Large Pail Denester:

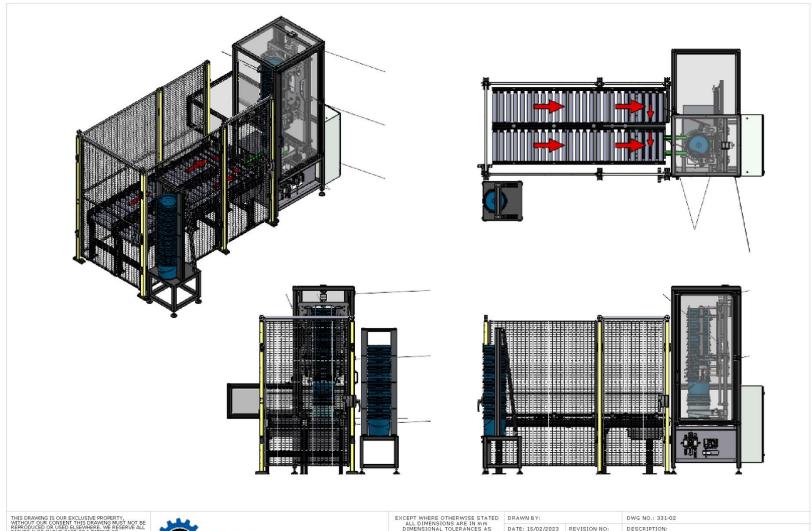
- Mechanical General Arrangement Drawings
- Electrical Drawings

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GA Drawings

Large Pail Denester

Main Assembly



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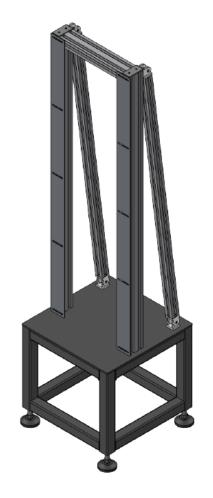


EXCEPT WHERE OTHERWISE STATED ALL DIMENSIONS ARE IN mm DIMENSIONAL TOLERANCES AS FOLLOWS:

0	DRAWN BY:			
	DATE: 15/02/2023	REVISION NO:		
	4 -1	SHEET SIZE: A3		
	(P) (U)	SCALE:		
s	3RD ANGLE PROJECTION	DO NOT SCALE		

		DWG NO.: 331-02	
23	REVISION NO:	DESCRIPTION:	
	SHEET SIZE: A3	QUANTITY:	
	SCALE:	MATERIAL:	
TION	DO NOT SCALE	SURFACE TREATMENT:	
			SHEET 1 OF

Handle Orientating Jig



ITEM NO.	PART NUMBER	Description	Vendor	QTV.
1	Robotunits GUS_4041 (45)	GUS 4041	Robotunits	2
2	Robotunits GUS_4041 (45)	GUS 4041	Robotunits	2
3	331-240-01	Frame P	ProEvo - Fab	1
4	331-240-02	Base Plate P	ProEvo - SM	1
5	331-240-05	Handle Alignment Bar	ProEvo - SM	2
6	331-240-03	Extrusion Vertical Member	Robotunits	2
7	331-240-04	Extrusion Cross Member	Robotunits	1
8	331-240-06	Extrusion Support Member	Robotunits	2
9	LVR8020100SSS	Machine Feet F	Richmond Castors	4
10	CAP 4081	End Cap 40x80	Robotunits	2

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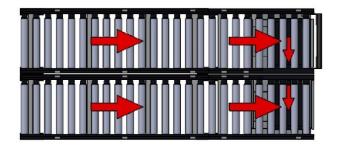
EXCEPT WHERE OTHERWISE STATED ALL DIMENSIONS ARE IN mm DIMENSIONAL TOLERANCES AS FOLLOWS:

LINEAR: ±0.1mm HOLES: ±0.1mm ANGULAR: ±0.5° REMOVE ALL BURRS & SHARP EDGES

DRAWN BY:		DWG NO.: 331-240	
DATE: 3/03/2023	REVISION NO:	DESCRIPTION: Large Pail Handle Orientation Jig	
3RD ANGLE PROJECTION	SHEET SIZE: A3	QUANTITY:	
	SCALE:	MATERIAL:	
	DO NOT SCALE	SURFACE TREATMENT:	
			SHEET 1 OF 1

