PROFESSIONAL INSTALLATION SERVICE **INGENIUM CO., LTD**

SINCE 2015

COMPANY PROFILE

Anniversara

The Latin Word Ingenium has meanings "The ability to have an inborn" specifically refers to cognitive ability. Such as artificial intelligence

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BUSINESS PROFILE.

Company Name	: Ingenium Co.,Ltd
Business Trade Name	: Engineering & Turnkey Installation Services
Date Established	: March 2015
Tax ID	: 0-1255-58007-26-4
Business Address (Head Office)	: 25/38 Moo 4 T.Bang Phai A.Muang Nonthaburi, 11000 Thailand
Business Address (Factory)	: 37/22 Moo 6 Lat Lum Kaeo, Lat Lum Kaeo District, Pathum Thani 12140 Thailand
Contact Numbers	: Tel/Fax . 02-117-4619
Register Capacity	: THB 10,000,000
Employee	: 40 Person (Full time employee)
Email	: itti@ingenium.co.th
Web Site	: www.ingenium.co.th







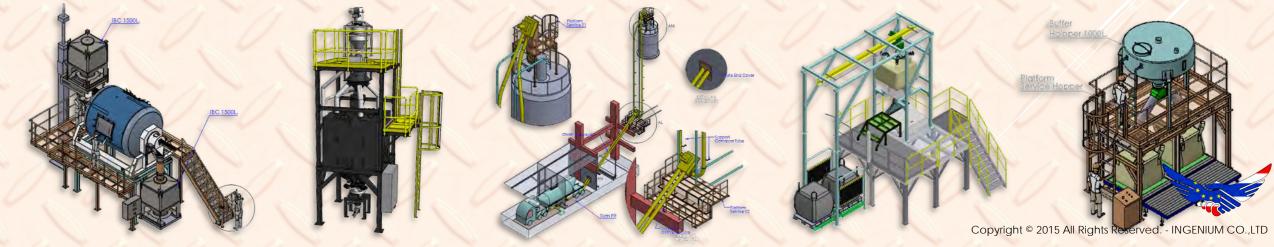


ABOUT US.

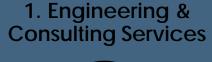
Ingenium Co.,Ltd was established since March 2015. We have experience and expertise in bulk solids material handling system and provide LEAN production solutions within various industries. We focus on the complete production process from bulk material handling system, Industrial Sieving and Screening Equipment, High-end Rotary Valves and Diverter Valve, Plastic extrusion System, Pneumatic conveying system, IBC System and production intermittent processes including movement and lifting of goods.

We cover engineering design, manufacturing for stainless and mild steel work, Professional installation service, Commissioning start-up services, and after-sales services.

Ingenium Co.,Ltd projects today range in scope from equipment and accessory sales to complete design and installation of turnkey systems. Our goal is to create a long and successful relationship with our customers to help them achieve improvement of product quality, increase production efficiency and improve labor operations.



5 PILLARS OF OUR BUSINESS





Process Improvement Consulting Services

Analyze and optimize production processes for better efficiency.

Engineering Design

3D process concept design and equipment layout integration. 2. Manufacturing & Fabrication



Bulk Material Handling Components

Supply of equipment and components for bulk material handling.

Structural Steel Fabrication

Fabrication of stainless/mild steel structures, silos, hoppers, tanks, and piping. 3. Installation & System integration



Installation Service

Professional installation services for bulk material handling and other systems.

Electrical and Control

PLC programming and operation interface for AB, Siemens, Omron, Mitsubishi, etc. 4. Logistics & Manpower Services



 Loading and Unloading Labor Services

> Equipment unloading, unpacking, and positioning services.

Manpower Supply Services

Skilled labor supply for installation and commissioning support.

5. After-Sales & Support Services



 After Sales/Service and Support

24/7 technical support by skilled technicians.

Certified Service Partner

.

