

THE

CLEAN MACHINE

by System Technologies, Inc.
Aqueous Cleaning Systems Division



*Aqueous Cleaning Systems ...
The answer to clean parts.*



THE **CLEAN** MACHINE DIMENSIONS AND FEATURES

MODEL	CM12	CM18	CM24	CM30	CM36	CM42
Belt Width	12"	18"	24"	30"	36"	42"
Belt Height	43"	43"	43"	43"	43"	47"
Overall Machine Width	59"	59"	71"	71"	83"	83"
Conveyor Opening Height	8"	12"	12"	15"	15"	15"
Overall Machine Height	69"	69"	69"	69"	69"	69"
Conveyor Extension Load/Unload	18"	18"	24"	24"	24"	24"

STANDARD FEATURES

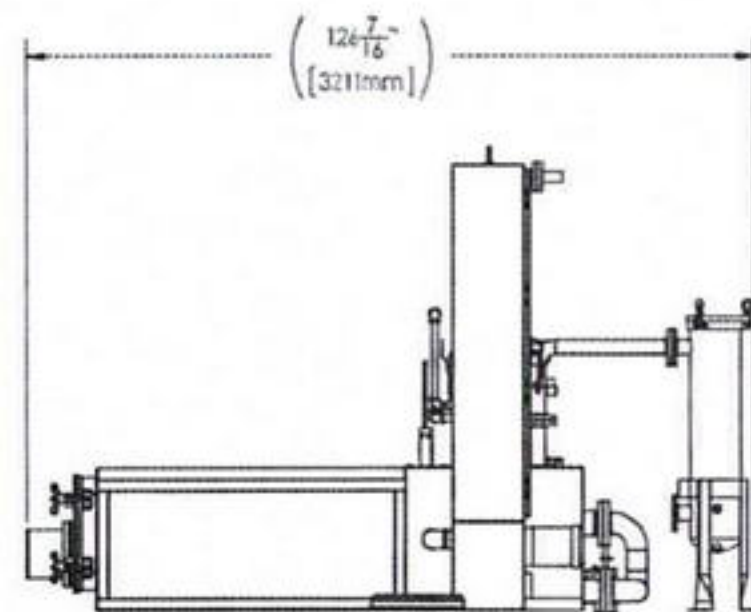
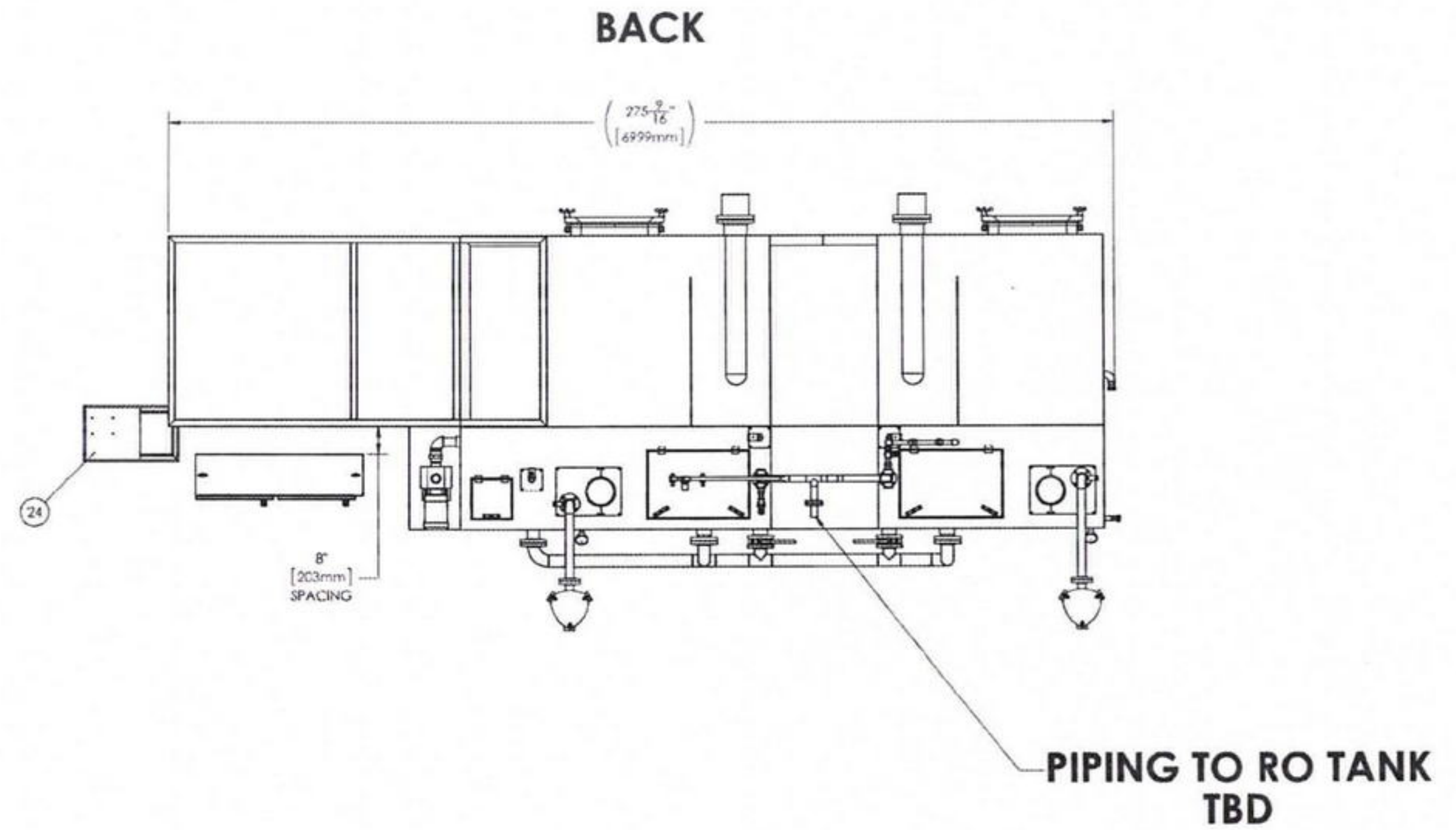
- Multiple Cleaning Stages
- High Velocity Blow-off Module
- PLC Control System
- Operator Interface
- Electric/Gas Heating
- All Stainless Steel Construction
- Automatic Level Controls
- Stainless Steel Conveyor Belt
- Exhaust Fan System

