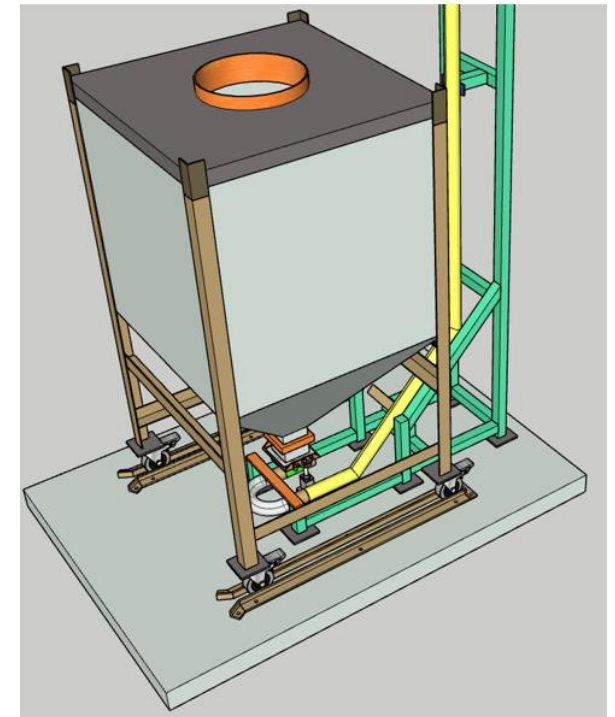
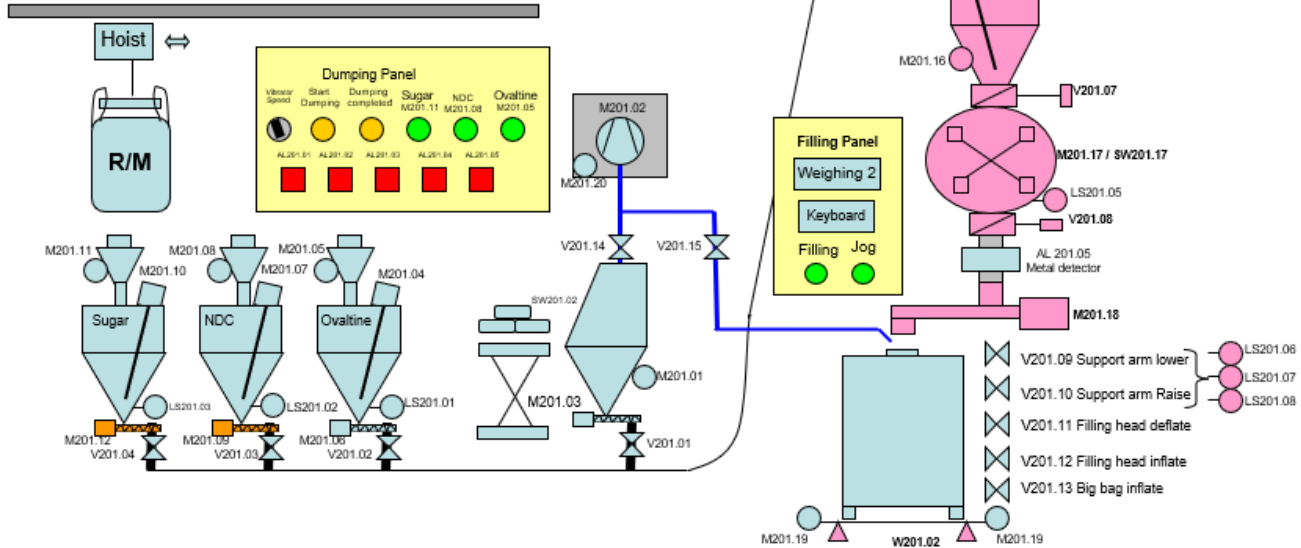
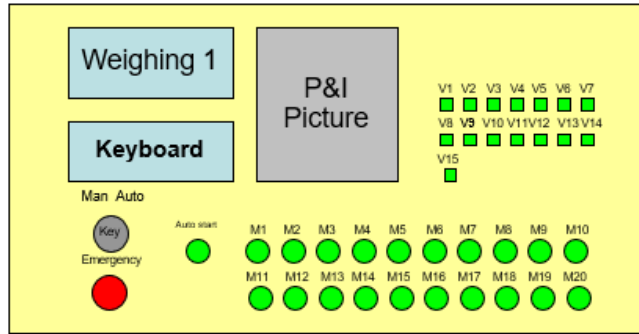


Therec Engineering & Consulting Co., Ltd.



3 in 1 Coffee & Others Powder Processing Guide

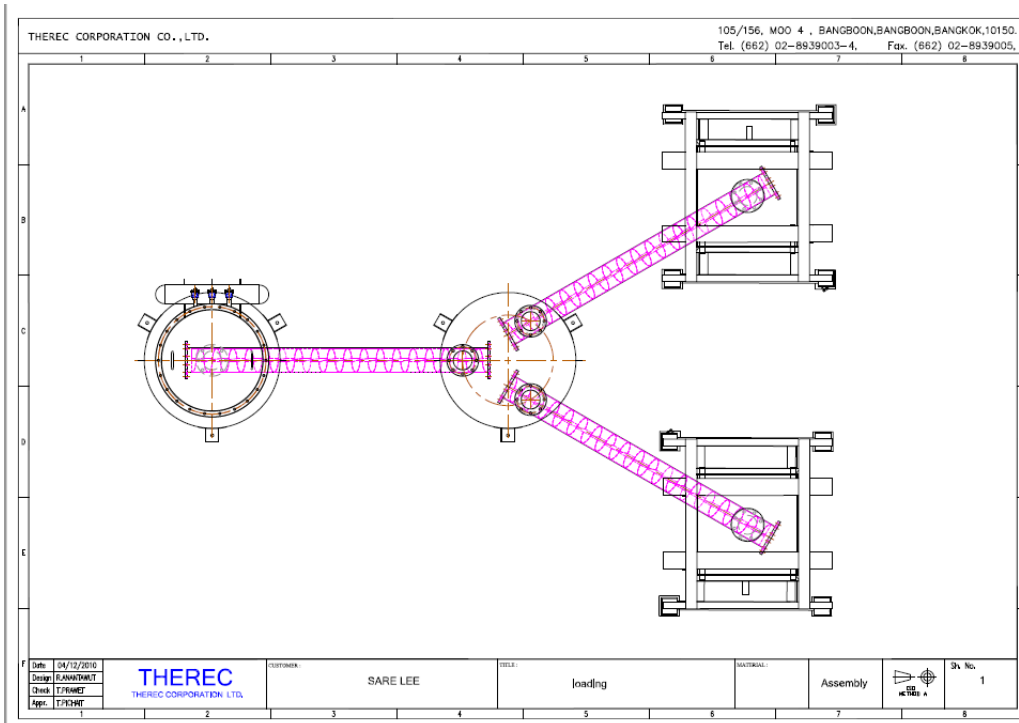
3 in 1 Coffee Powder Mix Processing System / 2013

Saralee (Thailand) Co.,Ltd (JDE Group) / Moccona Coffee



The powder handling system consisting of :

- 4 of Big Bag Unloading stations , Coffee, Non Dairy creamer, Sugar & Milk
- 4 of Dosing Screw Conveyor
- 4 of Weighting Hopper with Load cell set
- 1 of Dust collecting system






INTERIOR FINISHED SCHEDULE





FLOOR

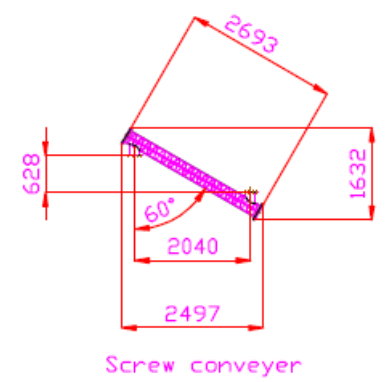
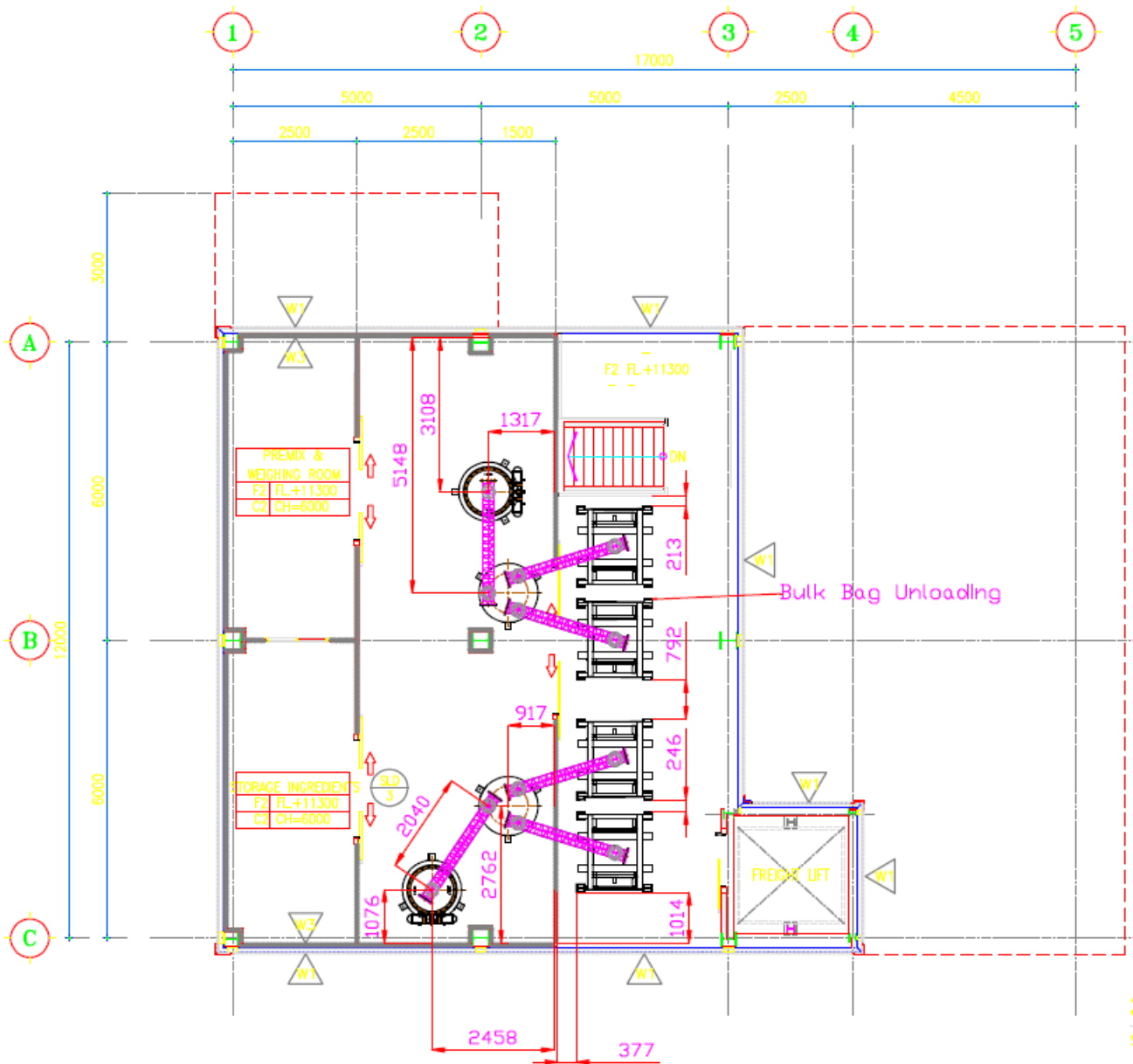
-  ชั้น PU หนา 8 มม.
-  ชั้น PU หนา 4 มม.