1st Certified DMN service partner in Southeast Asia



BOARD OF MANAGEMENT





Itti Na Bangchang

Chairman

Suchin Kingkaew

President



Sanao Maneepruk Senior Advisor



Sutat Puolprasert

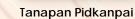


Chief Officers

Patcharaporn Sasiwimonrit



Noppharoj Lertakkharawitch



Adisak Arunrung





Supakit Piwpong





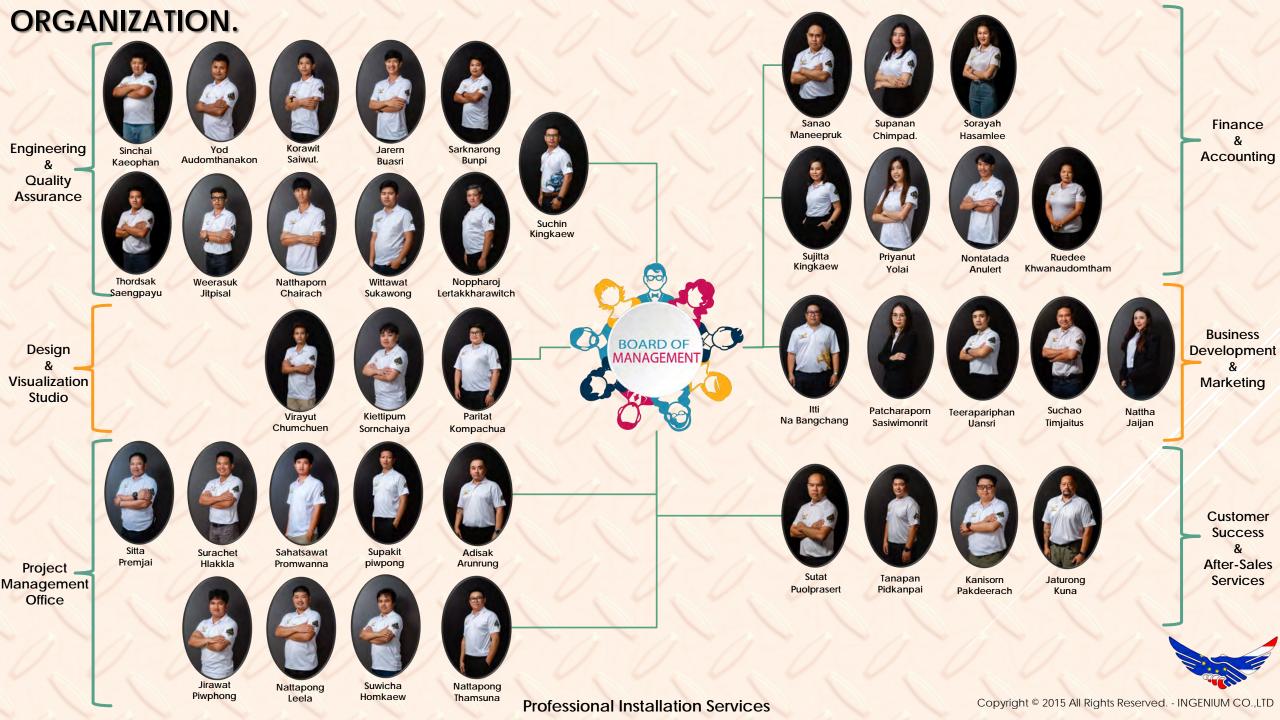
Paritat Kompachua Teerapariphan Uansri



Professional Installation Services

Group of Manager

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SAFETY FIRST...NO COMPROMISE.

IN-HOUSE SAFETY TRAINING (IG SAFETY DAY)

List of Safety Training Courses with Certificates (for Site Access):

- ✓ Supervisor Safety Officer Training.
- ✓ Working at Height Safety Training.
- ✓ Scaffolding Erection and Inspection Training.
- ✓ Confined Space Entry Safety Training.
- ✓ Crane Operation Safety Training 4 Key Roles.
- ✓ Basic Firefighting and Emergency Response Training.



