OPTIONAL FEATURES

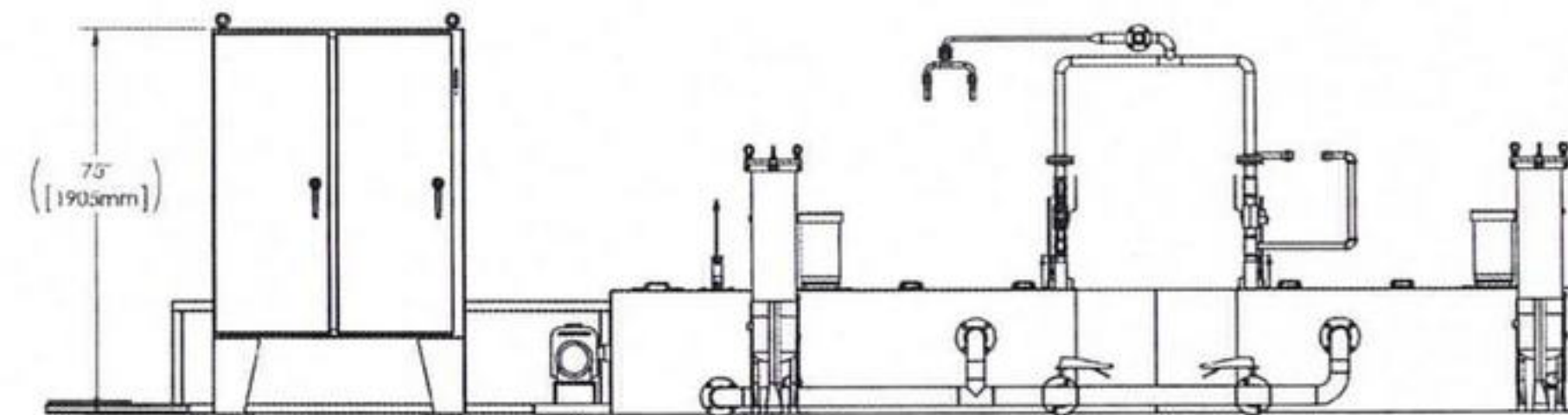
- Additional Filtration
- Chip Filter
- Oil Skimmer
- Production Counter
- Auto Air Knife Adjust

ITEM NO.	PART NUMBER	DESCRIPTION	Default Qty.	Length
1	5568.2.3.001	TANK SHEETMETAL	1	
2	Heater, Watlow, Immersion, 7-21-60-258MD, Flange	WATLOW FPN740GS-21, IMMERSION HEATER, 60 KW 48 W/IN2, 480/3160 VAC, TWO (2) EQUAL CIRCUITS, 6 DIA, 150W CARBON STEEL FLANGE AND INCOLOY ELEMENTS IMMERSED LENGTH (B) TO BE 41	2	
3	6", 150lb	FLANGE, SLIP-ON, 6", 150LB, 304SS	2	
4	6 in, Sch 10	PIPE, 6, Sch 10, 304SS, STD	2	3 1/2"
5	Door, Marine, Assy 26in X 20in, 304SS	DOOR, ASSY, MARINE, 26" X 20", 304SS	2	
6	5568.2.3.005	Pump Plate	2	
7	18"x20"	SCREEN, STD PUMP, 18" W x 20" H, 140 GPM FLOW, #8 MESH	2	
8	Watlow, Thermocouple, Type-J	WATLOW, EX1004112, SWITCH, THERMOCOUPLE, TYPE J,	2	
9	5568 Rns, Std, Waterfill 1.5 304SS	WATERFILL, SS, 1-1/2"	1	
10	5568 Rns, Std, Waterfill 1.5 304SS	WATERFILL, SS, 1-1/2"	1	
11	507" 304 SS Half Coupling	COUPLING, HALF, 0.5", 304SS	1	
12	003.210.011	CED, #C080630.3L020F3/DB4, CARTRIDGE FILTER VESSEL, 304I SS CONSTRUCTION, 4 ROUND 30" DOE ELEMENTS, 130 PSI RATED, 2" FLANGE CONNECTIONS, SIDE IN / SAME SIDE OUT, ADJUSTABLE TRIPOD LEGS (CUSTOM SIDE OUTLET)	2	
13	C13.004.003	SWITCH, MAKE-UP FLOAT ASSEMBLY, 2-PROX	1	
14	5568.2.3.040	LARGE TANK LID, RINSE AND WASH	2	
15	5568.2.3.045	SMALL TANK LID, SUMP	1	
16	5568.2.3.050	FILL PIPING	1	
17	5568.2.3.052	DOSATRON PIPING	1	
18	SCE-60XEL4912LP	2DR XEL Enclosure	1	
19	5568.2.3.500	DRAIN OVERFLOW PIPING	1	
20	5568.2.3.600	SUMP PUMP ASSEMBLY	1	
21	5568.2.3.400	WASH PIPING AND PUMP	1	
22	5568.2.3.700	RINSE PIPING AND PUMP	1	
23	5568.2.3.019	PRO-SEP PICKUP PIPING	1	
24	5568.2.3.054	MOTOR MOUNTING PLATE	1	
25	Three Switch, Float, Make-Up - 5 DIA	SWITCH, MAKE-UP FLOAT ASSY, 3 SWITCH	2	