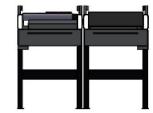
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Pail Stack In-Feed Conveyors









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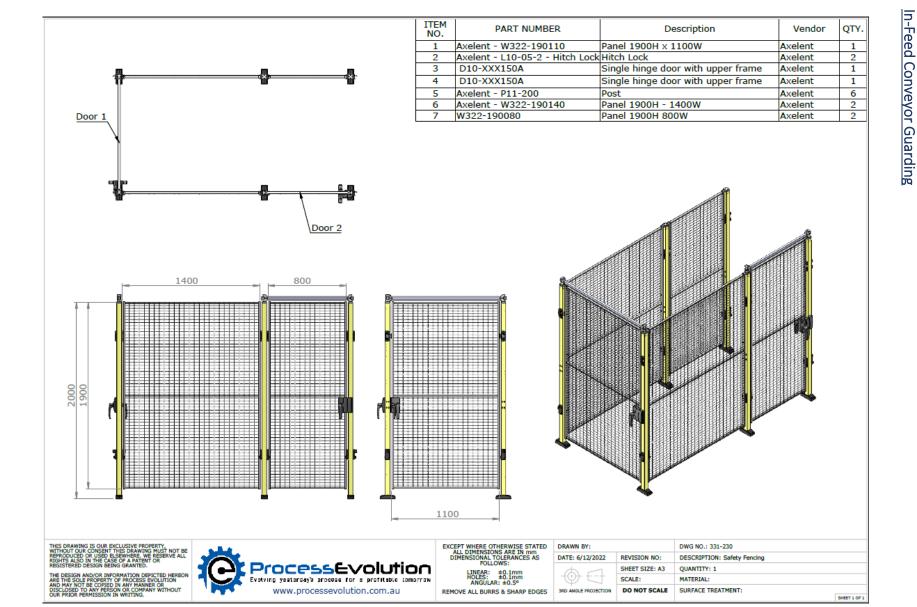
EXCEPT WHERE OTHERWISE STATED
ALL DIMENSIONS ARE IN mm
DIMENSIONAL TOLERANCES AS
FOLLOWS:

FOLL	
	±0.1mm ±0.1mm R: ±0.5°
REMOVE ALL BURR	S & SHARP EDGE:

5	DRAWN BY:		DWG NO.: 331-210		
	DATE: 15/02/2023	REVISION NO:	DESCRIPTION: Large Pail Infeed Conveyors		
	3RD ANGLE PROJECTION	SHEET SIZE: A3	QUANTITY:		
		SCALE:	SCALE:	MATERIAL:	
		DO NOT SCALE	SURFACE TREATMENT:		
				SHEET 1 OF 1	







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GA Drawings

Denester Frame







ITEM NO.	PART NUMBER	Description	Vendor	QTY
1	331-221-02	RHS Clamp A	ProEvo - CM	6
2	331-221-03	RHS Clamp B	ProEvo - CM	6
3	331-221-01	Frame	ProEvo - Fab	1
4	331-221-08	Roof Panel	ProEvo - PR	1
5	331-221-11	LH Guard Panel	ProEvo - PR	1
6	331-221-13	Rear Guard Panel	ProEvo - PR	1
7	331-221-05	Dead Plate Mount Bracket	ProEvo - SM	2
8	331-221-06	Dead Plate	ProEvo - SM	1
9	331-221-07	Panel Mount Bracket A	ProEvo - SM	2
10	331-221-09	Lower Front Panel	ProEvo - SM	1
11	331-221-10	Lower LH Panel	ProEvo - SM	1
12	331-221-12	Panel Mount Bracket B	ProEvo - SM	2
13	331-221-14	Panel Mount Bracket C	ProEvo - SM	4
14	331-221-15	Guard Panel Washer	ProEvo - SM	20
15	SICK - C2C-SA1503XX10000	Light Curtain	Sick	2
16	331-221-04	Linear Shaft	Statewide	2
17	THK - SK25	Linear Shaft Clamp	Statewide	6
18	LVR8020100SSS	Machine Feet	Richmond Castors	4
19	AE 1180.500	Electrical Enclosure	Rittal	1