SAFETY FIRST... FIVE MINUTES FOR YOUR LIFE









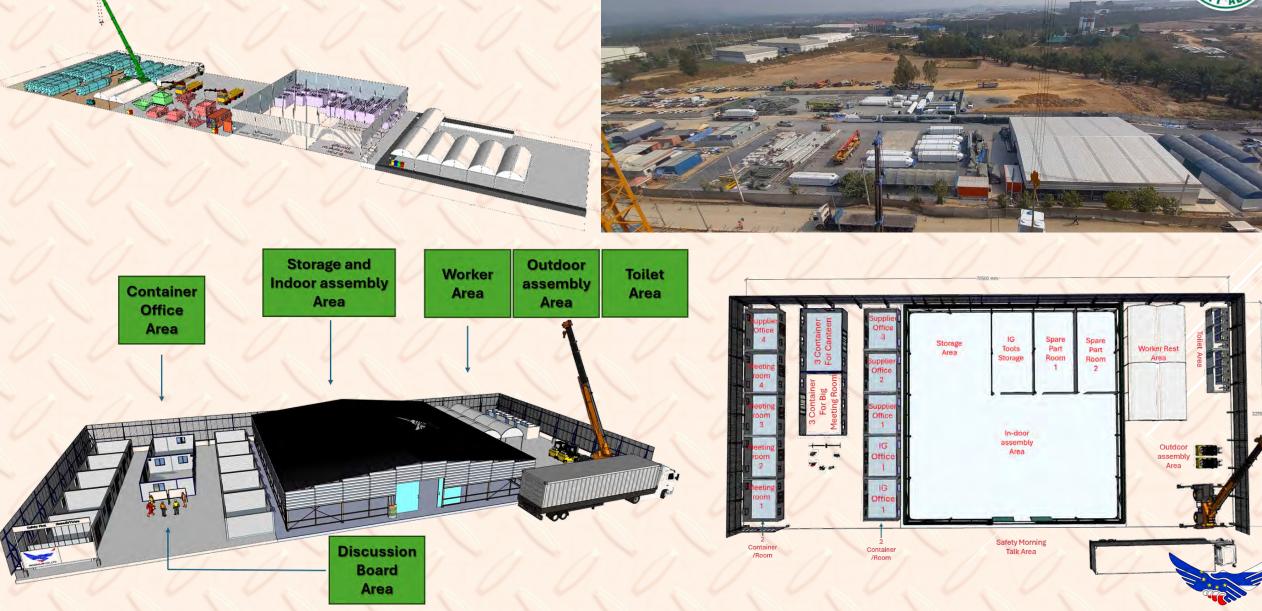






INGENIUM SITE OFFICE AND STORAGE AREA





ENGINEERING DESIGN CENTER.

By 3D and 2D Licensed program





ZW 3D



SketchUp Pro 2017



Adobe Acrobat-





CERTIFICATE.

- Effective Safety Training.
- Basic Vibration, Alignment and Balancing Training.



PROGRESS REPORT



ŝ.	Platform for cyclone 3 set and 4	37%	3/%	 Parlave out full 100% to outsil. Because, 7⁴ fluor our far men crave to als 844251 install. Cockent net full 100% to metall, Incount, wat
2	Cyclone 3 set mstall	0%		the step convect to blocks.
1	Silo BM-250 assembly & wstall	200%	100%	
4	Lot 2 unloading	175	20046	United to sharege term to one costal.
5	Platform & Dail cyclone 4 set instal	2%	206	Remain systems & Steam' (e. (200-) = 1 ind and mapping to the and carft install.
6	São BHORIDADAU (1 set) Install	0%	provis.	stat mally his liding post poster.
2	Multi scale & Silo BM200-2 mstall	0%	0%	
8.	Lot 3 Uniceding	176	100%	Critical to Harage Net! It ple accel
1	Platform 12 bucket elevator of gravity annual	-0%	0%	
e,	Support frame of Gravity M/C installation & Gravity M/C 3 set install	994	100%	Nemain wine part can't estall bicolous, web ten Mocateri or mobily part. (Innorig part)
а.	Puttorm for salo tutes? of gravity	0%	100%	
17	Lot 4 Unitsatting	0%	21809%	control to interrupt term & one manual
13	Platform color softer endal	0%	37%	
4	Puttern Heer Inital	0%	3/%	

STONAL INSTALLATIONATION SERVE













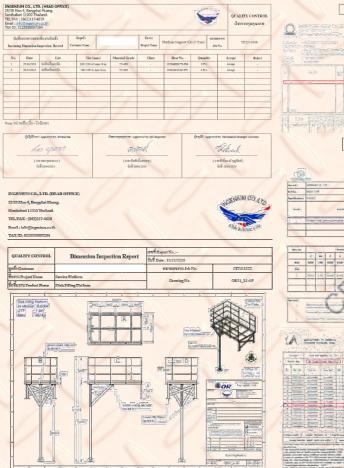




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QUALITY CONTROL (QC)

- Raw material certificate report.
- Coating layer thickness inspection.
- Roughness inspection.
- PT Test (liquid penetrant test).
- RT (Radiographic Test).
- Dimension Inspection Report.











ENGINEERING CALCULATION

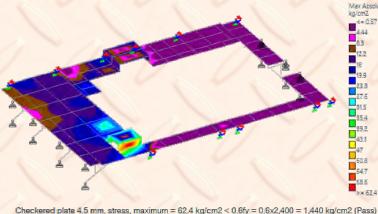
Steel structure Strength Calculation Report (By STAAD.Pro)

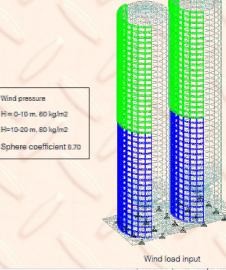


Steel design ratio of steel platform (Overall < 1.00 Pass)

No	Steel size	Type of member	Steel design ratio	Result
1	H-250x125x6x9 mm.	Main beam	0.264	< 1.00 (Pass)
2	[-100x50x5x7.5 mm.	Sub beam	0.252	< 1.00 (Pass)
3	H-100x100x6x8 mm.	Bracing	0.409	< 1.00 (Pass)

