Mount, PLUS Performance (XLL) Materials of Construction: Case, Tube & Socket: SS Range: 0-160 PSI	Ashcroft	25-1009SW-02B-XLL-160#
PI-1677	Pressure Gauge, 2-1/2" Dial x 1/4" MNPT Connection, Back Mount, PLUS Performance (XLL) Materials of Construction: Case, Tube & Socket: SS Range: 0-160 PSI	Ashcroft	25-1009SW-02B-XLL-160#
PRV-701	Pressure Relief Valve, Bronze, 2", FLG X 2" FLG. , 125# Connections, 316SS Trim,ASME CODE for Liquid Service, Set @ 200PSI	Kunkle	91H-H02AMC-200
PRV-702	Pressure Regulator, AIR, 1/4" NPT, bracket and 0-15 psi gauge	Wilkerson	Wilkerson Regulator# B-08-02-FK00, Bracket # GRP-95-147, Noshok Gauge 0-15psi
PRV-703	Pressure Regulator, AIR, 1/4" NPT, bracket and 0-140 psi gauge	Wilkerson	Wilkerson Regulator# B-08-02-FK00, Bracket # GRP-95-147, Bimba Gauge 0-140psi
PT-1672A	Pressure Transmitter, 1/4"-18 MNPT, 316SS process conn. , silicone fill, 0-150 psi range, aluminum housing, 4-20mA, with digital Hart signal, pipe mount bracket, calibration cert and LCD local display	Rosemount	3051TG2A2A21AB4Q4M5 S/N: 0150620
PT-1672B	Pressure Transmitter, 1/4"-18 MNPT, 316SS process conn. , silicone fill, 0-150 psi range, aluminum housing, 4-20mA, with digital Hart signal, pipe mount bracket, calibration cert and LCD local display	Rosemount	3051TG2A2A21AB4Q4M5 S/N: 0150621
ROOT VALVES (QTY: 5)	Ball Valve, 1-Piece, Reduced Port, 316SS, 1/2", NPT Connections, ASTM A351 Gr.CF8M Body/Ball, ASTM A276 Gr.316 Blowout Proof Stem, PTFE Seats	Ta-Chen	TC-01TK-1/2"
SV-701	Ball Valve, 1-Piece, Reduced Port, 316SS, 1", NPT Connections, ASTM A351 Gr.CF8M Body/Ball, ASTM A276 Gr.316 Blowout Proof Stem, PTFE Seats	Ta-Chen	TC-01TK-1"
SV-702	Ball Valve, 1-Piece, Reduced Port, 316SS, 1", NPT Connections, ASTM A351 Gr.CF8M Body/Ball, ASTM A276 Gr.316 Blowout Proof Stem, PTFE Seats	Ta-Chen	TC-01TK-1"
SV-703	Ball Valve, 1-Piece, Reduced Port, 316SS, 1", NPT Connections, ASTM A351 Gr.CF8M Body/Ball, ASTM A276 Gr.316 Blowout Proof Stem, PTFE Seats	Ta-Chen	TC-01TK-1"

Component Tag List: Rev 0

Project #: 190019 P&ID #190019P1r 0		Project Name: Ineos Condensate Polish Water System TXCM-1608-1551174, PO#4500346625	
CONDENSATE POLISHER D-432C (P&ID PAGE 7 OF 8)			
TAG #	DESCRIPTION	MFG.	PART # \ SERIAL # \ MODEL #
TT-1673	Temperature Transmitter, 2-40mA output, HART protocol, aluminum housing, 1/2" NPT conduit conn., mounting bracket	Rosemount	3144PD1A1NAB4Q4 S/N: 0050921
	Temp Sensor RTD, 4-wire no head, 100 Ohm, .00385 Alpha RTD, 12" "U" length, 316SS, with Thermowell 1" NPT process conn.		0-NUNS-3-ST1-12-R-1.75-PO14SR-FW
TT-1674	Temperature Transmitter, 2-40mA output, HART protocol, aluminum housing, 1/2" NPT conduit conn., mounting bracket	Rosemount	3144PD1A1NAB4Q4 S/N: 0050922