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LINEAR: ±0.1mm HOLES: ±0.1mm ANGULAR: ±0.5° REMOVE ALL BURRS & SHARP EDGES

D	DRAWN BY:		DWG NO.: 331-221	
	DATE: 7/12/2022	REVISION NO:	DESCRIPTION: Large Pail Denester Frame	
s	3RD ANGLE PROJECTION	SHEET SIZE: A3	QUANTITY:	
		SCALE:	MATERIAL:	
		DO NOT SCALE	SURFACE TREATMENT:	
				SHEET 1 OF 1

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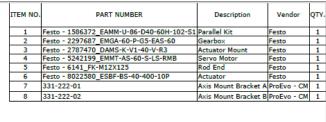
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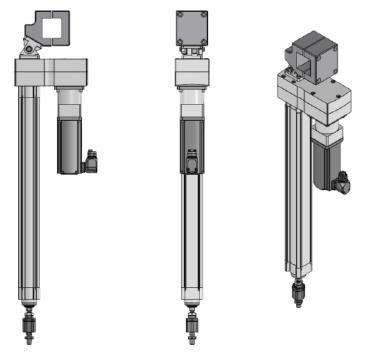
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GA Drawings

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Denester Z-Axis Servo Actuator





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EXCEPT WHERE OTHERWISE STATED ALL DIMENSIONS ARE IN mm DIMENSIONAL TOLERANCES AS FOLLOWS:

ED	DRAWN BY:		DWG NO.: 331-222		
	DATE: 7/12/2022	REVISION NO:	DESCRIPTION: 331-222 - Large Pail Denester Servo Ax	ds	
	⊕ €	SHEET SIZE: A3	QUANTITY:		
		SCALE:	MATERIAL:		
ES	3RD ANGLE PROJECTION	DO NOT SCALE	SURFACE TREATMENT:		
				SHEET 1 OF 1	

Denester Carriage

QTY.

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Vendor

ProEvo - CM

ProEvo - SM

ProEvo - SM

ProEvo - SM

ProEvo - SM

Swicthes Plus

Statewide

Festo

Festo

Festo

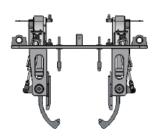
Festo

Festo

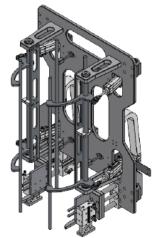
Festo

Festo

Festo



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ITEM NO.

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331-223-04

331-223-06

331-223-07

331-223-08

331-223-09

331-223-10

331-223-11

331-223-12

331-223-13

331-223-14

331-223-17

331-223-18

331-223-19

331-223-20

331-223-23

331-223-03

331-223-15

331-223-16

331-223-22

SG-M10X125

2204 E-2RS1TN9

SNCL-32

Bearing - SC25UU

GRLA-1_8-QS-6-D

CPS - 030.35.R48_B1-471L_(0_049174001271) E Chain

Festo - SNCB-32_174390

PART NUMBER

Festo - 1376423_DSBC-32-40-PPVA-N3

Festo - 170851_DFM-25-50-P-A-GF

Festo - 170874_DFM-50-100-P-A-GF

Festo - 193146_GRLA-1_4-QS-6-D





	3- p-1
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EXCEPT WHERE OTHERWISE STATED ALL DIMENSIONS ARE IN mm DIMENSIONAL TOLERANCES AS

REMOVE ALL BURRS & SHARP EDGES

)	DRAWN BY:		DWG NO.: 331-223	
	DATE: 7/12/2022	REVISION NO:	DESCRIPTION: Large Pail Denester Carriage	
5	3RD ANGLE PROJECTION	SHEET SIZE: A3	QUANTITY: 1	
		SCALE:	MATERIAL: Material <not specified=""></not>	
		DO NOT SCALE	SURFACE TREATMENT: None	
				SHEET 1 OF 1