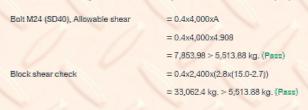
Steel design ratio detail by property

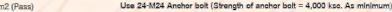




			Horizontai	Vertical	Horizontal	Moment		
	Node	LIC	Fx kg	Fy kg	Fz kg	Mx kg-m	My kg-m	Mz kg-m
Max Fx	26	102 DL+0.85WATER+0.7WIND	5513.888	21253.916	2.307	0.000	0.000	0.000
MinEx	38	101 DL+0.85WATER	-4806.100	18612.547	-1.692	0.000	0.000	0.000
Max Fy	26	102 DL+0 85WATER+0.7WIND	5513.888	21253.916	2.307	0.000	0.000	0.000
Min Ey	37	102 DL+0 85WATER+0 7WIND	-3091.326	6428.824	-473 160	0.000	0.000.	0.000
Max Fz	46	102 DL+0.85WATER+0.7WIND	1772.498	20003.217	4948.618	0.000	0.000	0.00
Min Fz	30	102 DL+0.85WATER+0.7WIND	1788 864	20020.185	-4937.288	0.000	0.000	0.00
Max Mx	26	101 DL+0 85WATER	4806 100	18612.547	1.692	0.000	0.000	0.000
Min Mx	26	101 DL+0.85WATER	4806 100	18612.547	1.692	0.000	0.000	0.00
Max My	26	101 DL+0.85WATER	4806.100	18612.547	1.692	0.000	0.000	0.000
Min My	26	101 DL+0.85WATER	4606.100	18612.547	1.692	0.000	0.000	0.000
Max Mz	26	101 DL+0.85WATER	4806.100	18612.547	1.692	0.000	0.000	0.000
Min Mz	26	101 DL+0.85WATER	4806.100	18612.547	1.692	0.000	0.000	0.000

Summary reaction force in bolt (Load from Silo calculation report)





 No.
 Member
 Type of structure
 Sitel design ratio
 Result

 1
 07-450:150.05 mm.
 Main column
 0.867
 <1.00 Fass</td>

 2
 07-450:150.05 mm.
 Main column
 0.867
 <1.00 Fass</td>

 2
 07-450:150.05 mm.
 Main beam
 0.481
 <1.00 Fass</td>

 3
 07-450:150.05 mm.
 Main beam
 0.481
 <1.00 Fass</td>

 4
 07-450:150.05 mm.
 Banding
 0.855
 <1.00 Fass</td>

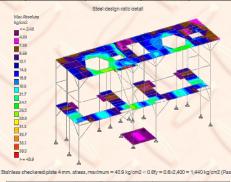
 8
 12-409:1500.05 mm.
 Sub beam
 0.238
 <1.00 Fass</td>

 8
 12-409:050.05 mm.
 Sub beam
 0.2414
 <1.00 Fass</td>

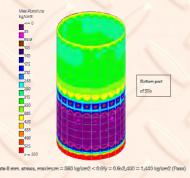
 8
 07-409:050.05 mm.
 Sub beam
 0.414
 <1.00 Fass</td>

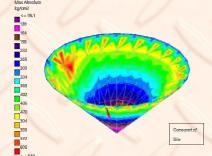
 6
 07-409:050.05 mm.
 Sub beam
 0.414
 <1.00 Fass</td>

 7
 12:056:66.05 mm.
 Sub beam
 0.348
 <1.00 Fass</td>

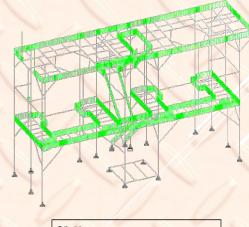


	Node	e L/C		Horizontal	Vertical	Horizontal	Moment			
			Fx	Fy	Fz	Mx kg-m	My kg-m	Mz kg-m		
MaxFx	23	101 DL+LL	331.043	7330.667	-479.530	0.0001	0.000	0.000		
Min Ex	22	101 DL+LL	-335.595	8528 191	-518.467	0.000	0.000	0.000		
Max Fy	22	101 DL+LL	-335.595	8528.191	-518.467	0.000	0.000	0.000		
Min Fy	431	101 DL+LL	2.348	245.622	-1.160	0.000	0.000	0.000		
Max F2	140	101 DL+LL	-0.279	977,096	626.058	0.000	0.000	0.000		
Min F2	22	101 DL+LL	-335.595	8528 191	-518,467	0.000	0.000	0.000		
Max Mx	1	101 DL+LL	33.322	2099,103	85,361	0.000	0.000	0.000		
Min Ms	1	101 DL+LL	33.322	2099 103	85,361	0.000	0.000	0.000		
Max My	1	101 DLALL	33.322	2099 103	85:361	0.000	0.000	0.000		
Min My	1	101 DL+LL	33.322	2099.103	85,361	0.000	0.000	0.000		
Max Mz	1	101 DL+LL	33 322	2099 103	85.361	0.000	0.000	0.000		
Min Mz	1	101 DL+LL	33.322	2099.103	85,361	0.0001	0.000	0.000		





Stainless steel plate 6 mm. stress, maximum = 640 kg/cm2 < 0.6ky = 0.6x2,400 = 1,440 kg/cm2 (Pass





Dead load inpu



The Steel Structure Strength Calculation Report is prepared to verify that the structure is strong, safe, and complies with engineering standards. It supports construction permit applications and serves as a technical reference for all stakeholders. Copyright © 2015 All Rights Reserved. - INGENIUM CO., LTD

3D Concept Design

lening

Industrial Sieving & Screening Equipment.

farleygreene



BY INDUSTRIES







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Nutriceutical

Reclamation & Recycling

Additive Manufacturing

High-end Rotary Valves & Diverter.