	Temp Sensor RTD, 4-wire no head, 100 Ohm, .00385 Alpha RTD, 12" "U" length, 316SS, with Thermowell 1" NPT process conn.		0-NUNS-3-ST1-12-R-1.75-PO14SR-FW
TI-1676	Temperature Thermometer, 3" dial, SS case and stem, 1/2" NPT , 50-400F, vari-angle adjustment. Silicone filled, 4" insertion, with thermowell	Ashcroft	30EL60R040-50/400, 75W0250ST260c 1/2" x 3/4" Thermowell
V-701	Butterfly Valve, 10", Viton Seat, 316SS Disc & Stem, CI Lug Body, with Manual Handle	ABZ	397-812-10"
V-702	Butterfly Valve, 2", Viton Seat, 316SS Disc & Stem, CI Lug Body, with Manual Handle	ABZ	397-812-2"
V-703	Butterfly Valve, 10", Viton Seat, 316SS Disc & Stem, CI Lug Body, with Manual Handle	ABZ	397-812-10"
V-704	Butterfly Valve, 10", Viton Seat, 316SS Disc & Stem, CI Lug Body, with Manual Handle	ABZ	397-812-10"
V-705	Ball Valve, 1-Piece, Reduced Port, 316SS, 1", NPT Connections, ASTM A351 Gr.CF8M Body/Ball, ASTM A276 Gr.316 Blowout Proof Stem, PTFE Seats	Ta-Chen	TC-01TK-1"
V-706	Ball Valve, 2", 3-Piece, Full Port, 316SS, Socket Weld Connections	Tru-Flo	EA33-NF-SW-20
V-707	Ball Valve, 2", 3-Piece, Full Port, 316SS, Socket Weld Connections	Tru-Flo	EA33-NF-SW-20
V-708	Ball Valve, 2", 3-Piece, Full Port, 316SS, Socket Weld Connections	Tru-Flo	EA33-NF-SW-20
XV-1661	Butterfly Valve, 10", Pneumatically Actuated, Spring Return, Fail-OPEN (F.O.) , Limit Switch with (2) SPDT Switches, VITON Seat, 316SS Disc & Stem, CI Lug Body, 24VDC solenoid	ABZ/ Max Air	397-812-10" (Valve) ABZ 210-SR5 (Actuator) MS45-120M03 (Limit Switch)
XV-1662	Butterfly Valve, 10", Pneumatically Actuated, Spring Return, Fail-Close, Limit Switch with (2) SPDT Switches, VITON Seat, 316SS Disc & 416SS Stem, CI Lug Body, 24VDC solenoid, with FULL TRAVEL STOPS	ABZ/ Max Air	397-812-10" (Valve) ABZ 210-SR5 (Actuator) MS45-120M03 (Limit Switch)
XV-1664	Butterfly Valve, 10", Pneumatically Actuated, Spring Return, Fail-Close, Limit Switch with (2) SPDT Switches, VITON Seat, 316SS Disc & Stem, CI Lug Body, 24VDC solenoid	ABZ/ Max Air	397-812-10" (Valve) ABZ 210-SR5 (Actuator) MS45-120M03 (Limit Switch)
XV-1665	Butterfly Valve, 10", Pneumatically Actuated, Spring Return, Fail-Close, Limit Switch with (2) SPDT Switches, VITON Seat, 316SS Disc & Stem, CI Lug Body, 24VDC solenoid	ABZ/ Max Air	397-812-10" (Valve) ABZ 210-SR5 (Actuator) MS45-120M03 (Limit Switch)
XV-1666	Butterfly Valve, 10", Pneumatically Actuated, Spring Return, Spring Return, Fail-OPEN (F.O.) , Limit Switch with (2) SPDT Switches, VITON Seat, 316SS Disc & Stem, CI Lug Body, 24VDC solenoid	ABZ/ Max Air	397-812-10" (Valve) ABZ 210-SR5 (Actuator) MS45-120M03 (Limit Switch)