A	08/04/15		C

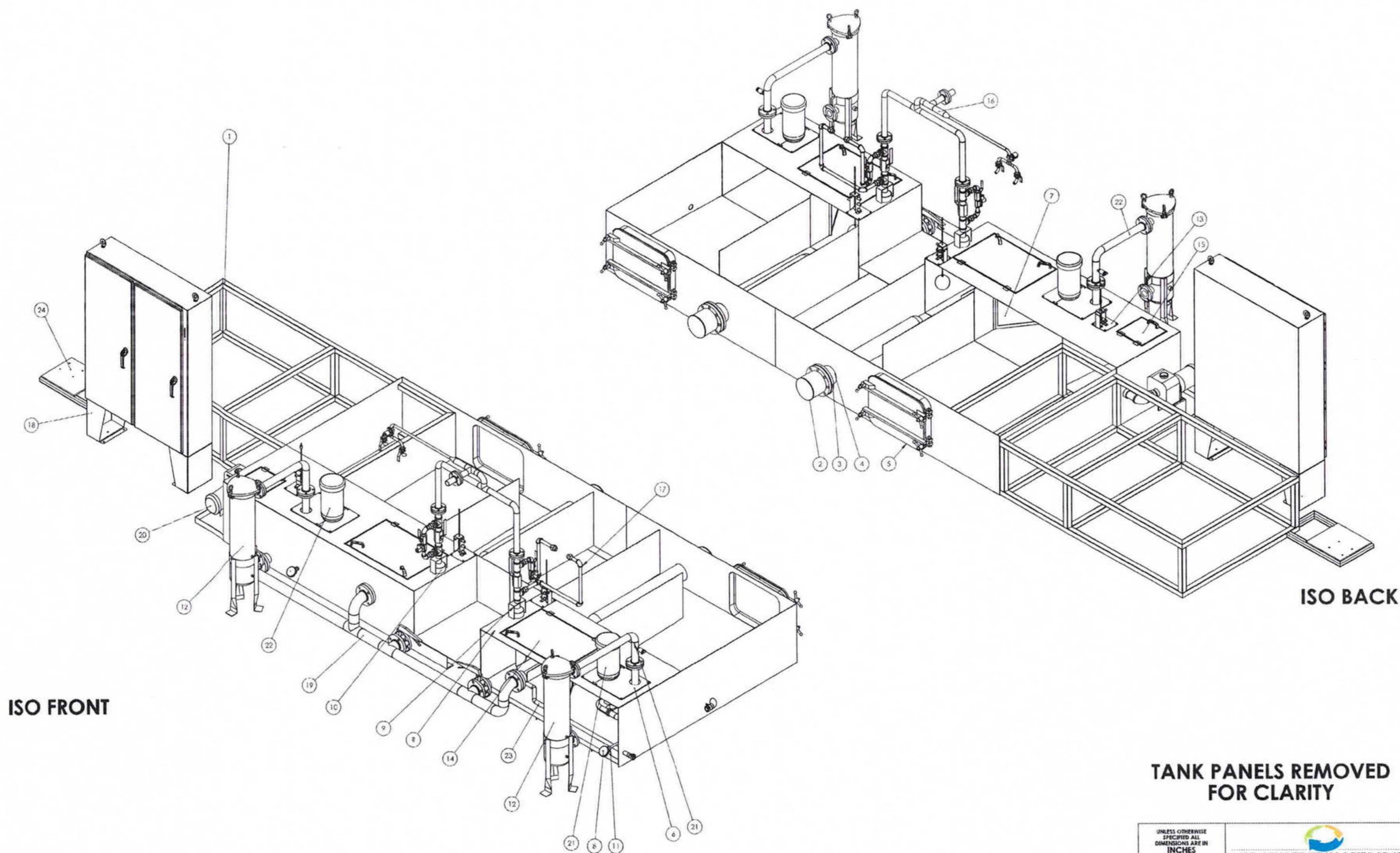


SIDE



FRONT

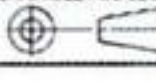
UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES (m)			
TOLERANCES +/-			
1 PLACE .1			
2 PLACE .01			
3 PLACE .00			
ANGULAR 0.5°			
THIRD ANGLE PROJECTION			
CLEANING TECHNOLOGIES GROUPE WASSERHOF - BLANCKENBURG - ULTRASCHALL - CTD AG WE DRAUGHT AND ALL DIMENSIONS THROUGH THE PROPERTY OF CTD, B.E. COMPANY AND WE WILL NOT BE RESPONSIBLE FOR ANY DIMENSIONS NOT SHOWN ON THE DRAWING. ALL DIMENSIONS ARE SUBJECT TO BEING CHANGED.			
SIGNATURE	DATE	DATE	DATE
DIV	05/15/15	05/15/15	05/15/15
JP	7/17/2015	7/17/2015	7/17/2015
JP	8/4/2015	8/4/2015	8/4/2015
30" Sure Clean TANK LAYOUT DO NOT SCALE DRAWING 1 of 2			