DMN-WESTINGHOUSE has been designing and manufacturing rotary valves, diverter valves and other related components for the bulk solids handling industry for many years.





ROTARY VALVES

Our rotary valves and diverters have a well-established reputation for being able to handle all kinds of dry powders and granular materials, such as sugar, cocoa, starch, flour, chemical ingredients, lime powder, china clay, fly ash and wood chips. A number of standard rotary valves can be upgraded, depending on the product handled. The housing can be made from Ni-hard casting when working with abrasive products, such as fly ash. Or the inside of the housing can be coated with chromium or tungsten when working with mild abrasive products. What's more, the valve can be fitted with a special rotor when processing sticky products or starch, for example.

use or a variety of applications. The extensive diverter range comprises a series of plug diverters (dual pipe, single pipe, CIP suitable, gravity) and tube diverters (2-14 ports), some of which are also available in USDA Dairy accepted version. For the mineral industry, the BTD ball type diverter with its rugged design is very suitable for

at all would present a very



WESTINGHOUSE

PLASTICS A world with no processed chemical dustry which touches literally inhospitable environment. No

Thanks to carbon dating, scientiste are reasonably sure that around 43,000 years ago, our ancestors

High-end Rotary Valves & Diverter.

SERVICE & MAINTENANCE

DMN-WESTINGHOUSE provides preventive maintenance, for example when it comes to finetuning rotor blades and determining tolerances, etc. \rightarrow



What does this mean for you as a customer?

- Annual inspection and maintenance
- ✓ 24/7 service, 365 days a year
- Serviceman within 24 hours on site in case of a defect
- ✓ Advise on increasing the maintenance interval
- Smaller chance of a production standstill due to breakdowns
- ✓ Also possible with delivery through a retailer
- ✓ Under conditions possible in retroaction





CWN

2025





QUALIFIED, VERIFIED, CERTIFIED!

S.W.L 300 KG

STORES.

Contraction in the

1

IUC

Ceth

ROTARY VALVES AND DWERTE VALVES

FTER SALES / SERVICE AND SUPP

24 HOURS A DAY, 7 DAYS A WEEK, 365 DAYS A YEAR OUR SKILLED TECHNICIANS CAN HELP YOU.

114

6

Distributor | Thailand

BRAMBATI S.p.A.

Brambati specialises in coffee production plants and similar types.

We can supply "turnkey" plants, from the reception of green coffee up to feeding packaging machines, through cleaning, storage, weighing, blending, roasting, conveyance (with either traditional mechanical conveyors or the latest generation of slow conveyors), grinding and degassing.

Our roasters come in a variety of sizes, from 5-7.5Kg/batch (20Kg/h.) to 600Kg/batch (3000Kg/h.). They can be the traditional type (KAR or KAR-S models) or with highly automated design (BR models), allowing for complete flexibility in controlling the coffee roasting process, by adapting the roasting features to the different Customer requirements.



CUSTOMER CARE SERVICE



Brambati specialises in coffee production plants and similar types.

Brambati has introduced a new Customer Care service to provide our customers with quick and efficient assistance worldwide.

Phone line Our service numbers are <u>0383 73795</u> when calling from Italy <u>+39 0383 73795</u> when calling from abroad

For quick access to the service, please prepare the following information in advance:

- ✓ Company data
- Customer code (unique code assigned to each Brambati customer via e-mail)
- Type of machine/plant with serial number or wiring diagram of reference
- ✓ Contact person to call back
- Severity of the fault (informational, nonblocking, partially blocking, total block)