XV-1667	Butterfly Valve, 10", Pneumatically Actuated, Spring Return, Fail-Close, Limit Switch with (2) SPDT Switches, VITON Seat, 316SS Disc & Stem, CI Lug Body, 24VDC solenoid, with FULL TRAVEL STOPS	ABZ/ Max Air	397-812-10" (Valve) ABZ 210-SR5 (Actuator) MS45-120M03 (Limit Switch)
XV-1668	Ball Valve, 2", 3-Piece, Full Port, 316SS, SW Conn., Pneumatically Actuated, Spring Return, Fail-Close, with (2) SPDT Limit Switches	Tru-Flo/MaxAir	EA33-NF-SW-20 (valve) MT36-SR (actuator) MS45-120M03 (Limit Switches) SV61-24D-5-STD (solenoid)

Component Tag List: Rev 0

Project #: 190019 P&ID #190019P1r 0		Project Name: Ineos Condensate Polish Water System TXCM-1608-1551174, PO#4500346625	
CONDENSATE POLISHER D-432C (P&ID PAGE 7 OF 8)			
TAG #	DESCRIPTION	MFG.	PART # \ SERIAL # \ MODEL #
XV-1669	Ball Valve, 2", 3-Piece, Full Port, 316SS, SW Conn., Pneumatically Actuated, Spring Return, Fail-Close, with (2) SPDT Limit Switches	Tru-Flo/MaxAir	EA33-NF-SW-20 (valve) MT36-SR (actuator) MS45-120M03 (Limit Switches) SV61-24D-5-STD (solenoid)
XV-1670	Butterfly Valve, 2", Pneumatically Actuated, Spring Return, Fail-Close, Limit Switch with (2) SPDT Switches, VITON Seat, 316SS Disc & Stem, CI Lug Body, 24VDC solenoid	ABZ/ Max Air	397-812-2" (Valve) ABZ 210-SR5 (Actuator) MS45-120M03 (Limit Switch) SV61-24D-5-STD (Solenoid)
XV-1671	Butterfly Valve, 2", Pneumatically Actuated, Spring Return, Fail-Close, Limit Switch with (2) SPDT Switches, VITON Seat, 316SS Disc & Stem, CI Lug Body, 24VDC solenoid	ABZ/ Max Air	397-812-2" (Valve) ABZ 210-SR5 (Actuator) MS45-120M03 (Limit Switch) SV61-24D-5-STD (Solenoid)
XV-1673	Butterfly Valve, 10", Pneumatically Actuated, Spring Return, Fail-Close, Limit Switch with (2) SPDT Switches, VITON Seat, 316SS Disc & Stem, CI Lug Body, 24VDC solenoid	ABZ/ Max Air	397-812-10" (Valve) ABZ 210-SR5 (Actuator) MS45-120M03 (Limit Switch)
CONDENSATE POLISHER - SHIP LOOSE - D-432C (P&ID PAGE 7 OF 8)			
TAG #	DESCRIPTION	MFG.	PART # \ SERIAL # \ MODEL #
AE/AIT-897	Hardness Analyzer, SP510 Series, 1SPDT, 120/230VAC, Alarm point:0.3 mg/l	HACH	5410003
FE/FIT-1660	Vortex Flow Meter, Wafer, 316SS, 8", 150#, 4-20mA, with digital Hart signal, calibration cert , local LCD display	Rosemount	8800DW080SA1N1D1M5Q4 S/N: 14986239
SV-707	Ball Valve, 1-Piece, Reduced Port, 316SS, 1/2", NPT Connections, ASTM A351 Gr.CF8M Body/Ball, ASTM A276 Gr.316 Blowout Proof Stem, PTFE Seats	Ta-Chen	TC-01TK-1/2"

Component Tag List: Rev 0

Project #: 190019 P&ID #190019P1r 0		Project Name: Ineos Condensate Polish Water System TXCM-1608-1551174, PO#4500346625	
KCL REGEN PUMP SKID ASSEMBLY (P&ID PAGE 8 OF 8)			
TAG #	DESCRIPTION	MFG.	PART # \ SERIAL # \ MODEL #
CV-801	Check Valve, Flange Insert Type, 316 SS, 3", EPDM, .500 Cracking Pressure	Check-All	F6MSSEP.500SS