ISO FRONT

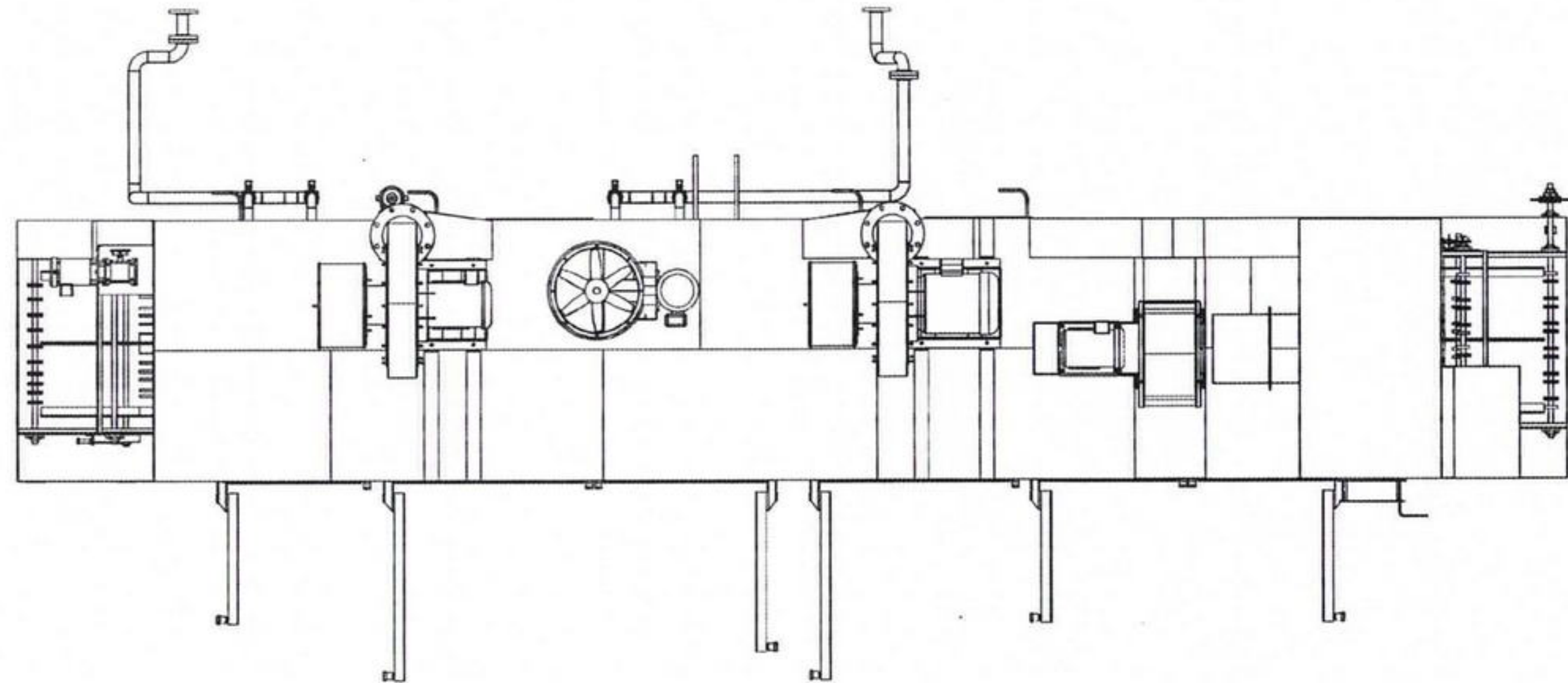
ISO BACK

TANK PANELS REMOVED
FOR CLARITY

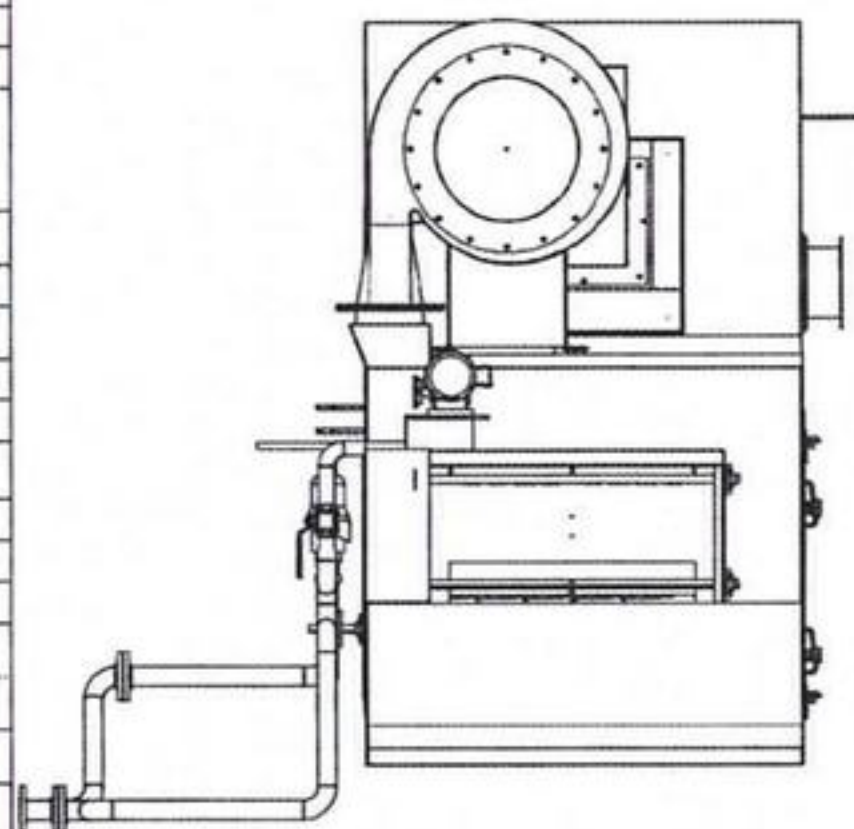
UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES (in)		 CLEANING TECHNOLOGIES GROUP	
TOLERANCES +/-		MANUFACTURING - BLASTING/WEAR/ALUMINUM/STAINLESS - STD. DIM.	
1 PLACE .1		DEL. DRAWING AND ALL DIMENSIONS THEREON ARE THE PROPERTY OF CTG. IF IT COMES ANYWHERE ELSE IT IS NOT VALID. NO PARTS SHALL BE MADE WITHOUT THE APPROVAL OF CTG. ALL DIMENSIONS ARE SUBJECT TO REVISION.	
2 PLACE .01		30" Sure Clean	
3 PLACE .00		TANK ISO VIEW	
ANGULAR 0.5°		DO NOT SCALE DRAWING	
THIRD ANGLE PROJECTION		SIGNATURE DATE 06/11/15	CHECKED DATE 7/17/2015
		DESIGNED DATE 8/4/2015	DRAWN DATE 8/4/2015