JOB REFERENCE. 578 BFM

Job Design Reference for BFM



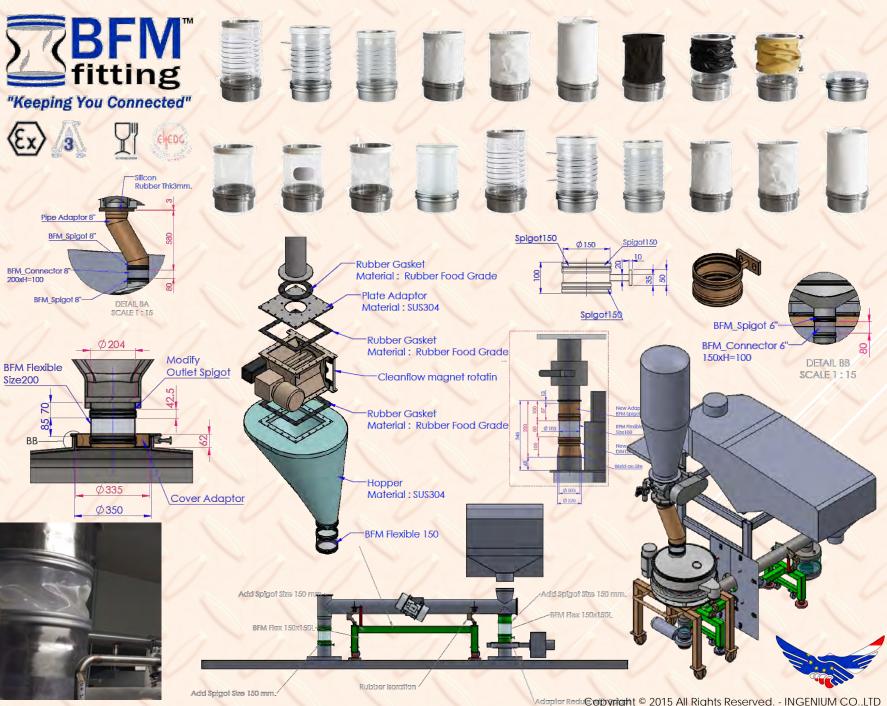
- 100% dust tight seal
- No product build-up, no contamination
- Standard sizes 100-650 mm diameter
- FDA and 3-A hygiene certification
- Ideal for Clean in Place (CIP)
- Certified explosion resistance
- Vacuum resistant





Size200

BB-



IBC 1500L

IBC 1500L.

Installation Lindor Mixer

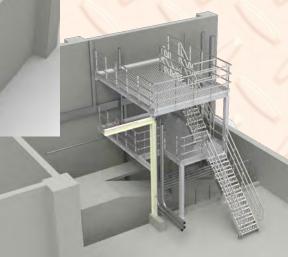






Stainless Platform With Hygienic Design







Stainless Platform & Galvanized Steel (Fabrication and Installation.) With Hygienic Design Step of work platform installation