WALL

-  หน้า METAL SHEET ZINCALUNE 0.40 มม.
-  ผนังระบบกันสาดขนาด 3"
-  ผนังระบบกันสาดขนาด 3"

CEILING

-  ฝ้าเพดานระบบกันสาดขนาด 3"
-  ฝ้าเพดานระบบกันสาดขนาด 3"
-  ฝ้าเพดานยิปซั่มขนาด หนา 9 มม. ใส่อลูมิเนียม 1-2x4
-  ฝ้าฉาบเรียบฝ้าตะกั่ว/ทึบ

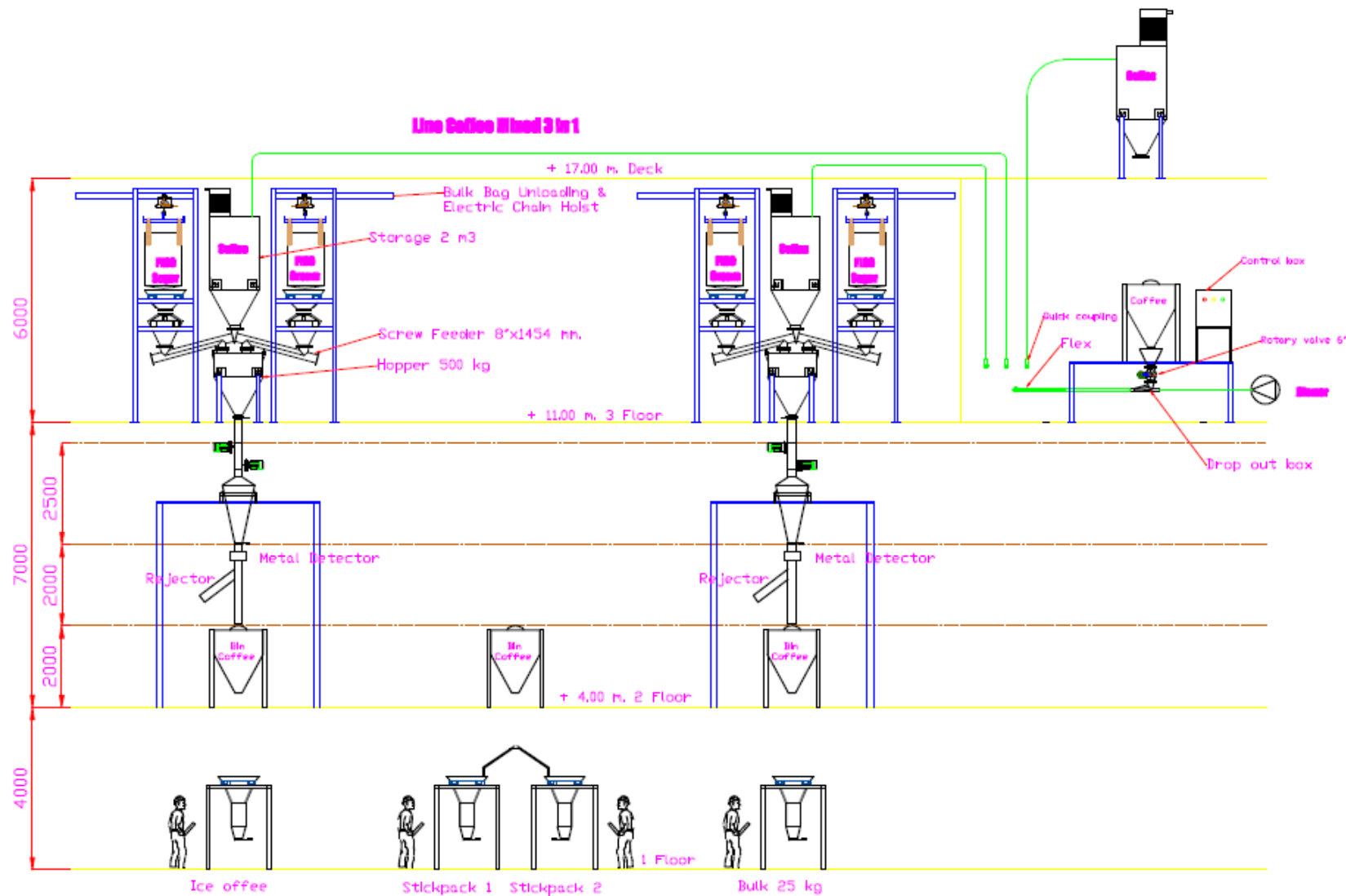


3rd FLOOR PLAN

SCALE

1 : 100





Date	8/11/2010
Design	C.SOMMAH
Check	T.PRAWET
Appr.	T.PICHAT

THEREC
 THEREC CORPORATION LTD.

CUSTOMER:

SARA LEE

TITLE:

Pneumatic Conveying System

MATERIAL:

UNITS

mm.

SCALE

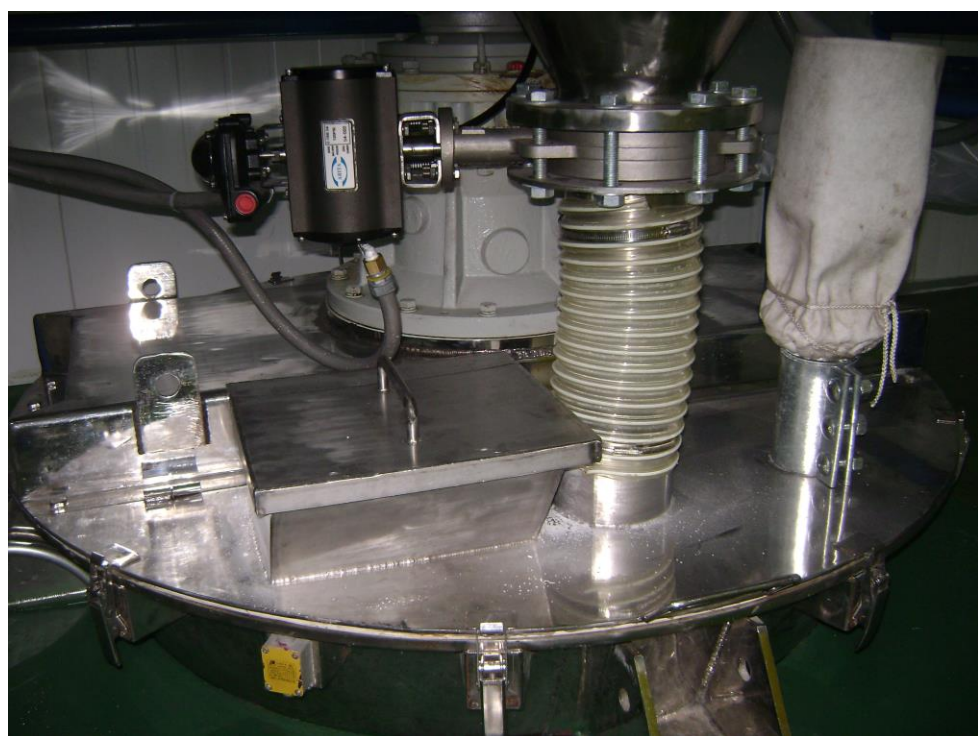
Assembly



Sh. No.