Self Aligning Ball Bearing I.D 20mm OD 47mm Statewide

Description

Keeper Rod Attachment Block

Pail Stack Cage Actuator

Pail Separator Actuator

Pail Stack Support Shaft

Pivot Rod Main Support LHS

Pivot Rod Main Support RHS

Servo Cylinder Base - Bottom

Pail Stack Alignment Guide

Guide Block - Alignment Plate

Pail Stack Finger Support - LHS

Pail Stack Finger Support - RHS

Guide Block - Alignment Plate

Sheetmetal Cylinder Support

Pail Stack Secondary Mount

Pail Stack Support Bar

Chain Mount Bracket

Flow Control 1/8" 6mm

Pail Stack Primary Support Plate - Rear

Pail Stack Primary Support Plate - Front

Pail Pusher Actuator

Main Carriage Plate

All Thread M10 L140

Actuator Mount

Flow Control

Pivot Shaft

Shaft Cap M8

Swing Arm

Large Washer

Linear Bearing

Clevis M10x1.25

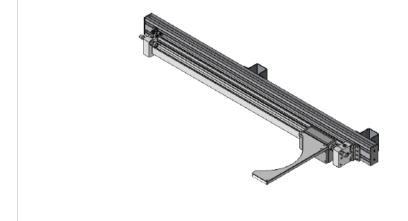
Swivel Flange

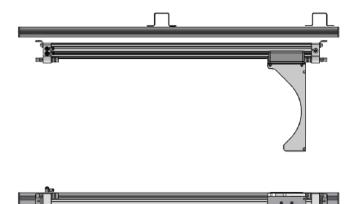
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Denester Pail Out-Feed Transfer

GA Drawings

ITEM NO. PART NUMBER QTY. Description Vendor Festo - 532448_DGC-32-800-KF-YSRW-A DGC-32-800-KF-YSRW-A Festo Festo -533669_HPC-32 HPC-32 Festo 331-224-02 Actuator Mount Bracket ProEvo - CM 2 3 331-224-03 1 4 Pail Push Part ProEvo - CM 331-224-05 Carriage Mount Plate ProEvo - CM 1 6 331-224-06 Pail Pusher Gusset ProEvo - CM 1 331-224-04 Assembly Mount Bracket ProEvo - SM 2 8 331-224-01 Extrusion Mount Member Robotunits 1 9 GRLA-1_8-QS-6-D Flow Control 1/8" 6mm Festo 2 Robot Units 10 CAP 4081 End Cap 40x80 2







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EXCEPT WHERE OTHERWISE STATED
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DIMENSIONAL TOLERANCES AS
FOLLOWS:
LINEAR: ±0.1mm
HOLES: ±0.1mm

D	DRAWN BY:		DWG NO.: 331-224	
	DATE: 7/12/2022	REVISION NO:	DESCRIPTION: Large Pail Transfer Pusher	
	4 -	SHEET SIZE: A3	QUANTITY:	
	#	SCALE:	MATERIAL:	
s	3RD ANGLE PROJECTION	DO NOT SCALE	SURFACE TREATMENT:	
				SHEET 1 OF 1

GA Drawings

Denester Vacuum Plate QTY. 1 2 1 2 6 1 1

Vendor

Festo

Festo

ProEvo - CM

ProEvo - CM

ProEvo - CM

ProEvo - SM

Festo

Description

SUCTION ASSY ANCHOR BRACKET ProEvo - CM

STACK VACUUM PLATE - BOTTOM ProEvo - SM

Actuator

Suction Cup

Pail Hold Pin

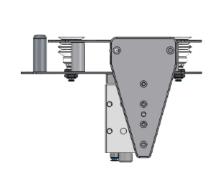
Pail De-Nest Centre Plate

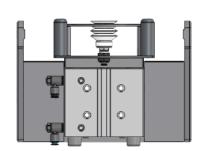
Standoff - Vacuum Cups

Flow Control 1/8" 6mm

STACK VACUUM PLATE - TOP







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EXCEPT WHERE OTHERWISE STATED
ALL DIMENSIONS ARE IN mm
DIMENSIONAL TOLERANCES AS
FOLLOWS:

ITEM NO.