CV-802	Check Valve, Flange Insert Type, 316 SS, 3", EPDM, .500 Cracking Pressure	Check-All	F6MSSEP.500SS
FO-1684	Flow-Control Orifice Plate, 316SS , 3/4" -150# flg paddle style. 5 gpm @60psi set	PSC	Shop Fab
P-435A	Vertical centrifugal pump, 60gpm @ 140"TDH, 5HP, 460vac, 3pH/60hz, vic groove. MOC:Titanium	Grundfos	91129765 CRT8-5 A-P-A-E-AUUE
P-435B	Vertical centrifugal pump, 60gpm @ 140"TDH, 5HP, 460vac, 3pH/60hz, vic groove connections. MOC:Titanium	Grundfos	91129765 CRT8-5 A-P-A-E-AUUE
PI-1682A	Pressure Gauge, 2-1/2" Dial x 1/4" MNPT Connection, Back Mount, PLUS Performance (XLL) Materials of Construction: Case, Tube & Socket: SS Range: 0-160 PSI	Ashcroft	25-1009SW-02B-XLL-160#
PI-1682B	Pressure Gauge, 2-1/2" Dial x 1/4" MNPT Connection, Back Mount, PLUS Performance (XLL) Materials of Construction: Case, Tube & Socket: SS Range: 0-160 PSI	Ashcroft	25-1009SW-02B-XLL-160#
ROOT VALVES (QTY: 2)	Ball Valve, 1-Piece, Reduced Port, 316SS, 1/2", NPT Connections, ASTM A351 Gr.CF8M Body/Ball, ASTM A276 Gr.316 Blowout Proof Stem, PTFE Seats	Ta-Chen	TC-01TK-1/2"
SV-801	Ball Valve, 1-Piece, Reduced Port, 316SS, 1", NPT Connections, ASTM A351 Gr.CF8M Body/Ball, ASTM A276 Gr.316 Blowout Proof Stem, PTFE Seats	Ta-Chen	TC-01TK-1"
V-809	Butterfly Valve, 3", Viton Seat, 316SS Disc & 416 Stem, CI Lug Body, with Manual Handle	ABZ	397-812-3"
V-810	Butterfly Valve, 3", Viton Seat, 316SS Disc & 416 Stem, CI Lug Body, with Manual Handle	ABZ	397-812-3"
V-811	Butterfly Valve, 3", Viton Seat, 316SS Disc & 416 Stem, CI Lug Body, with Manual Handle	ABZ	397-812-3"
V-812	Butterfly Valve, 3", Viton Seat, 316SS Disc & 416 Stem, CI Lug Body, with Manual Handle	ABZ	397-812-3"
V-813	Ball Valve, 1-Piece, Reduced Port, 316SS, 3/4", NPT Connections, ASTM A351 Gr.CF8M Body/Ball, ASTM A276 Gr.316 Blowout Proof Stem, PTFE Seats	Ta-Chen	TC-01TK-3/4"
V-814	Ball Valve, 1-Piece, Reduced Port, 316SS, 3/4", NPT Connections, ASTM A351 Gr.CF8M Body/Ball, ASTM A276 Gr.316 Blowout Proof Stem, PTFE Seats	Ta-Chen	TC-01TK-3/4"
V-815	Ball Valve, 3/4", 3-Piece, Full Port, 316SS, Socket Weld Connections	Tru-Flo	EA33-NF-SW-3/4"
V-816	Ball Valve, 1-Piece, Reduced Port, 316SS, 3/4", NPT Connections, ASTM A351 Gr.CF8M Body/Ball, ASTM A276 Gr.316 Blowout Proof Stem, PTFE Seats	Ta-Chen	TC-01TK-3/4"
V-817	Ball Valve, 1-Piece, Reduced Port, 316SS, 3/4", NPT Connections, ASTM A351 Gr.CF8M Body/Ball, ASTM A276 Gr.316 Blowout Proof Stem, PTFE Seats	Ta-Chen	TC-01TK-3/4"
V-818	Ball Valve, 3/4", 3-Piece, Full Port, 316SS, Socket Weld Connections	Tru-Flo	EA33-NF-SW-3/4"
XV-1683	Butterfly Valve, 3", Pneumatically Actuated, Spring Return, Fail-Close, Limit Switch with (2) SPDT Switches, VITON Seat, 316SS Disc & 416SS Stem, CI Lug Body, 24VDC solenoid	ABZ/ Max Air	397-812-3" (Valve) ABZ 210-SR5 (Actuator) MS45-120M03 (Limit Switch) SV61-24D-5-STD (Solenoid)