1





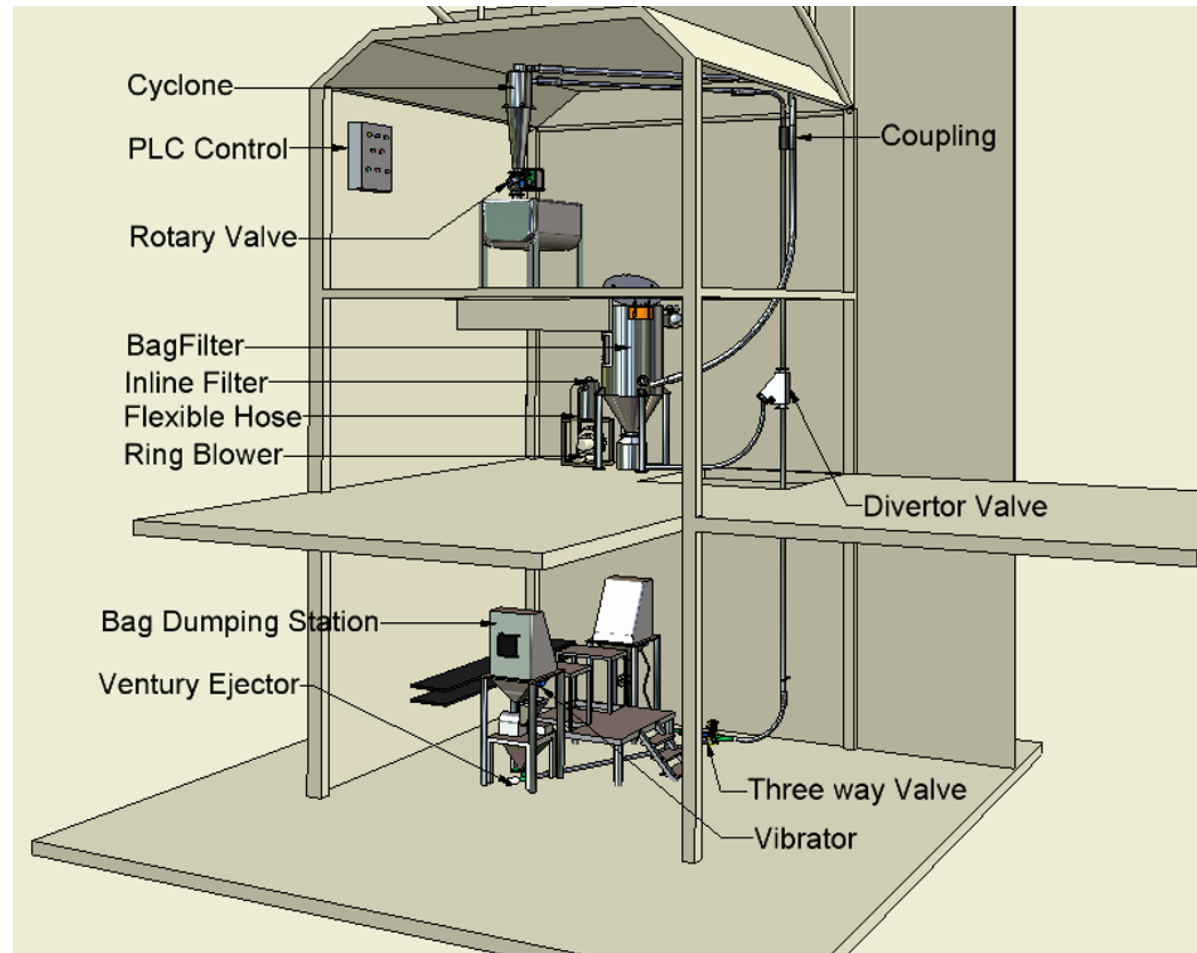
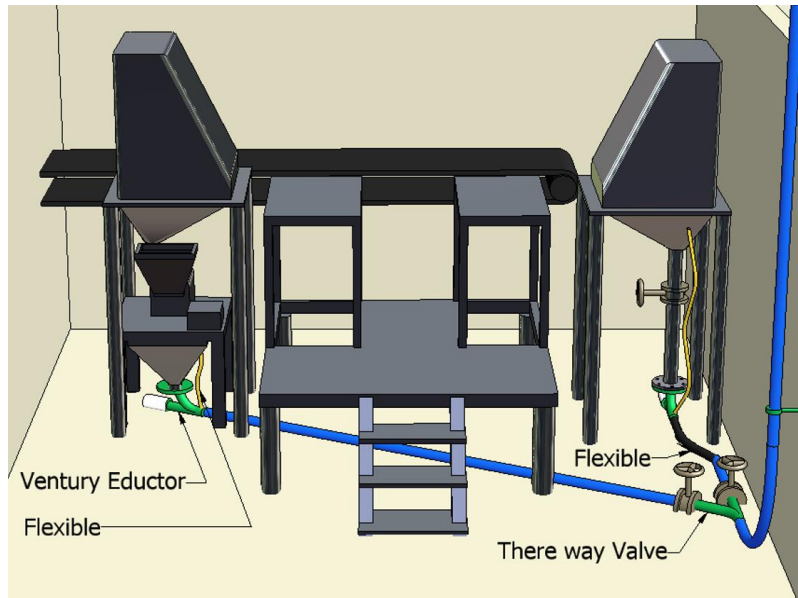
3 in 1 Coffee Powder Mix Processing System / 2007



Ciphona Coffee Co.,Ltd

The powder handling system consisting of :

- 2 of Small Bag Dumping Stations , Coffee, Non Dairy creamer, Sugar
- 1 of Ribbon Powder Mixer
- 1 of Cyclone Collector
- 1 of Dust collecting system
- 1 of Ring Blower 4.0 kw
- 1 of Rotary valve 6.0''





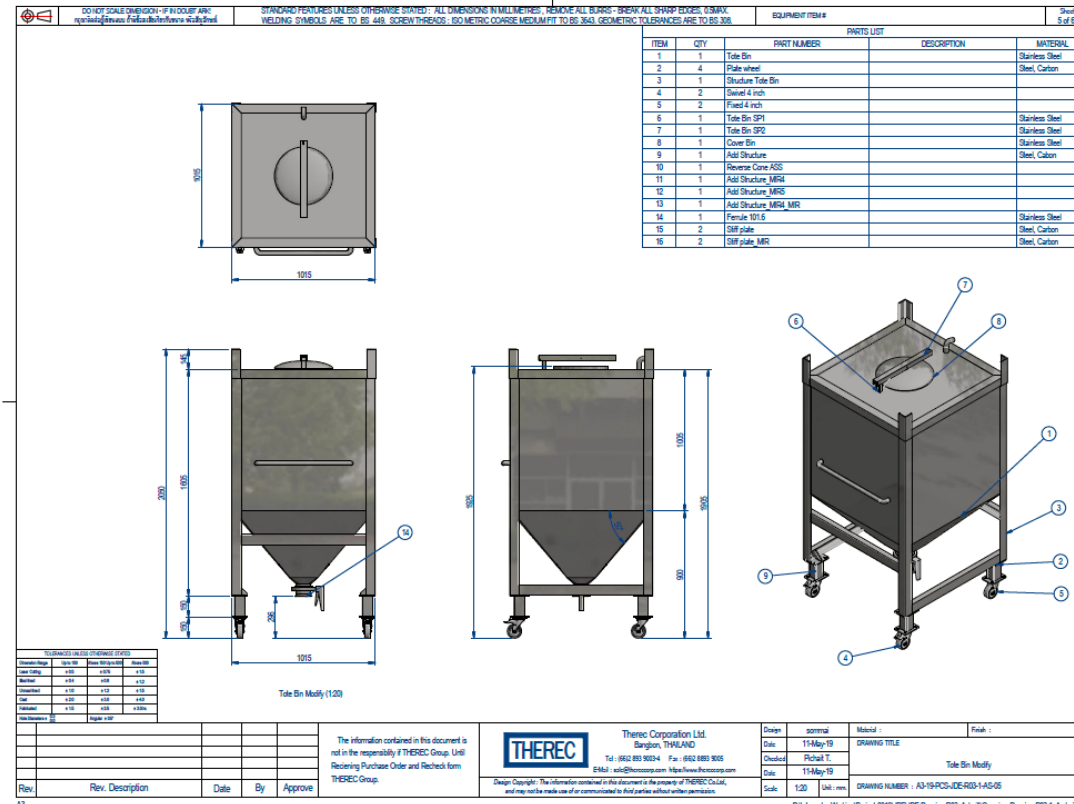
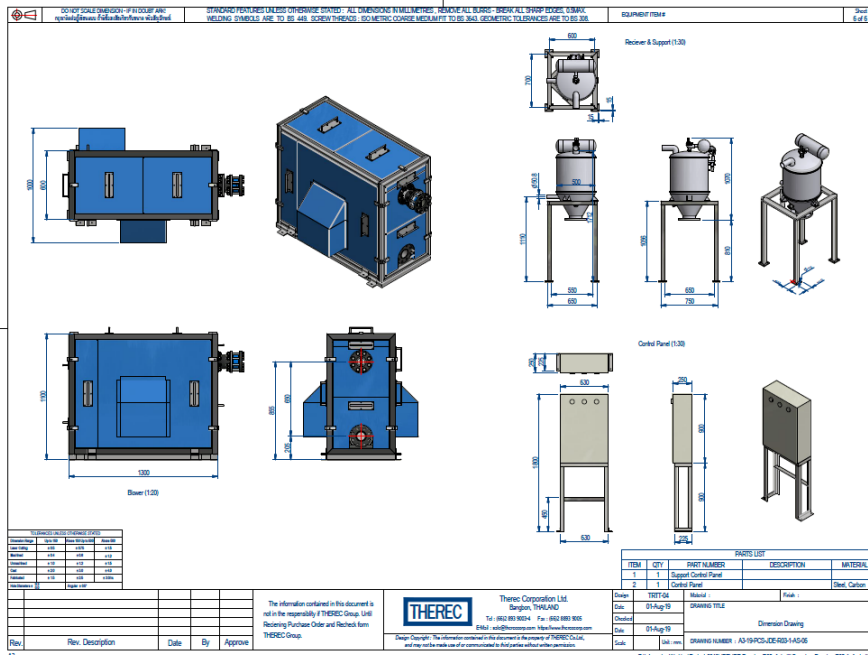


3 in 1 Coffee Powder Mix Processing System / 2018

SCML(Thailand) Co.,Ltd (JDE Group) / Moccona & Supper Coffee

The powder handling system consisting of :

- 4 of 3 in 1 Ready mix tote bin unloading station
- 1 of Pneumatic conveying system
- 1 of Food grade easy clean bag filter
- 1 of High vacuum booster blower
- 1 of 0.5 kg bag filling machine set



EQUIPMENT NO.
TAG NO.