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PART NUMBER

Festo - DFM-40-50-P-A-GF 170865

Festo - ESS-40-BU

331-225-01

331-225-02 331-225-05

331-225-06

331-225-03 331-225-04

GRLA-1_8-QS-6-D

LINEAR: ±0.1mm HOLES: ±0.1mm ANGULAR: ±0.5°

REMOVE ALL BURRS & SHARP EDGES

)	DRAWN BY:		DWG NO.: 331-225	
	DATE: 7/12/2022	REVISION NO:	DESCRIPTION: Large Pail Vac Picker	
5	3RD ANGLE PROJECTION	SHEET SIZE: A3	QUANTITY: 1	
		SCALE:	MATERIAL: Material <not specified=""></not>	
		DO NOT SCALE	SURFACE TREATMENT: None	
				SHEET 1 OF 1

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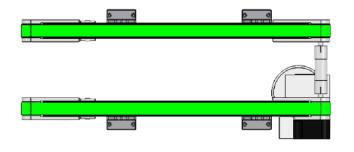
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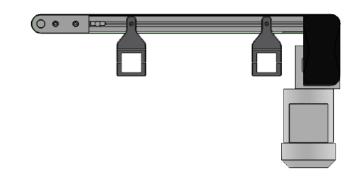
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Denester In-Feed Conveyor

GA Drawings

ITEM NO. PART NUMBER Description Vendor QTY. Robotunits C4T_EU 0040 SB2N 0800 200 (0) 90 180 (12m_min) (20kg) Conveyor Robotunits 1 331-226-01 Conveyor Mount Bracket ProEvo - CM 331-226-02 Conveyor Bracket - Bottom ProEvo - CM







EXCEPT WHERE OTHERWISE STATED ALL DIMENSIONS ARE IN mm DIMENSIONAL TOLERANCES AS FOLLOWS:

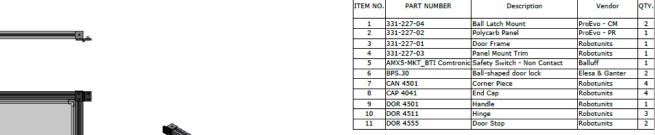
DRAWN BY:		DWG NO.: 331-226	
DATE: 7/12/2022	REVISION NO:	DESCRIPTION: Large Pail Stack Infeed Conveyor	
\$ —	SHEET SIZE: A3	QUANTITY:	
(D) (U)	SCALE:	MATERIAL:	
3RD ANGLE PROJECTION	DO NOT SCALE	SURFACE TREATMENT:	
			S

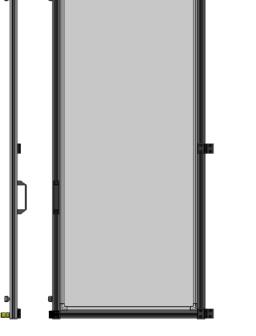
Denester Guard Door

Processevolution











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DIMENSIONAL TOLERANCES AS
FOLLOWS:

DRAWN BY:
DATE: 7/12/2

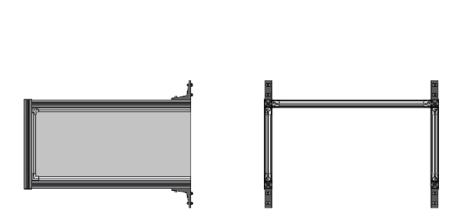
LINEAR: ±0.1m HOLES: ±0.1m ANGULAR: ±0.5 REMOVE ALL BURRS & SHA

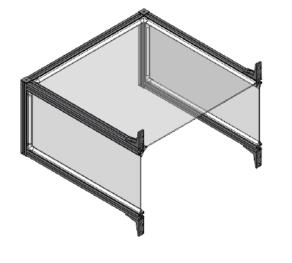
NCES AS	DA
nm nm	+
ARP EDGES	380

DWG NO.: 331-227 ATE: 7/12/2022 REVISION NO: DESCRIPTION: Large Pail Denester Guard Door SHEET SIZE: A3 QUANTITY: SCALE: MATERIAL: ANGLE PROJECTION DO NOT SCALE SURFACE TREATMENT:

Denester Tunnel Guard

ITEM NO. PART NUMBER Description Vendor QTY. 331-228-03 Polycarb Top Panel ProEvo - PR 1 2 331-228-06 Polycarb Side Panel ProEvo - PR 331-228-01 Frame Robotunits 1 4 331-228-02 Polycarb Trim Robotunits 1 331-228-04 Robotunits Polycarb Trim 1 5 Polycarb Trim 331-228-05 Robotunits 1 CAN 4501 Corner Piece Robotunits 6 CAP 4041 End Cap Robotunits 4 9 GUS 1101 Corner Bracket 100 Robotunits 4