BA NO.	PART NUMBER	DESCRIPTION	Default/ QTY.	BA NO.	PART NUMBER	DESCRIPTION	Default/ QTY.
1	5568.2.4.001	HOUSING ASSEMBLY	1	53	50B519.1	Bored to Size	1
2	5568.2.4.943	INNER STAGE AIRKNIFE ASSY	3	54	5568.2.4.017	Bearing Plate	2
3	FB250.1.00	BEARING	31	55	5568.0.2.030		4
4	5546.2.2.132	CONVEYOR SHAFT	13	56	5568.2.4.018		1
5	5568.2.4.006	CONVEYOR SHAFT	5	57	5568.2.4.013	BEARING PLATE	6
6	50B515.1	Bored to Size	10				
7	5568.0.2.090	Sprocket - Wire Belt P/N G24-42SS100	23				
8	5568.2.4.106	TAKE-UP ASSEMBLY, SSI, 1" SHAFT	6				
9	30" W x 30" H - RH - Open	Heavy Duty Access Door Assy	1				
10	36" W x 30" H - LH - Open	Heavy Duty Access Door Assy	2				
11	24" W x 30" H - LH - Open	Heavy Duty Access Door Assy	2				
12	24" W x 30" H - RH - Open	Heavy Duty Access Door Assy	1				
13	5568.2.4.940	INNER STAGE AIRKNIFE ASSY	5				
14	Cincinnati Fan, Tubeaxial, WAF-18	CINCINNATI FAN, WAF-18 (STN STL, 6" 3.850 CFM), TUBEAXIAL EXHAUST FAN, 3.850 CFM @ 3/4" IN SP, STN STEEL, PROP #MS17-3/4-B, ARRGT #9, 2.329 RPM, CLASS 2, ADJUSTABLE MOTOR BASE, 1-1/2 HP MOTOR, TFC, 230 460/3/60, RKED SPEED BELT DRIVE + DRIVE GUARD, DRILLED FLANGES EACH END, EXTENDED BRG LUBE LINES, (1) COMPANION FLANGE	1				
15	5568.0.2.055	CINCINNATI FAN SQBI-12C, CLASS 2 CONSTRUCTION, 2000 CFM @ 5 SP, 100% WIDTH, ARRANGEMENT 5, CW ROTATION, HD WHEEL, 3H DISCHARGE MTR 5 HP, 2850/3450 RPM, 3 PH.	1				
16	5568.0.2.052	CINCINNATI FAN, HP-8D21, 1000 CFM, 36 SP, ARRANGEMENT 4, STD WHEEL, CW ROTATION, DB DISCHARGE MTR, 10 HP, 2850/3450 RPM, 3PH, 50/60HZ	1				
17	5568.0.2.053	CINCINNATI FAN, HP-8D21, 1500 CFM, 36SP ARRANGEMENT 4, STD WHEEL, CW ROTATION, DB DISCHARGE MTR, 15 HP, 2850/3450 RPM, 3PH, 50/60HZ	1				
18	5568.2.4.100	SPRAY MANIFOLD ASSEMBLY	4				
19	5568.2.4.150	WASH PIPING ASSEMBLY	1				
20	5568.2.4.151	RINSE PIPING ASSEMBLY	1				
21	RNS, 260.201.031, Vibration Isolation Paddling	VIBRATION ISOLATION PADDING, 3" x 3" x 3/8"	12				
22	5568.2.6.000	RETURN DUCT ASSEMBLY	1				
23	5568.2.4.007	CONVEYOR DRIVE SHAFT	1				
24	5568.0.2.054	DALTON TORQUE LIMITER	2				
25	5568.2.4.010	AIR KNIFE SUPPORT	2				
26	5568.2.4.011	BRACKET	4				
27	DOSATRON, DI 210, CHEMICAL DISPENSER		1				
28	5568.2.4.073	RO RISER ASSEMBLY	2				
29	5", Sch 40	ELBOW, WELD, 90, 0.5", 304SS, SCH 40	4				
30	0.5 in. Sch 10	PIPE, 0.5, Sch 10, 304SS, 23-1/4" OAL	1				
31	0.5 in. Sch 10	PIPE, 0.5, Sch 10, 304SS, 60-11/16" OAL	2				
32	0.5 in. Sch 10	PIPE, 0.5, Sch 10, 304SS, 8-3/4" OAL	1				
33	5568.2.4.302	PROX SENSOR MOUNT BRACKET	5				
34	Efector, IGC233, Prox Switch, 18mm	EFFECTOR, IGC233, PROXIMITY SWITCH, WET LOCATION, 18 MM DIA, 12 MM SENSING N.O. NON FLUSH, 4-PIN MICRO CABLE (TYPE 1), 10-36 DC	6				
35	5568.2.4.079	PARTITION, SSI	5				
36	5568.2.4.305	PEDESTAL, SSI, BLOWER MOTOR	1				
37	M12 TAP BLOCK, .5 X 2 X 2, 304 SS	TAP BLOCK, 1/2 X 2 X 2, M12-1.75 THREAD, 304 SS	7				
38	5568.2.4.307	PROX SENSOR MOUNT BRACKET	1				
39	5568.2.4.008	Divider	1				
40	5568.0.2.056	BLANK Sprocket - Wire Belt P/N G24-42SS100	13				
41	5568.2.4.013	IDLER SHAFT	1				
42	5568.2.4.014		1				
43	5568.2.4.009	CONVEYOR SHAFT	1				
44	5568.2.4.050a	BLOWOFF AIR KNIFE	4				
45	5568.2.4.082	RISER SUPPORT	4				
46	5568.2.4.083	RO RINSE RISER SUPPORT	2				
47	5568.2.4.610	AIR KNIFE SUPPORT BRACKET	1				
48	5568.8.8.880	BEARING SUPPORT BLOWOFF	1				
49	5568.8.8.881	BEARING SUPPORT BLOWOFF	1				
50	5568.2.4.205	MOUNTING PLATE	1				
51	VM3546 BLD	1HP, 1725RPM, 3PH, 60HZ, 56C, 3426M, TFC, F1, N MOTOR	1				
52	20Q05L6_B00_2_03	TIGER-2 20Q2SL456	1				

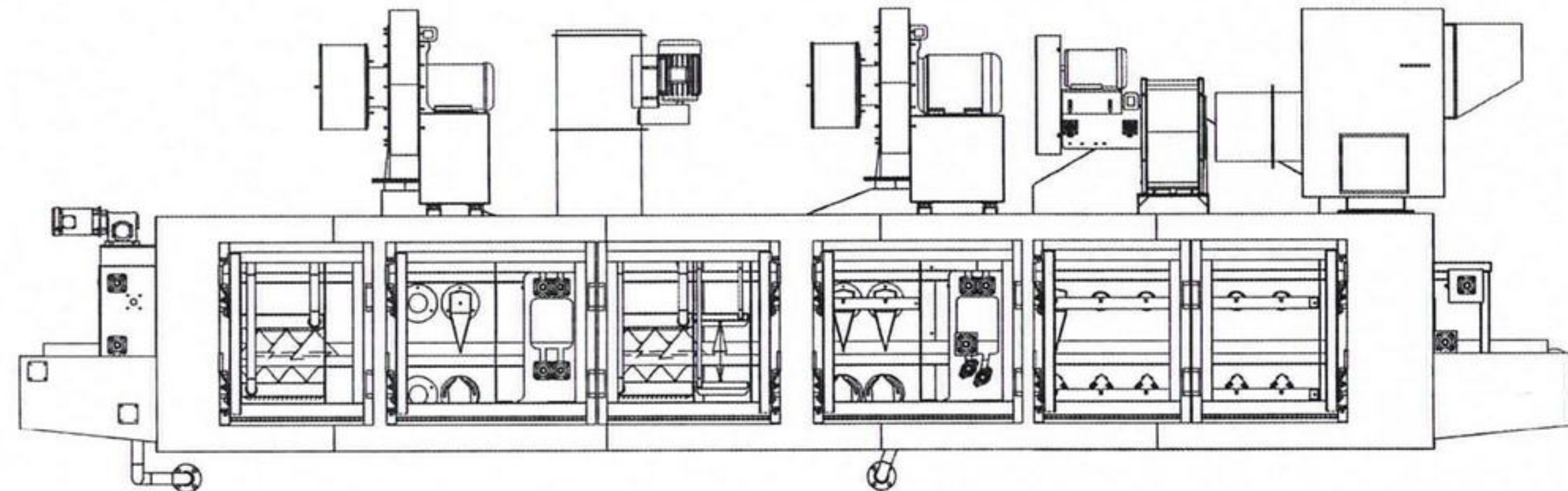
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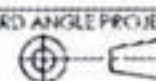
TOP