Bulk Bag Unloading System





Piping Fabrication and Erection Work

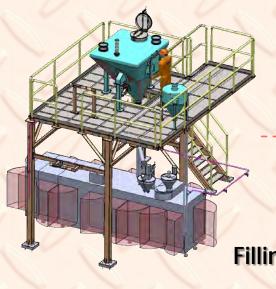


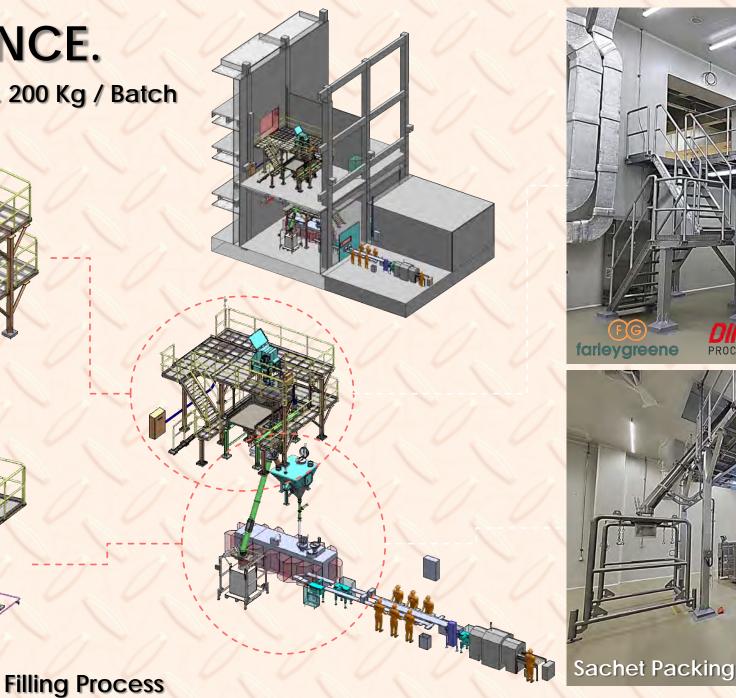




Dry Mix - Turnkey Line . 200 Kg / Batch

Mixing Process

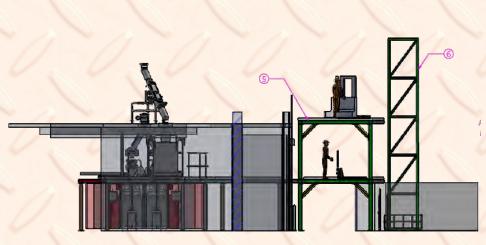






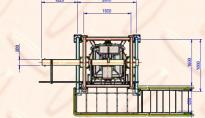
Can Line Project









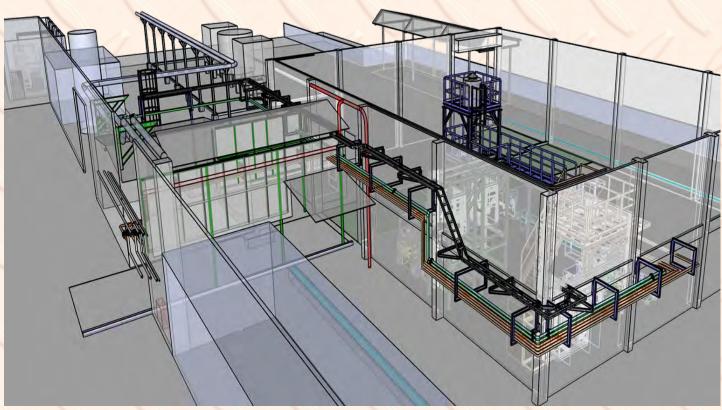




Installation Job For Compounding plastic extrusion lines









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Big Bag Unloading Station with Bucket Elevator Transfer System





SUS304 Platform



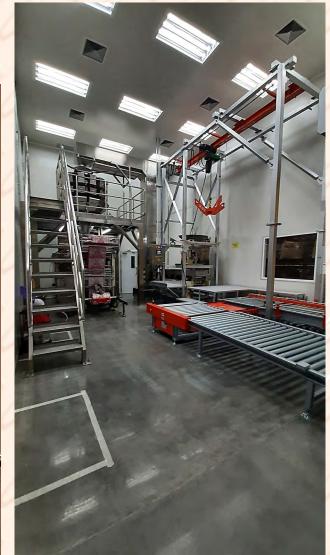
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Big Bag Unloading Station with Roller Conveyor













BRAMBATI. Design and Supply Main Equipment INGENIUM. Supply Local Equipment and Installation work for Coffee Plant ROASTER MOD. BR3600