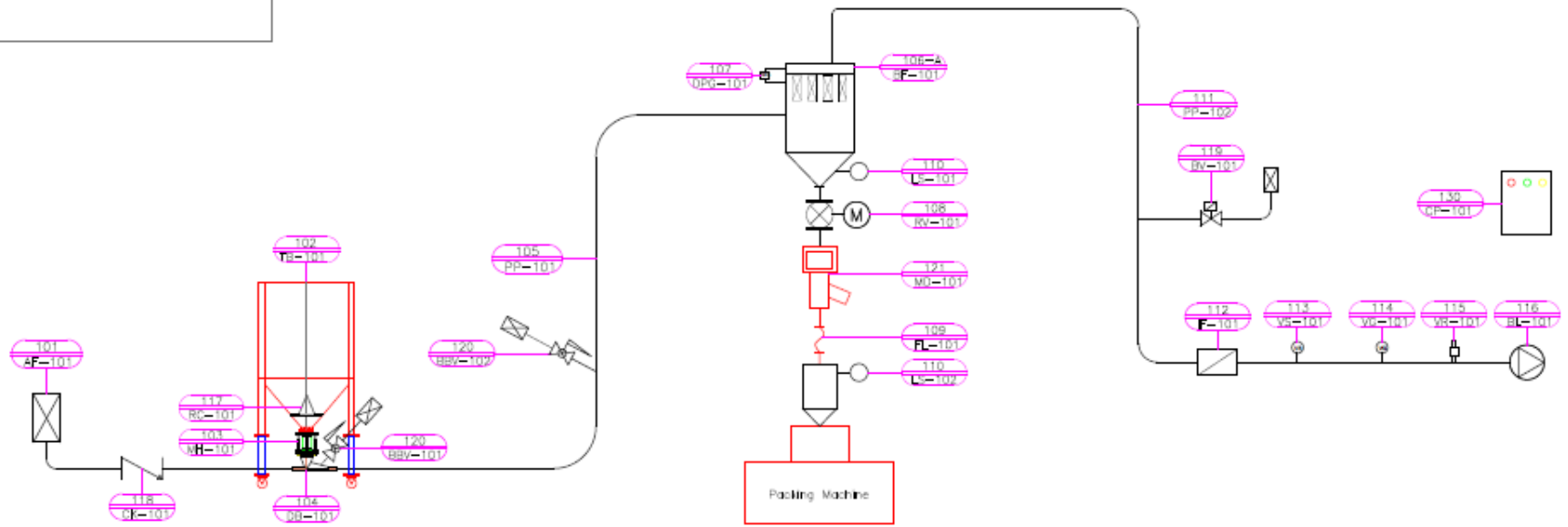
SCOPE OF WORK

- THEREC SUPPLY
- EXISTING/NOT SUPPLY
- NOTIFY/INSTALLATION

DESIGN SYSTEM

Project name : Pneumatic Conveying System
 Product name : Three in one coffee
 Particle Size : 100 micron
 Bulk Density : 1g/cm³
 Pneumatic conveyor Capacity : 1,500 kg/hr.
 Total Distance : 14 m
 Total Height : 6 m
 Number of pipe bend : 3 Pcs

NO.	EQUIPMENT	DESCRIPTION	QTY
101	AIR INLET FILTER	SUS304	1
102	TIE ROD	Existing / Modify Structure	1
103	WELDING HEAD	SUS304	1
104	DRIP OUT BOX	SUS304, TMSV27	1
105	PIPING JOINT	SUS316, Indent Pipe, 2" Feed grade	1
106	HEAVY DUTY HOSE	SUS304, Indent Pipe, 2" Feed grade	1
107	DIFFERENTIAL PRESSURE GAUGE	Transmitter	1
108	BUTTERFLY VALVE	SUS304, Indent Pipe, 2" Feed grade	1
109	FLY WHEEL	Scope of Confirmation	1
110	LEVEL SWITCH	Volume Filling, 4-11 Level	2
111	PIPING JOINT	SUS304, Indent Pipe, 3" Feed grade	1
112	FLY WHEEL	Scope of Confirmation	1
113	VACUUM SWITCH	Scope of Confirmation	1
114	VACUUM GAUGE	Scope of Confirmation	1
115	VACUUM RELEASE VALVE	Scope of Confirmation	1
116	VALVE	Scope of Confirmation	1
117	HEAVY DUTY HOSE	Scope of Confirmation	1
118	SWING CHECK VALVE	SUS304	1
119	BUTTERFLY VALVE	2" Indent Pipe, 4-11 Level	1
120	BALL VALVE	SUS304 & Indent Pipe, 4-11 Level	2
121	HEAVY DUTY HOSE	SUS304, & Indent Pipe, 4-11 Level	1
122	CONTROL PANEL WIRING	Scope of Confirmation	1



Rev.	Rev. Description	Date	By	Approve
01	Add Ball Valve & Butterfly Valve	27 JAN 20	Somchai C.	Pichak T.



Therec Corporation Ltd.
 Bangkok, THAILAND
 Tel : (662) 883 8034 Fax : (662) 883 8035
 E-Mail : sales@therec.com <http://www.therec.com>

Design	Somchai C.	Material	Contact part : SUS	Finish	
Date	18 APR 2019	DRAWING TITLE			
Checked	Pichak T.	Pneumatic Conveying System : 1,500 kg/hr P&ID			
Date		DRAWING NUMBER : A3-19-SCML-PCS-P&ID-R01			
SCALE	As Scale				

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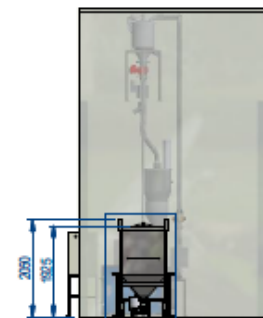
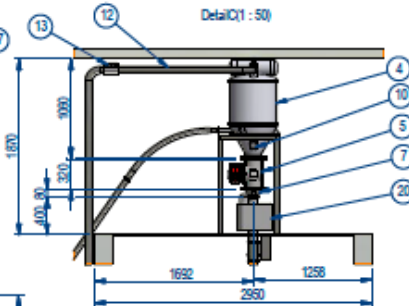
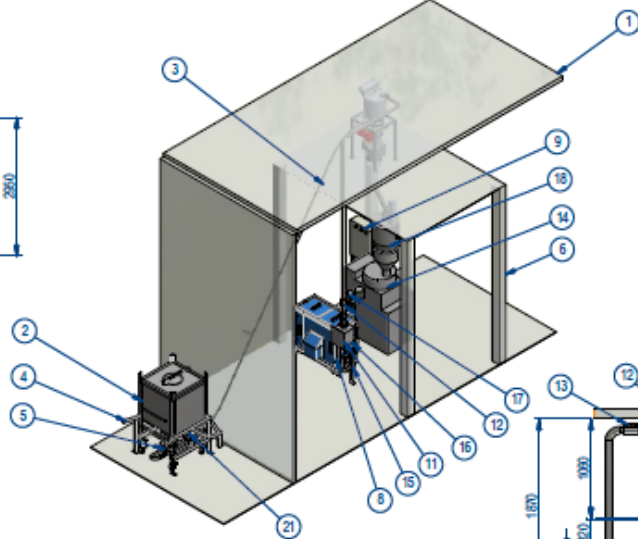
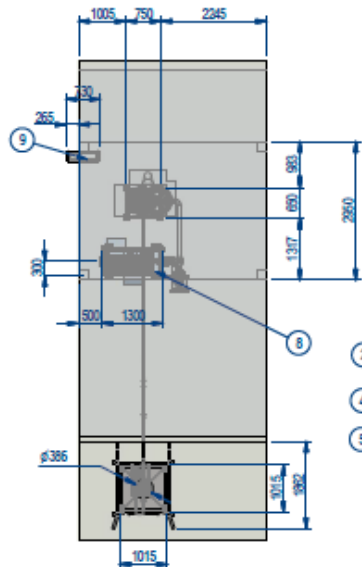


DO NOT SCALE DIMENSION - IF IN DOUBT ASK
อย่าวัดขนาดจากรูป - ถ้าไม่แน่ใจถามผู้ร่าง

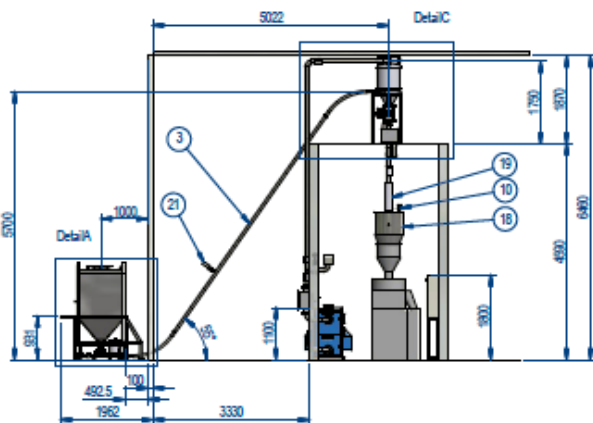
STANDARD FEATURES UNLESS OTHERWISE STATED: ALL DIMENSIONS IN MILLIMETRES. REMOVE ALL BURRS - BREAK ALL SHARP EDGES, 0.5MAX.
คุณสมบัติมาตรฐาน เว้นแต่จะระบุไว้เป็นอย่างอื่น: ทุกขนาดเป็นมิลลิเมตร. กำจัดครีบก้น - ทำมุมแหลมให้เรียบร้อย, 0.5MAX.
WELDING SYMBOLS ARE TO BS 449. SCREW THREADS: ISO METRIC COARSE MEDIUM FIT TO BS 3643. GEOMETRIC TOLERANCES ARE TO BS 308.

EQUIPMENT ITEM#

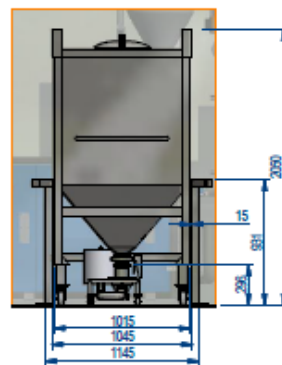
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1 of 6



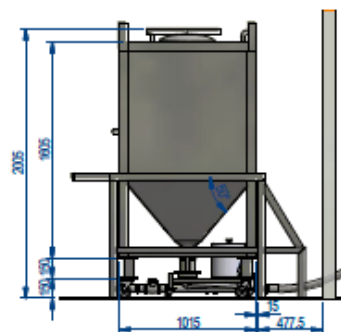
Detail B



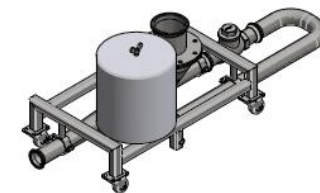
Overview Drawing (1 : 100)



Detail B (1 : 35)



Detail A (1 : 35)



		PARTS LIST		
ITEM	QTY	PART NUMBER	DESCRIPTION	MATERIAL
1	1	Warehouse		Generic
2	1	Tote Bin Ass	Modify	
3	1	Piping Product	2' Food grade	
4	1	Structure Stopper		
5	1	Inlet Product Set		
6	1	Structure of Receiver		Generic
7	1	Reduce under rotary valve		Stainless Steel
8	1	Blower Package NB80		
9	1	Control Panel Ass		
10	2	Level UWT 4020		Generic
11	1	Inline Strainer 3 in Tube		
12	1	Piping Receiver to Blower		
13	4	Coupling 3 in-3C Tube Ass		
14	1	Packing Machine		Generic
15	1	Piping Blower to Air		
16	1	Vacuum Switch		Generic
17	1	Butterfly Valve 2.5 in Auto		
18	1	Buffer Hopper_Ass		
19	1	Vent Filter		Generic
20	1	Metal detector Ass Ass		
21	2	Ball Valve 1.2 & Filter		

TOLERANCES UNLESS OTHERWISE STATED			
Dimension Range	Up to 300	Over 300 up to 500	Over 500
Linear Calling	+0.05	+0.10	+0.15
Bores	+0.04	+0.08	+0.12
Threads	+0.10	+0.12	+0.15
Flat	+0.02	+0.03	+0.04
Perpendicular	+0.10	+0.15	+0.20
Surface Finish	Rough as 10'		

Rev.	Rev. Description	Date	By	Approve

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Therec Corporation Ltd.
Bangkok, THAILAND

Tel : (662) 893 9034 Fax : (662) 893 9005
E-Mail : sales@therecorp.com <http://www.therecorp.com>

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Design	Somjai C.	Material :	Finish :
Date	21-Sep-19	DRAWING TITLE	
Checked	Pichai T.	Overview Drawing 01	
Date	21-Sep-19	DRAWING NUMBER : A3-19-PCS-JE-R03-1-AS-01	
Scale	1 : 80	Unit :	mm.