SIDE



FRONT

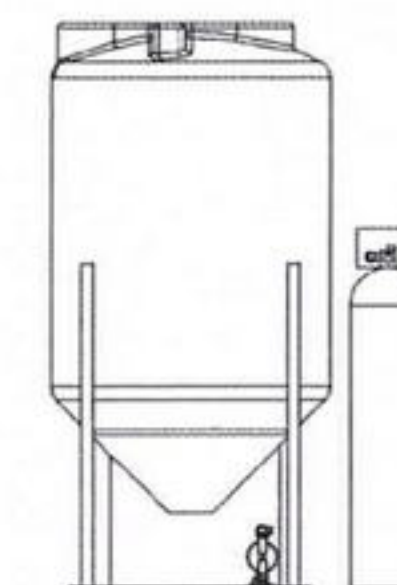
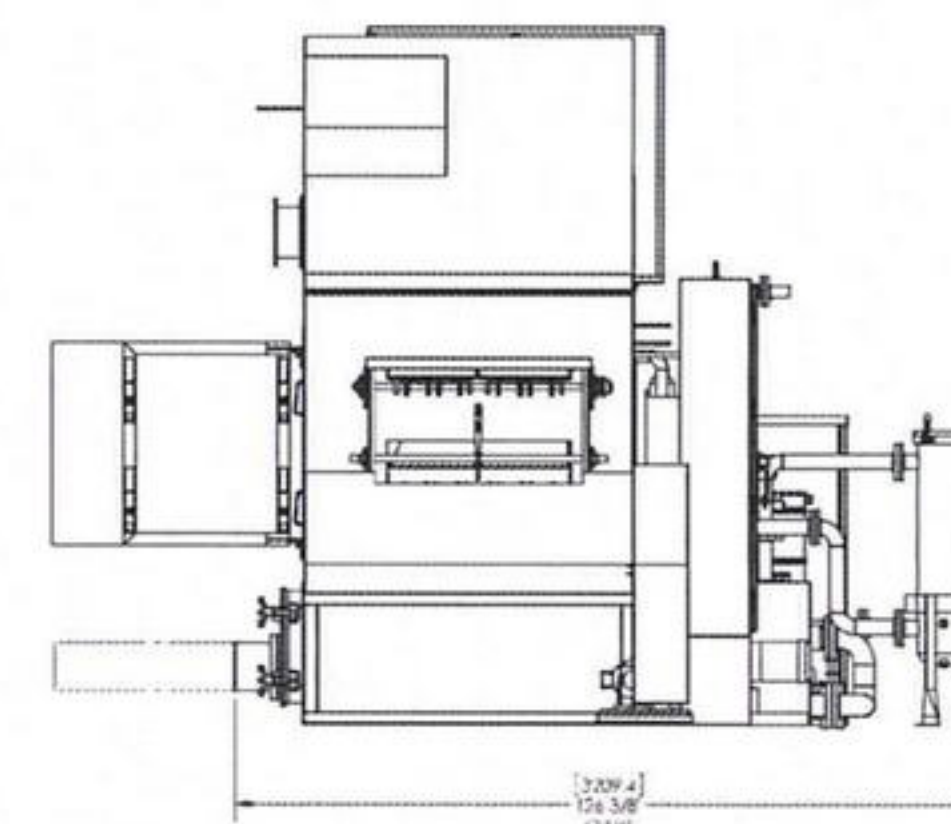
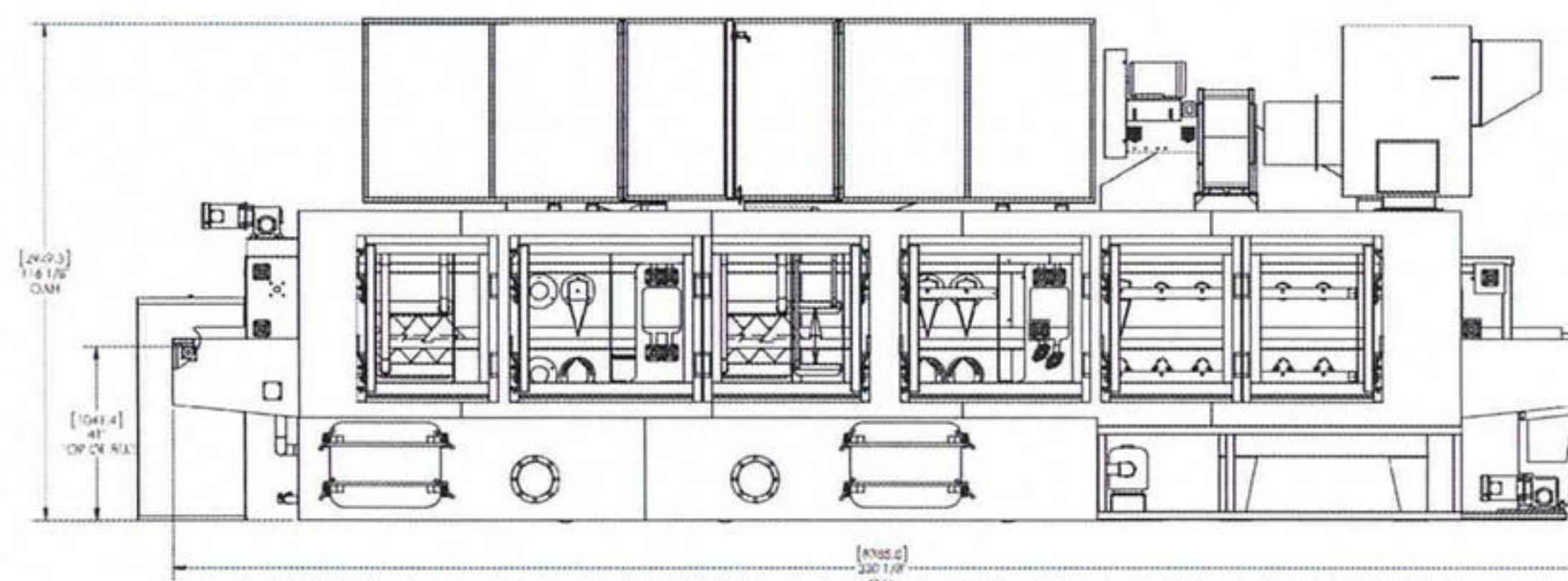
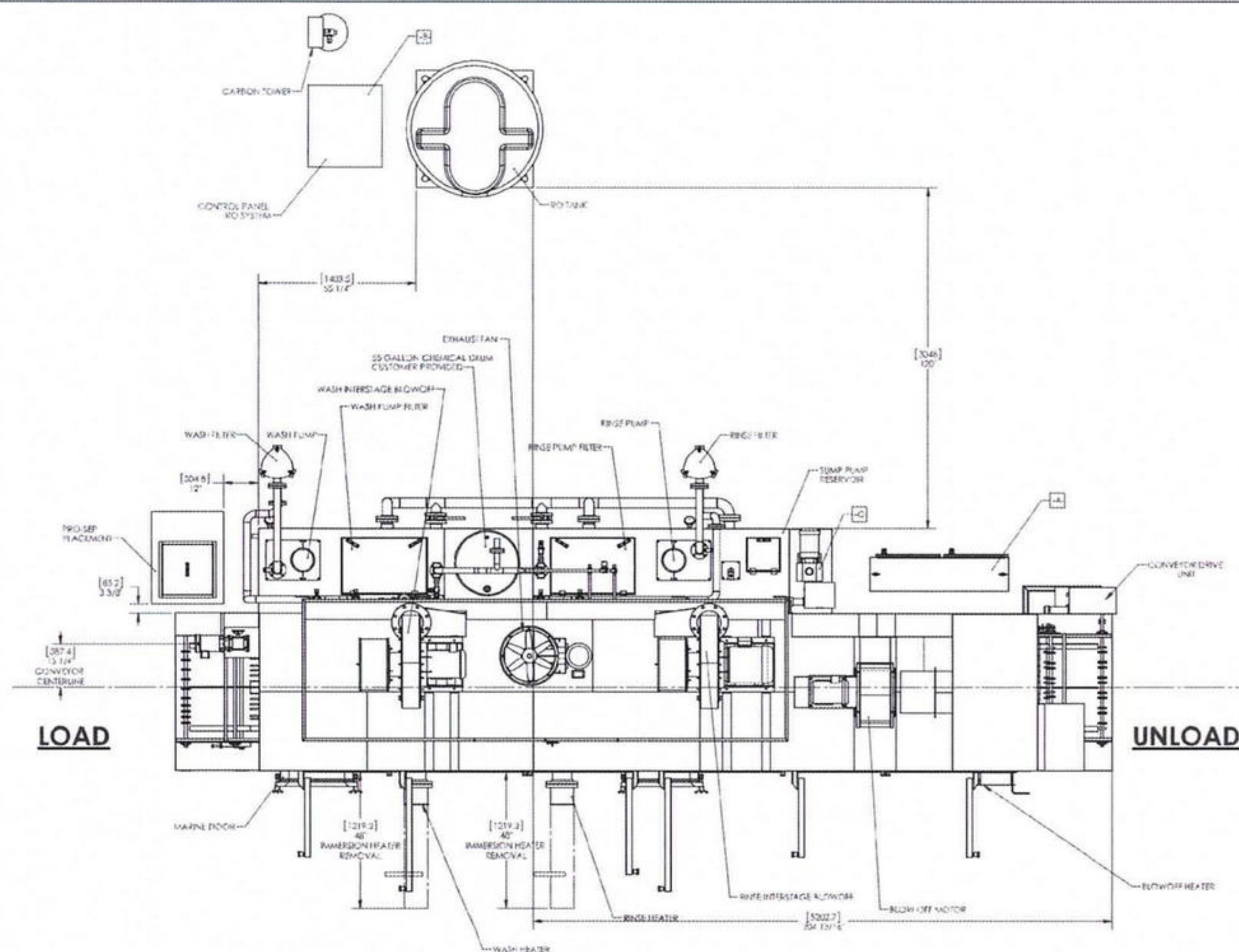
UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES (in)		 CLEANING TECHNOLOGIES GROUP	
TOLERANCES +/-		1 PLACE .1 2 PLACE .01 3 PLACE .00 ANGULAR .05°	
DESIGNED BY	DATE	DATE	DATE
ON	05/11/15	05/11/15	05/11/15
CHIEF	IP	7/17/2015	7/17/2015
THIRD ANGLE PROJECTION	CHIEF	7/17/2015	7/17/2015
		Sure Clean 30° HOUSING DO NOT SCALE DRAWING	