Component Tag List: Rev 0

Project #: 190019 P&ID #190019P1r 0		Project Name: Ineos Condensate Polish Water System TXCM-1608-1551174, PO#4500346625	
KCL REGEN PUMP SKID ASSEMBLY (P&ID PAGE 8 OF 8)			
TAG #	DESCRIPTION	MFG.	PART # \ SERIAL # \ MODEL #
XV-1684	Butterfly Valve, 2", Pneumatically Actuated, Spring Return, Fail-Close, Limit Switch with (2) SPDT Switches, VITON Seat, 316SS Disc & 416SS Stem, CI Lug Body, 24VDC solenoid	ABZ/ Max Air	397-812-2" (Valve) ABZ 210-SR5 (Actuator) MS45-120M03 (Limit Switch) SV61-24D-5-STD (Solenoid)
KCL REGEN PUMP SKID ASSEMBLY - SHIP LOOSE- (P&ID PAGE 8 OF 8)			
TAG #	DESCRIPTION	MFG.	PART # \ SERIAL # \ MODEL #
FE-1686	Vortex Flow Meter, Wafer, 316SS, 3" , 150#, 4-20mA, with digital Hart signal, calibration cert , with local LCD Display	Rosemount	8800DW030SA1N1D1M5Q4 S/N: 14988002
XV-1685			CLIENT SUPPLIED
KCL SOLUTION STORAGE TANK ASSEMBLY - SHIP LOOSE - (P&ID PAGE 8 OF 8)			
TAG #	DESCRIPTION	MFG.	PART # \ SERIAL # \ MODEL #
LT-1681	Level Transmitter, Coplaner, -250 to 250" WC, Aluminum Housing, 4-20mA, with Calibration Certs , LCD Display , 4-20mA HART	Rosemount	3051CG2A22A1AB4M5Q4 S/N: 0150611
LG-1681, V-804, V-807	Level Gauge , 316SS body , rigid Polycarbonate tube sight, with guard rods, 120" CL dimension	John Ernst Co	416-04-120CC-522-VIT
F-435	Storage Tank, FRP Construction, 5,000 Gallon, Sloped Bottom	Diamond Fiberglass	VT10108 DT-SB
V-801	2" SS Ball Valve		Client Supplied
V-802	3/4" SS Ball Valve		Client Supplied
V-803	Butterfly Valve, 2", Viton Seat, 316SS Disc & 416 Stem, CI Lug Body, with Manual Handle	ABZ	397-812-2"
V-805	Ball Valve, 1-Piece, Reduced Port, 316SS, 1/4", NPT Connections, ASTM A351 Gr.CF8M Body/Ball, ASTM A276 Gr.316 Blowout Proof Stem, PTFE Seats	Ta-Chen	TC-01TK-1/4"
V-806	Butterfly Valve, 3", Viton Seat, 316SS Disc & 416 Stem, CI Lug Body, with Manual Handle	ABZ	397-812-3"
V-808	Ball Valve, 1-Piece, Reduced Port, 316SS, 1/4", NPT Connections, ASTM A351 Gr.CF8M Body/Ball, ASTM A276 Gr.316 Blowout Proof Stem, PTFE Seats	Ta-Chen	TC-01TK-1/4"
XV-1687	Butterfly Valve, 4", Pneumatically Actuated, Spring Return, Fail-Close, Limit Switch with (2) SPDT Switches, VITON Seat, 316SS Disc & 416SS Stem, CI Lug Body, 24VDC solenoid	ABZ/ Max Air	397-812-4" (Valve) ABZ 210-SR5 (Actuator) MS45-120M03 (Limit Switch) SV61-24D-5-STD (Solenoid)
XV-1688	Butterfly Valve, 3", Pneumatically Actuated, Spring Return, Fail-Close, Limit Switch with (2) SPDT Switches, VITON Seat, 316SS Disc & 416SS Stem, CI Lug Body, 24VDC solenoid	ABZ/ Max Air	397-812-3" (Valve) ABZ 210-SR5 (Actuator) MS45-120M03 (Limit Switch) SV61-24D-5-STD (Solenoid)