26 JAN 2020







JDE
JACOBS DOUWE EGBERTS





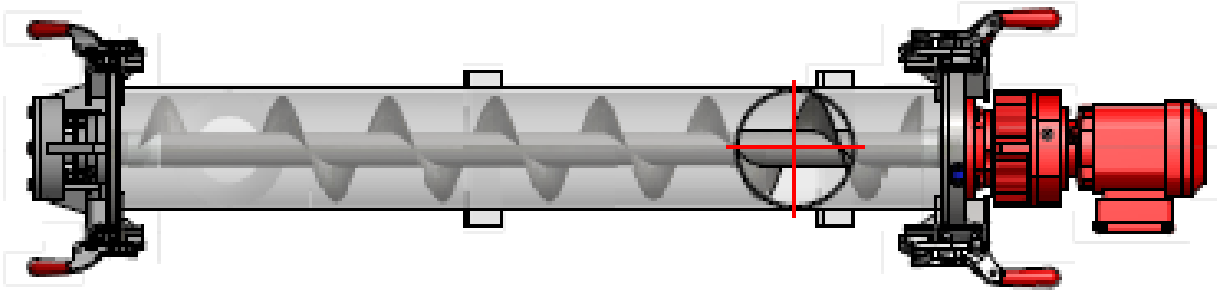
3 in 1 Cacao Powder Mix Processing System / 2021

AB Food Co.,Ltd. / Ovaltine 2012 to 2021



The powder handling systems consisting of :

- 4 of Pneumatic conveying systems
- 12 of Food grade easy clean bag filters
- 4 of High vacuum booster pump
- 8 of Food grade easy clean rotary valve
- 1 of Big bag & Tote Bin unloading station
- 5 of Food grade easy clean screw conveyors





DO NOT SCALE DIMENSION - IF IN DOUBT ASK!
 มิใช่การวัดขนาดเพื่อใช้สร้างงาน

STANDARD FEATURES UNLESS OTHERWISE STATED : ALL DIMENSIONS IN MILLIMETRES , REMOVE ALL BURRS - BREAK ALL SHARP EDGES, 0.5MAX.
 WELDING SYMBOLS ARE TO BS 449. SCREW THREADS : ISO METRIC COARSE MEDIUM FIT TO BS 3643. GEOMETRIC TOLERANCES ARE TO BS 308.

EQUIPMENT ITEM #

Weight N/A

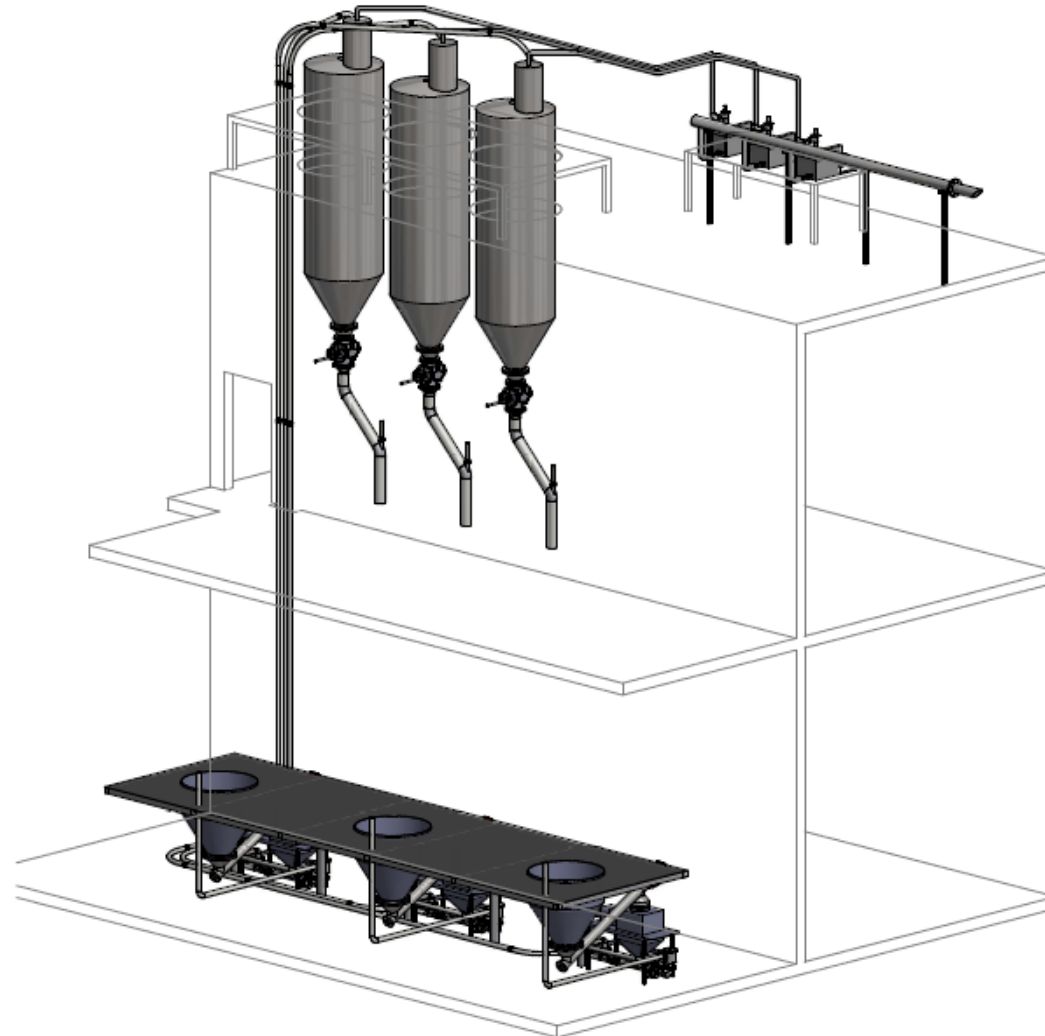
Sheet
1 of 4

Pneumatic Conveyor System

Customer : AB FOOD THAILAND

Project : BD 1,2,3

(Drawing for Review Not use for Construction)



TOLERANCES UNLESS OTHERWISE STATED			
Dimension Range	Up to 300	From 300 Up to 500	Above 500
Linear Cutting	±0.1	±0.15	±0.2
Machined	±0.1	±0.15	±0.2
Threaded	±0.1	±0.15	±0.2
Cast	±0.2	±0.3	±0.4
Welded	±1.0	±1.5	±2.0mm
File Dimension	±0.1	Angle ±0.1°	

Reference P&ID No. APP15-003-PID-06

Rev.	Rev. Description	Date	By	Approve

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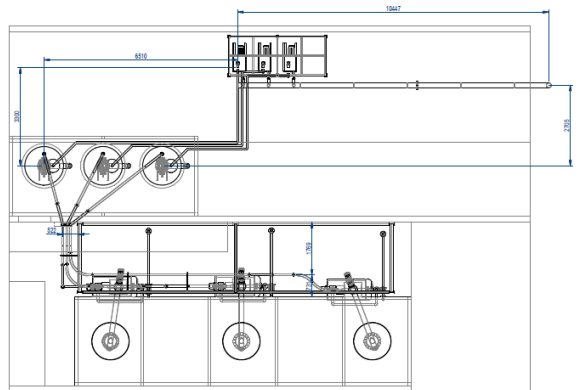


Therec Corporation Ltd.
Bangkok, THAILAND

Tel : (66) 2 893 9003-4 Fax : (66) 2 893 9005
 E-Mail : sales@thereccorp.com Http://www.thereccorp.com

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Design	Nuttapong.S	Material :	Finish :
Date	08-May-15	DRAWING TITLE Pneumatic Conveyor System	
Checked		Drawing for Review Not use for Construction	
Date	08-May-15	DRAWING NUMBER :	
Scale		Unit : mm	