**HOUSING AND DOOR
REMOVED FOR CLARITY**

[illegible]

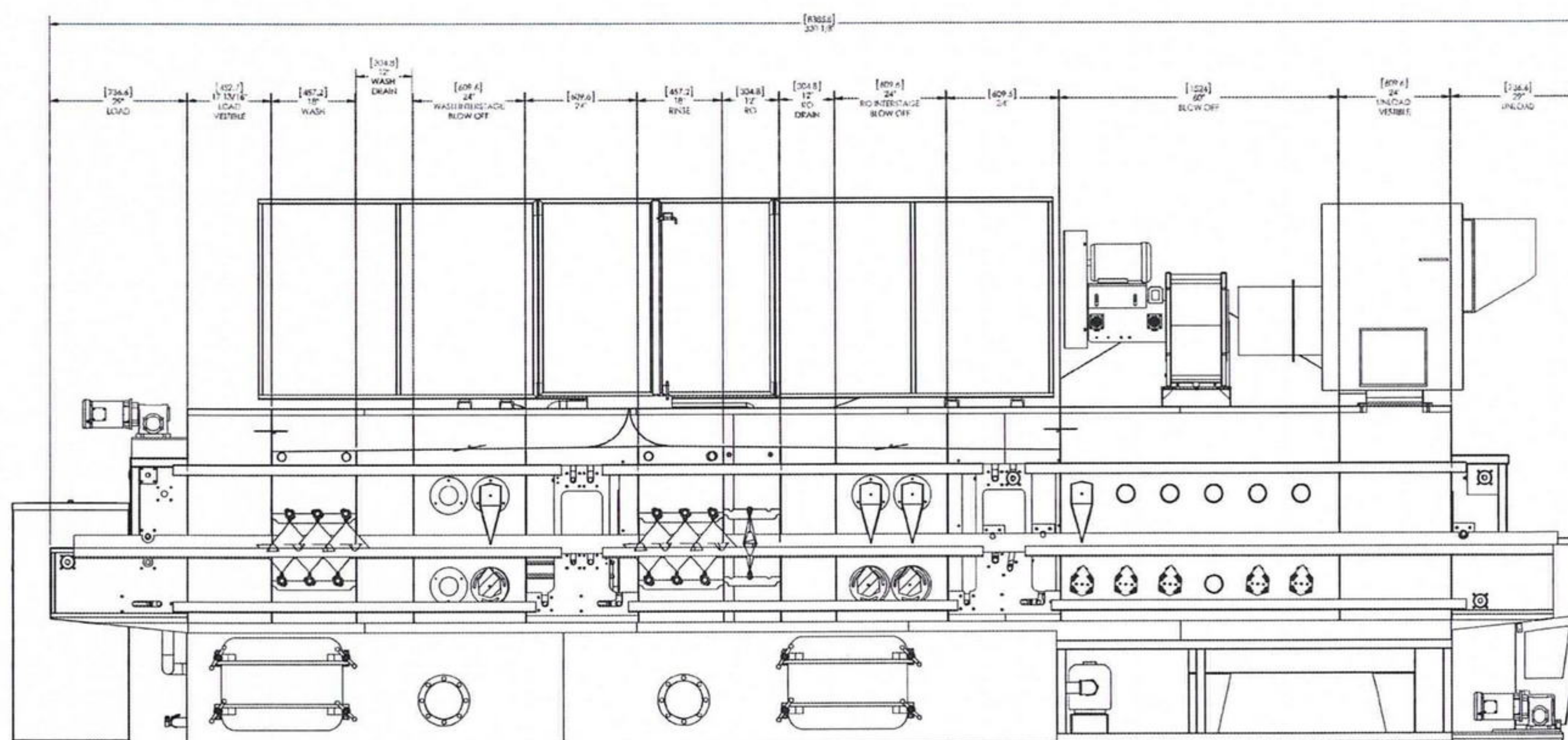
MACHINE SPECIFICATIONS

GENERAL	
PO NUMBER:	04717
PARTS:	Stamped battery shelf - Two parts will be processed in washer
PART INFO:	Largest- 228 mm (9") OAL x 305mm (12") OAW X 25 mm (1") OAH
MATERIAL:	Aluminum and Galvanized Steel
CLEANNESS & DRYNESS:	Visually clean in conjunction with Dyne #31 Test and part must be 100% dry. Residual moisture on part is expected to flash dry within 1 minute after exiting washer.
CONTAMINANT:	Stamping lubricant and mill oil
ORIENTATION:	Flat on belt with lip of stamping face down and 1" dimension with conveyor travel. Two kates of parts on a common belt. Part held down by included.
SOUND LEVEL:	83 dBA
LOAD/UNLOAD:	Transition to and from customer conveyors
PRODUCTION RATE	
CONVEYOR SPEED:	20 FPM (Variable speed 10-25 FPM)
PART SPACING:	Varies
CONSTRUCTION	
TANK:	Stainless
HOUSING:	Stainless
DUCT/WORK AIR KNIVES:	Stainless
PLUMBING:	Stainless
INSULATION:	2" thick
FRESH	
MACHINE:	Insulation Panels Polished
WASH TANK	
CAPACITY:	100 GAL
TEMPERATURE:	150°F
CHEMISTRY:	Perkins Chemistry
FILTRATION:	Single C1D42 Stainless steel filter. 50 micron BAG
RINSE TANK	
CAPACITY:	150 GAL
TEMPERATURE:	150°F
CHEMISTRY:	80 Water overflowed to Drain
FILTRATION:	Single C1D42 Stainless steel filter. 50 micron BAG
RQ RINSE TANK	
CAPACITY:	500 GAL
TEMPERATURE:	Ambient
BLOWOFF	
VOLUME:	1000 CFM @ 34" 5" (Wash Interstage)
VOLUME:	1500 CFM @ 34" 1" (Rinse Interstage)
VOLUME:	2000 CFM @ 8" 5" (Heated Blowoff) 200°F
ELECTRICAL	
SUPPLY:	440V, 3PH, 60Hz
CONTROL:	120VAC / 24VDC
UTILITY CONNECTIONS	
-A-	ELECTRICAL CONNECTION 480V, 3PH, 60Hz
-B-	RO MAIN WATER CONNECTION 1-1/2" NPT FEMALE
-C-	SUMP PUMP HOOKUP
SAFETY	
SAFETY RELAY	Sanner Dual Channel Safety Relay
EMERGENCY STOP:	QTY. 5 Push-buttons w/ Indication on HMI
OPTIONS INCLUDED:	
-	Stainless Steel Exhaust Fan
-	Pro-100
-	3 GPM Reverse Osmosis
-	Wash Only-Distillation Chemical Feed
-	Some Parts and Tools



DRAWINGS SUBMITTED FOR CUSTOMER APPROVAL		
RANSOFF, INC. CINCINNATI, OH	DATE SUBMITTED	09/25/00
	PLEASE APPROVE AND RETURN BY	09/26/00
APPROVED FOR CULTURAL PLANNING AND ZONING, (SUBMITTING COMPANY) _____		
BY _____		
DATE _____		
PLEASE ADVISE NLRP BEING CHECKED FOR CUL & ZONING ENGINEERING (E&E) (DO NOT USE FOR EASEMENT PURPOSES)		

UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES (n) TOLERANCES +/- 1 PLACE .1 2 PLACE .01 3 PLACE .00 ANGULAR 0.5°		
	CLEANING TECHNOLOGIES GROUP MANUFACTURING & ELECTRONIC ASSEMBLY 1000 W. 10TH AVE. & 10TH ST. N. W. MINNEAPOLIS, MN 55408 TEL: 612.338.1111 FAX: 612.338.1112 WWW.CLEANINGTECH.COM	
THIRD ANGLE PROJECTION 	SIGNATURE  DATE 05/01/15	MACHINE LAYOUT DATE 05/01/15 BY 7 3 DO NOT SCALE DIMENSIONS



UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES (in)		 CLEANING TECHNOLOGIES GROUP	
TOLERANCES +/-		ALL DIMENSIONS AND ALL DIMENSIONS THEREON ARE THE PROPERTY OF CTG. BE COME ANY AND NOT BE MADE PUBLIC. ANY OTHERS SHALL BE MADE WITHOUT THE AUTOMATIC OF CTG. ALL DIMENSIONS ARE SUBJECT TO CHANGE.	
1 PLACE .1		SIGNATURE	DATE
2 PLACE .01		DIV	05/01/15
3 PLACE .00		DESIGNED BY	05/01/15
ANGULAR 0.5°		CHECKED BY	05/01/15
THIRD ANGLE PROJECTION		MAIN ASSEMBLY SECTION	
		SHEET 3 OF 3 DO NOT SCALE DRAWING	