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LINEAR: ±0.1mm HOLES: ±0.1mm ANGULAR: ±0.5° REMOVE ALL BURRS & SHARP EDGES

DRAWN BY:		DWG NO.: 331-228	
DATE: 7/12/2022	REVISION NO:	DESCRIPTION: Large Pail Denester Tunnel Guard	
⊕ €	SHEET SIZE: A3	QUANTITY:	
	SCALE:	MATERIAL:	
3RD ANGLE PROJECTION	DO NOT SCALE	SURFACE TREATMENT:	
			SHEET 1 OF 1

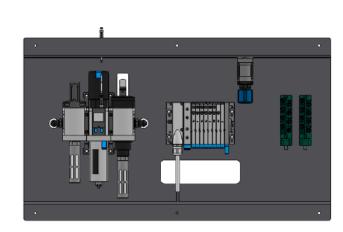
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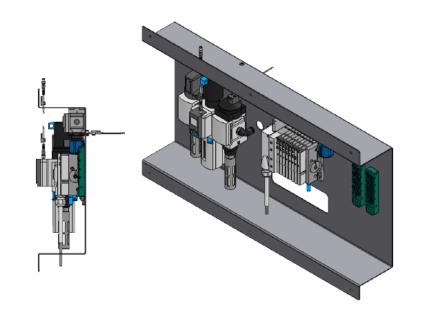
Denester Pneumatic Control Panel

GA Drawings



ITEM NO.	PART NUMBER	Description	Vendor	QTY.
1	Festo - 569926_34P-MS1-U8A-5JEXL	Valve Bank	Festo	1
2	331-229-01	Pneumatic Panel	ProEvo - SM	1
3	MSB6-3_8_C4_J13_D4-WP	Air Service Unit	Festo	1
4	KMEB-1-24-5-LED	Plug & Cable	Festo	1
5	MS4-LR-1_4-D6-AG-MPA-B	Regulator	Festo	1
6	NEBU-M8G3-K-5-M8G3	Cable M8 3-pin 5m	Festo	1
7	QSL-G3_8-10	Push-In L G3/8" 10mm	Festo	2
8	VMPAL-KM-V-SD25-IP67-5	Connecting Cable - Valve Bank	Festo	1
9	V3-8A-E2-5M-PUR	Splitter Box 8 Way M8 3pin	Pepperl Fuchs	2





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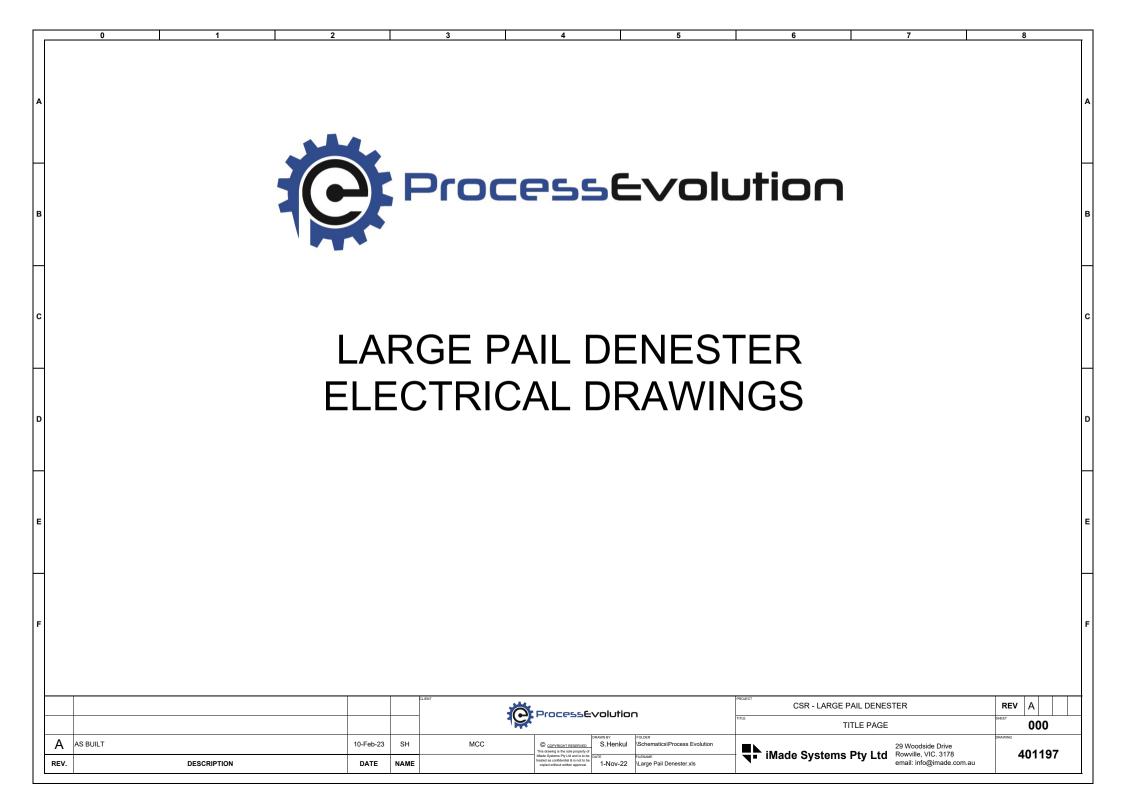