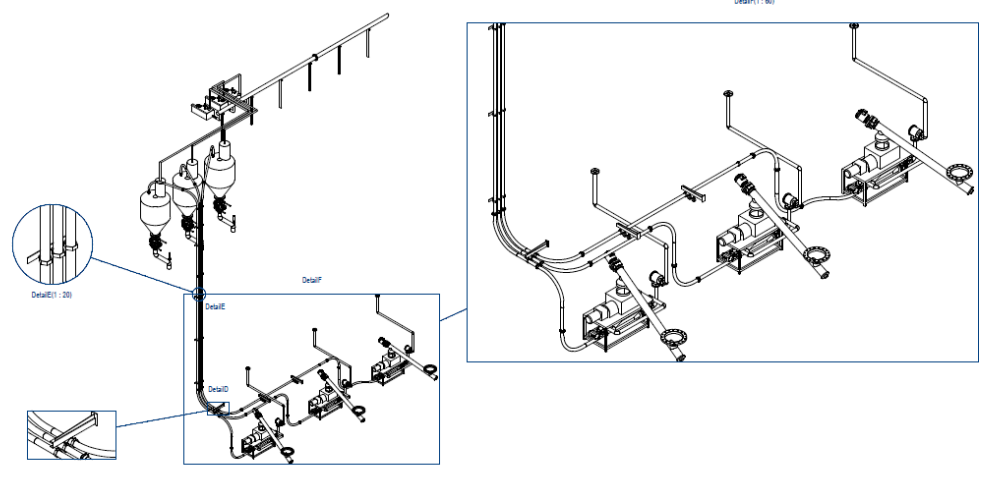


Rev.	Rev. Description	Date	By	Approve	PROJECT	80133 20146

Customer:	AB Food & Beverage (Thailand) Ltd.
Customer Logo:	
Customer Name:	Therac Corporation Ltd.
Customer Address:	Bangkok, THAILAND
Customer Tel:	Tel: +662 893 9024
Customer Fax:	Fax: +662 899 9005
Customer Email:	E-Mail: sales@therac.com, thailand@therac.com
Customer Website:	Website: www.therac.com
Customer Logo:	
Customer Name:	Therac Corporation Ltd.
Customer Address:	Bangkok, THAILAND
Customer Tel:	Tel: +662 893 9024
Customer Fax:	Fax: +662 899 9005
Customer Email:	E-Mail: sales@therac.com, thailand@therac.com
Customer Website:	Website: www.therac.com
Customer Logo:	
Customer Name:	Therac Corporation Ltd.
Customer Address:	Bangkok, THAILAND
Customer Tel:	Tel: +662 893 9024
Customer Fax:	Fax: +662 899 9005
Customer Email:	E-Mail: sales@therac.com, thailand@therac.com
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D:\Nulapong Work\Customer\AB Food\2014\vacuum System 801.2.30\Drawing\RD3 Pipe Route.dwg

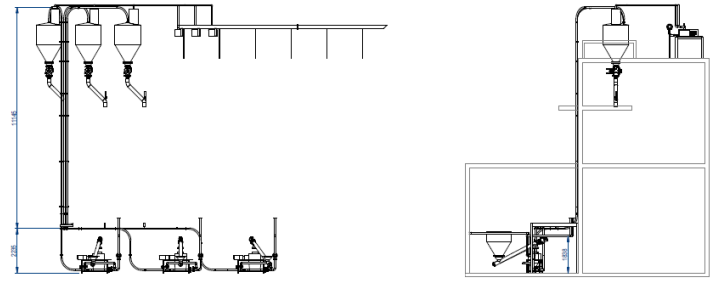


Rev.	Rev. Description	Date	By	Approve	PROJECT	80133 20146

Customer:	AB Food & Beverage (Thailand) Ltd.
Customer Logo:	
Customer Name:	Therac Corporation Ltd.
Customer Address:	Bangkok, THAILAND
Customer Tel:	Tel: +662 893 9024
Customer Fax:	Fax: +662 899 9005
Customer Email:	E-Mail: sales@therac.com, thailand@therac.com
Customer Website:	Website: www.therac.com
Customer Logo:	
Customer Name:	Therac Corporation Ltd.
Customer Address:	Bangkok, THAILAND
Customer Tel:	Tel: +662 893 9024
Customer Fax:	Fax: +662 899 9005
Customer Email:	E-Mail: sales@therac.com, thailand@therac.com
Customer Website:	Website: www.therac.com

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D:\Nulapong Work\Customer\AB Food\2014\vacuum System 801.2.30\Drawing\RD3 Pipe Route.dwg



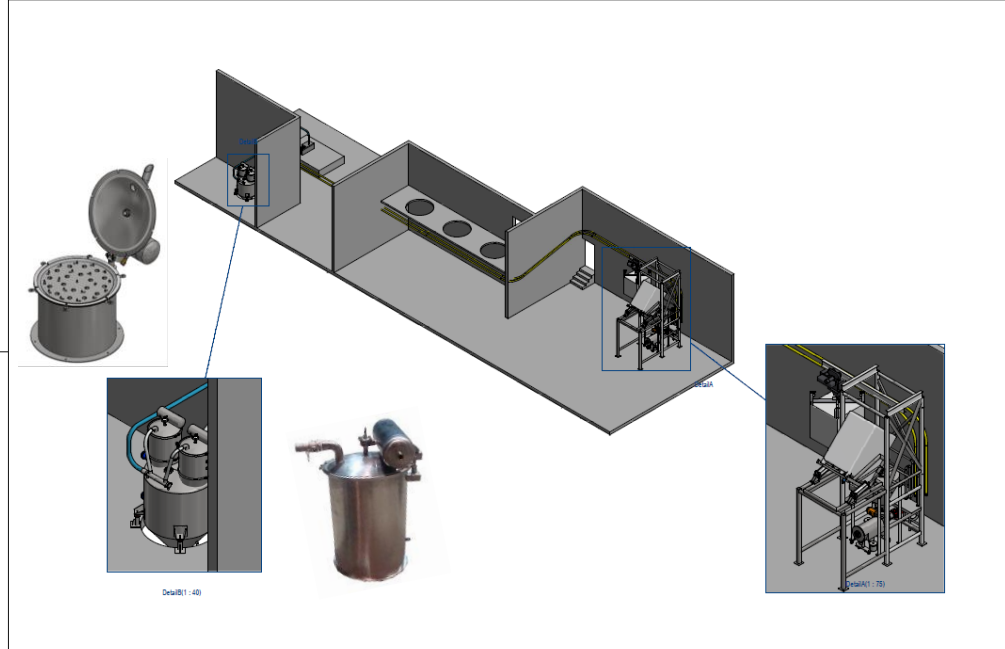
Rev.	Rev. Description	Date	By	Approve	PROJECT	80133 20146

Customer:	AB Food & Beverage (Thailand) Ltd.
Customer Logo:	
Customer Name:	Therac Corporation Ltd.
Customer Address:	Bangkok, THAILAND
Customer Tel:	Tel: +662 893 9024
Customer Fax:	Fax: +662 899 9005
Customer Email:	E-Mail: sales@therac.com, thailand@therac.com
Customer Website:	Website: www.therac.com
Customer Logo:	
Customer Name:	Therac Corporation Ltd.
Customer Address:	Bangkok, THAILAND
Customer Tel:	Tel: +662 893 9024
Customer Fax:	Fax: +662 899 9005
Customer Email:	E-Mail: sales@therac.com, thailand@therac.com
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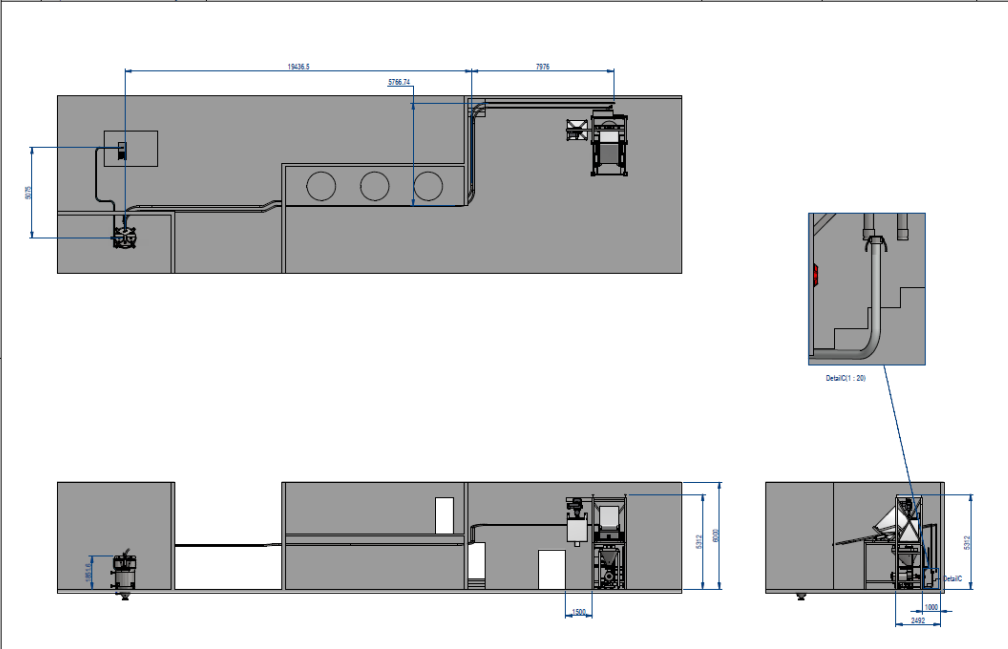
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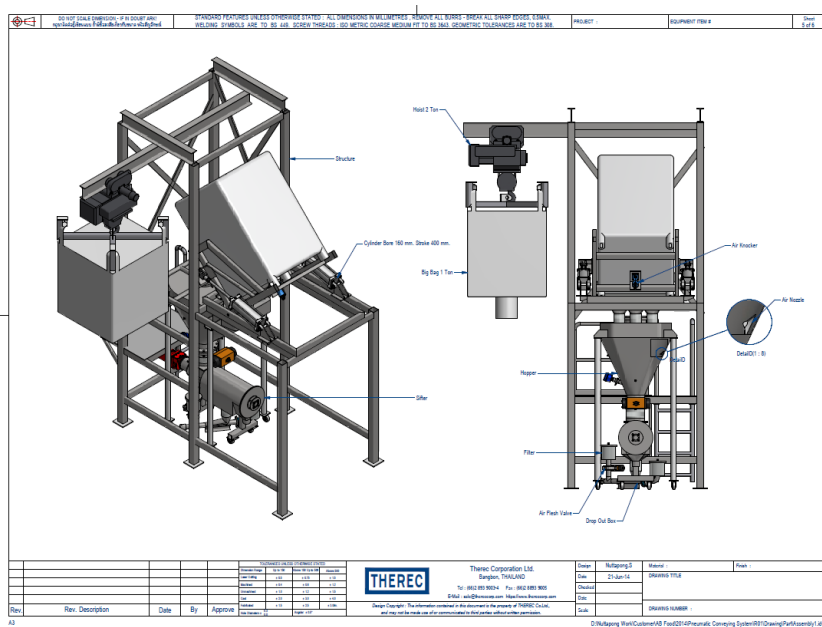
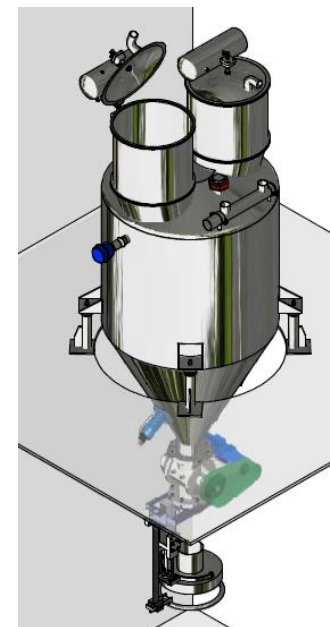
Rev	Rev. Description	Date	By	Approve

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Rev	Rev. Description	Date	By	Approve

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Rev	Rev. Description	Date	By	Approve

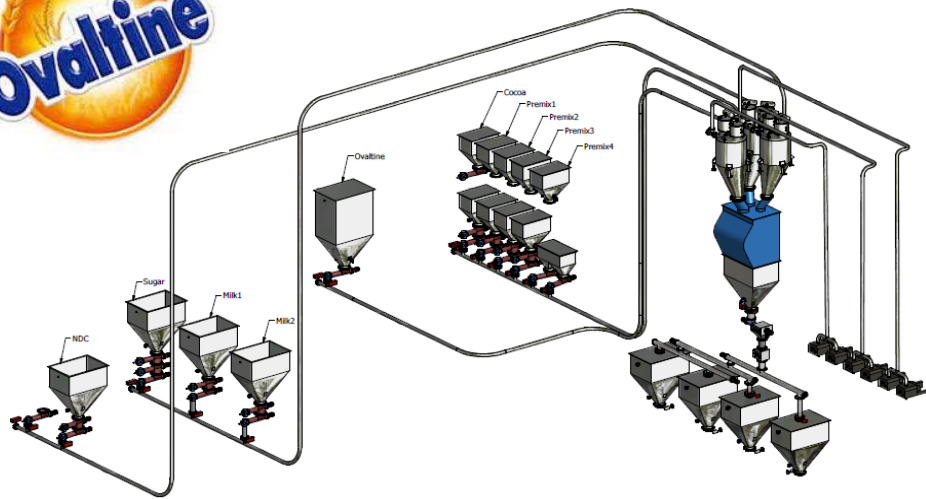
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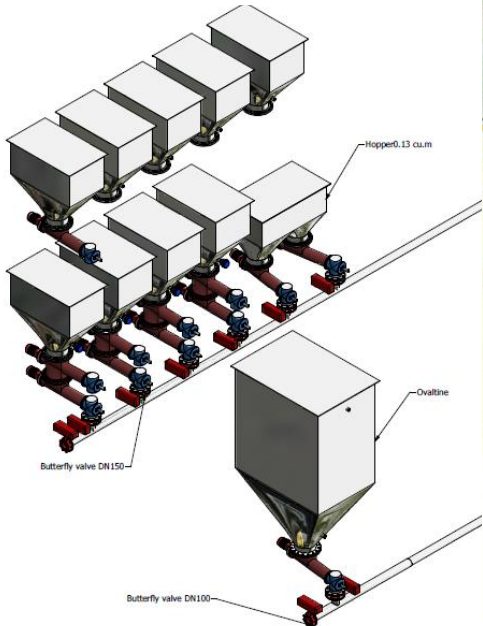
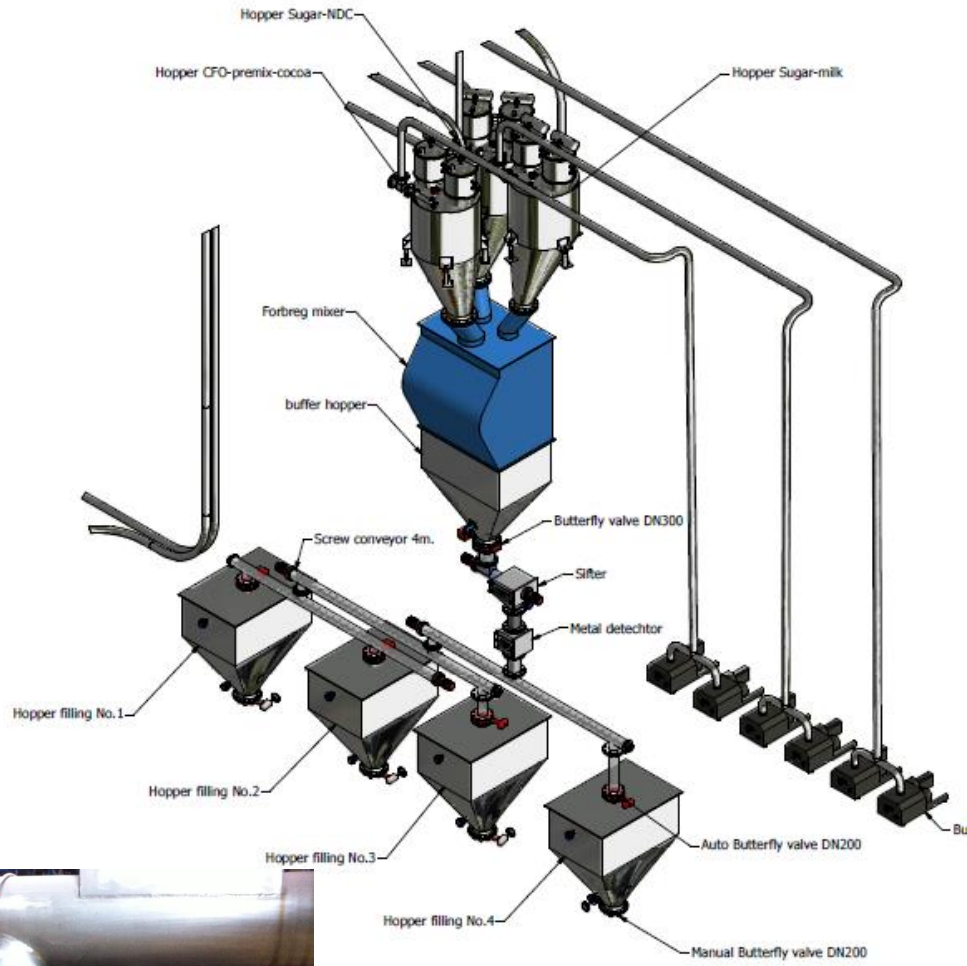


Tote Bin and Moving Head





DESIGN	Plengkwan A.	27/9/2555	TITLE	
DRAWN	Huittarong S.			
QA				
APPROVED			AB Food-Dry mix	
REVISION				
NO.	C	System	REV	0
SCALE		For REC.		

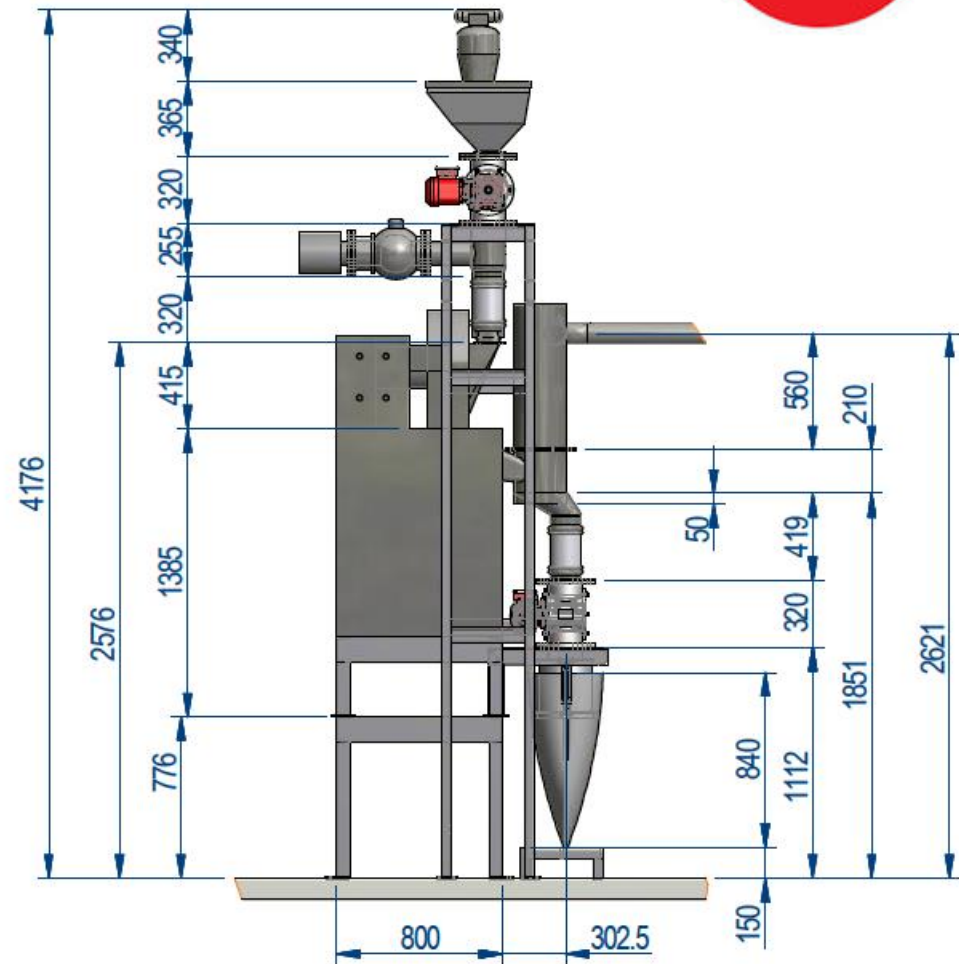
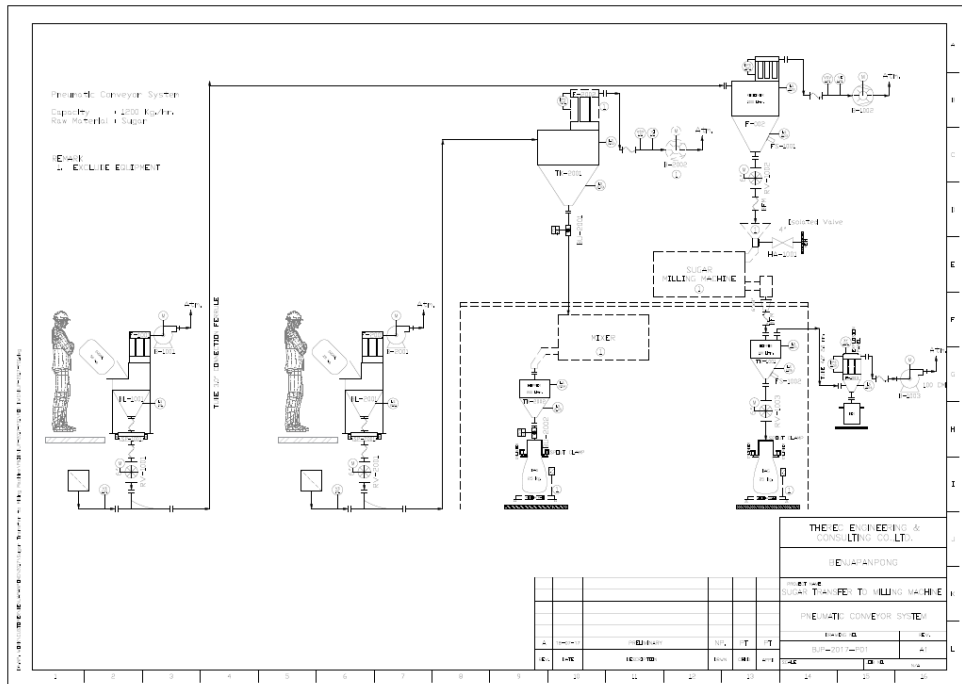