EXCEPT WHERE OTHERWISE STATED ALL DIMENSIONS ARE IN mm DIMENSIONAL TOLERANCES AS FOLLOWS:

LINEAR: ±0.1mm HOLES: ±0.1mm ANGULAR: ±0.5°

DRAWN BY:		DWG NO.: 331-229	
DATE: 7/12/2022	REVISION NO:	DESCRIPTION: Large Pail Denester Pneumatics Panel	
3RD ANGLE PROJECTION	SHEET SIZE: A3	QUANTITY:	
	SCALE:	MATERIAL:	
	DO NOT SCALE	SURFACE TREATMENT:	
			SHEET 1 OF 1

REMOVE ALL BURRS & SHARP EDGES



PAGE TITLE REV PAGE TITLE REV TITLE PAGE PAIL STACK LIFT SERVO 000 Α 050 Α 001 DIRECTORY Α 051 PAIL STACK INFEED CONVEYOR Α 005 IP ADDRESS ALLOCATION Α 060 ETHERNET SWITCH & NETWORK TOPOLOGY Α 061 CONVEYLINX CONTROLLERS A4 & A3 Α 010 AC POWER DISTRIBUTION Α 062 CONVEYLINX CONTROLLERS A2 & A1 Α 063 CONVEYLINX CONTROLLERS B1 & B2 Α 012 DC POWER DISTRIBUTION Α 064 CONVEYLINX CONTROLLERS B3 & B4 Α 013 CONVEYLINX MDR POWER DISTRIBUTION Α 014 MAIN SAFETY RELAY CIRCUIT Α SAFETY DOOR SWITCHES 015 Α 016 LOADING DOOR SAFETY RELAY Α 017 LIGHT CURTAIN SAFETY RELAY Α 018 AIR SUPPLY DUMP VALVE Α PLC, POINT IO ADAPTER & HMI SUPPLY CONNECTIONS 019 Α 020 POINT IO MODULE 1 - DIGITAL INPUTS Α 021 POINT IO MODULE 2 - DIGITAL INPUTS Α 022 POINT IO MODULE 3 - DIGITAL INPUTS Α 023 POINT IO MODULE 4 - DIGITAL INPUTS Α POINT IO MODULE 5 - DIGITAL OUTPUTS 030 Α 031 POINT IO MODULE 6 - DIGITAL OUTPUTS Α 032 POINT IO MODULE 7 - DIGITAL OUTPUTS Α 040 DISTRIBUTION IO BLOCK #1 Α 041 DISTRIBUTION IO BLOCK #2 Α 045 FESTO VALVE BANK Α CSR - LARGE PAIL DENESTER REV A ProcessEvolution 001 DIRECTORY Α AS BUILT MCC 10-Feb-23 SH S.Henkul iMade Systems Pty Ltd 401197 REV. DESCRIPTION NAME DATE 1-Nov-22 \Large Pail Denester.xls