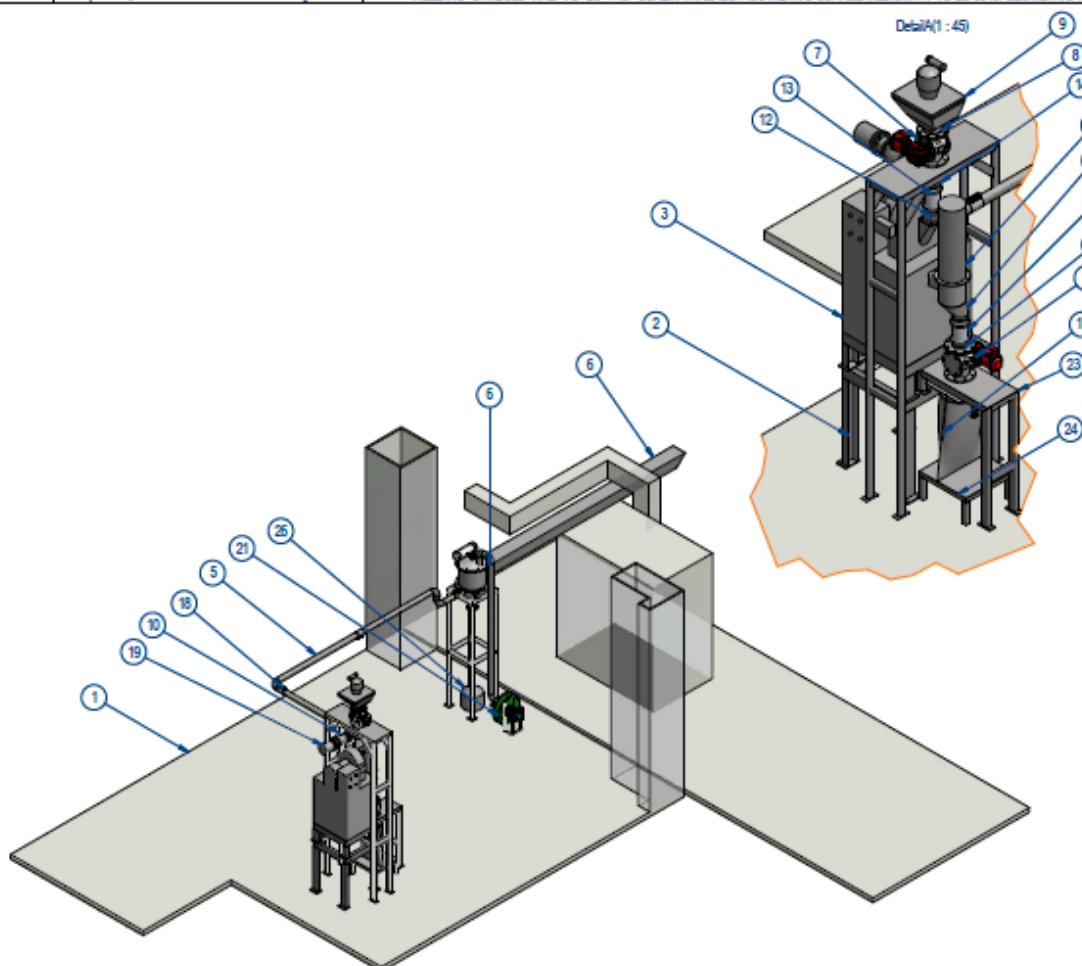
3 in 1 Coffee Powder Mix Processing System / 2019

Benjanpong Co.,Ltd (Quality Coffee Co.,Ltd's Co-packer) / Nest cafe

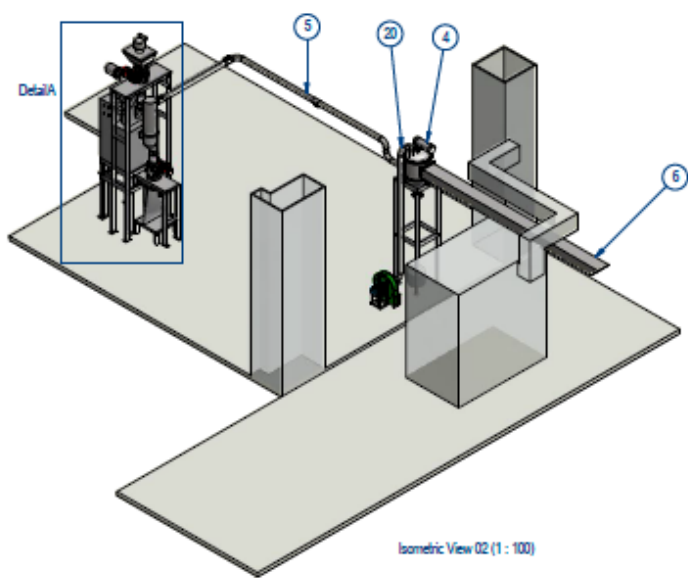
The powder handling system consisting of :

- 1 of Pneumatic conveying vacuum loading system
- 1 of Sugar Grinding Machine
- 1 of Dust collecting system
- 1 of Explosive Dust protection system
- 1 of Semi Auto 20 kg bag filling station





Isometric View 01 (1 : 90)



Isometric View 02 (1 : 100)

		PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION	MATERIAL	
1	1	Operation room		Generic	
2	1	Mil structure_Addition		Steel	
3	1	Mil Machine Existing Ass	Existing		
4	1	Hopper receiver Ass	Structure is steel	Stainless Steel	
5	1	Piping 4 in food grade	Food grade	Stainless Steel	
6	1	Explosion and duct Ass		Steel	
7	2	TRC-150-AL-IB-D	Rotary Valve	Stainless Steel	
8	1	Reduce 6 in to existing flange 02		Stainless Steel	
9	1	Cover and Jet loader	Existing		
10	1	Float Valve Isolation		Stainless Steel	
11	1	Pipe duct dia 225 x 1000 mm		Stainless Steel	
12	1	Reduce 150 to existing flange		Stainless Steel	
13	2	BFM Spigots 150		Stainless Steel	
14	1	Three way pipe		Stainless Steel	
15	1	Reduce 255 to 150		Stainless Steel	
16	1	Flange 6 in jis 10k 6t		Stainless Steel	
17	1	Small bag	Scope of customer	Generic	
18	4	Coupling 4 in-3C tube Ass		Galvanize	
19	1	Inlet filter		Stainless Steel	
20	1	Piping outlet receiver		Stainless Steel	
21	1	CentriAss		Steel	
22	1	Spool clamp OK			
23	1	New structure 01	Structure : Steel ; Plate : Sus		
24	1	Table small bag Structure	Scope of customer	Stainless Steel	
25	1	New structure 02	Structure : Steel ; Plate : Sus		
26	1	Bin		Stainless Steel	

TOLERANCES UNLESS OTHERWISE STATED			
Dimension Range	Up to 100	From 100 to 400	Over 400
Linear Cutting	±0.15	±0.25	±0.3
Machined	±0.1	±0.15	±0.2
Unmachined	±0.2	±0.3	±0.4
Cast	±0.2	±0.3	±0.4
Forged	±0.15	±0.2	±0.25

Rev.	Rev. Description	Date	By	Approve

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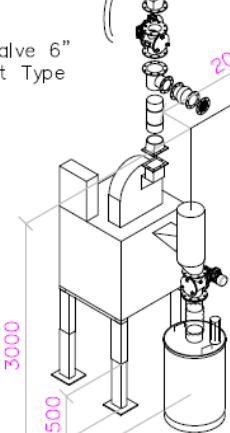
Drawn	Sornjai C.	Material :	Finish :
Date	22-Aug-17	DRAWING TITLE	
Checked		GA Drawing : Over View drawing	
Date	22-Aug-17		
Scale	1 : 90		
DRAWING NUMBER : A3-TRE-SJP-OPTION 01-R03-P1			



Jet Loader
900 kg/hr

Rtary Valve 6"
Compact Type

Isolated Valve 4"



2000

6000

Rtary Valve 6"
Compact Type

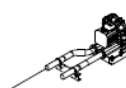
Bag Filter

Explosion Panel



3500

Ring Blower



Rev.	Rev. Description	Date	BY	Approve	<p>THEREC Corporation Ltd. Bangkok, THAILAND Tel : 00662 883 9900-4 Fax : 00662 883 9903 E-Mail : info@therec.com http://www.therec.com</p> <p><small>Design Copyright © The information contained in this document is the property of THEREC Co., Ltd., and may not be made use of or communicated to third parties without written permission.</small></p>	Drawn : CHANINDIUM Date : 06/07/2017 Checked : PICHATIT Date : 06/07/2017	Model : DRAWING TITLE : ISOMETRIC VIEW	Risk : Rev. :	Rev. :
					SCALE : UNIT : mm. DRAWING NUMBER : ASTR04UFFE04-001				