Installation Work for ME Platform and Structure Frame





Silo 10 Chamber @ 2 Silo







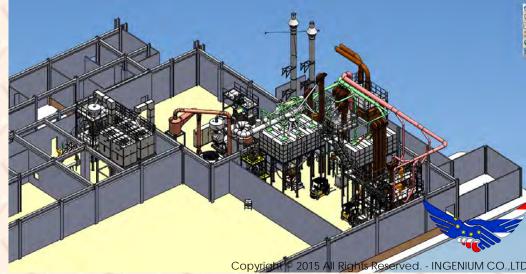


Complete line Coffee Roaster Plant - Installation

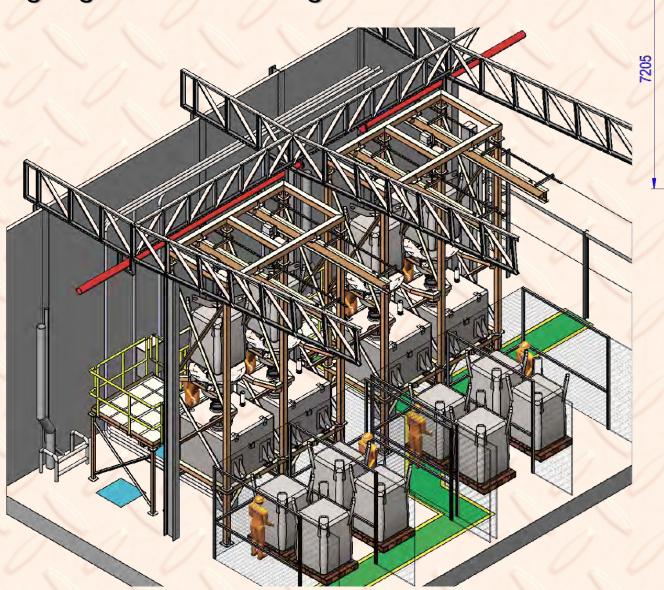


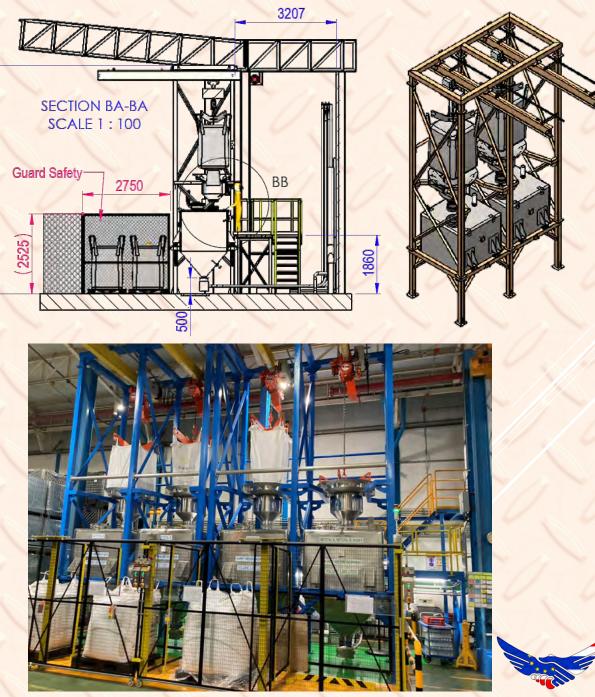






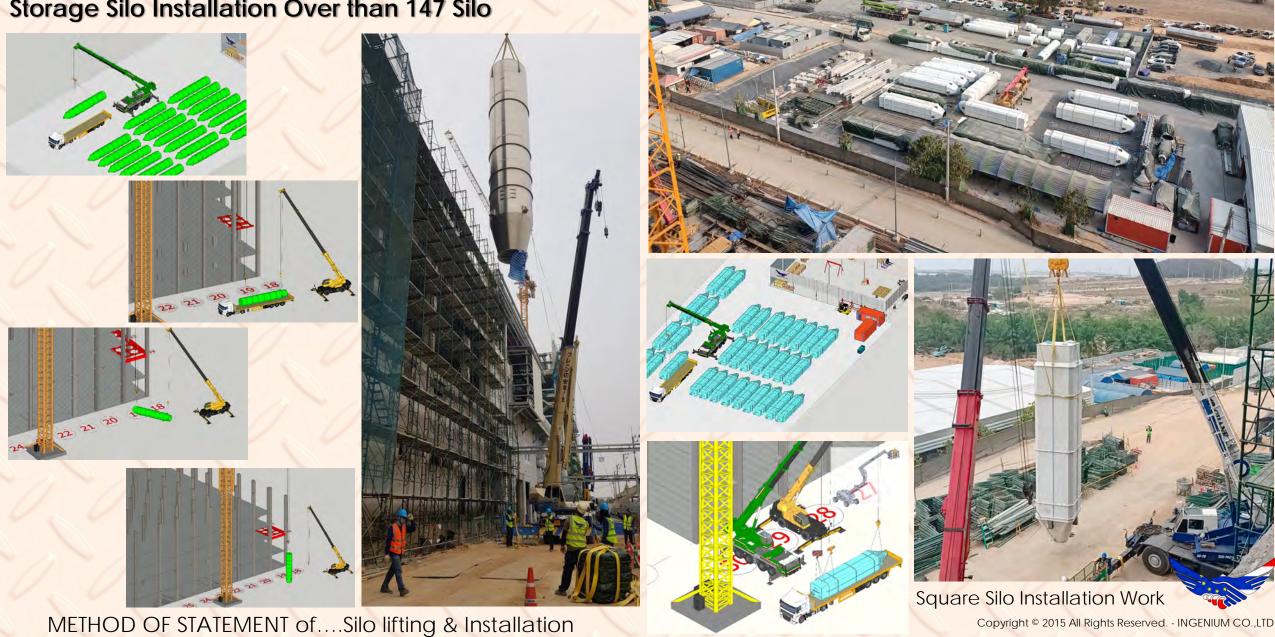
Big Bag Station for Bulk Bag





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Storage Silo Installation Over than 147 Silo



- External LIPP Silo and Flat Silo Installation















BUHLER F 储丰钢板仓 CF51L0





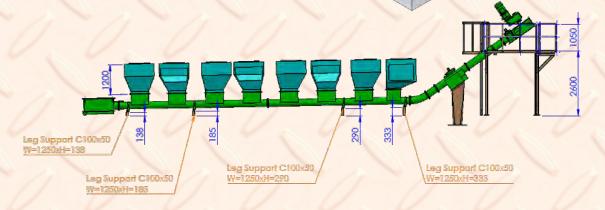




Installation Chain Tube Conveyor for PET Food (20 Ton / Hr.)

Schrage

CONVEYING SYSTEMS

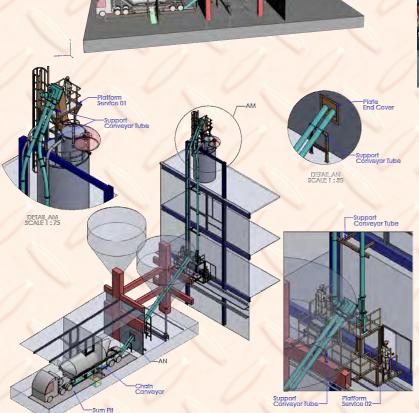








Installation Chain Tube Conveyor for PTA Powder (30 Ton / Hr.)





Schrage CONVEYING SYSTEMS



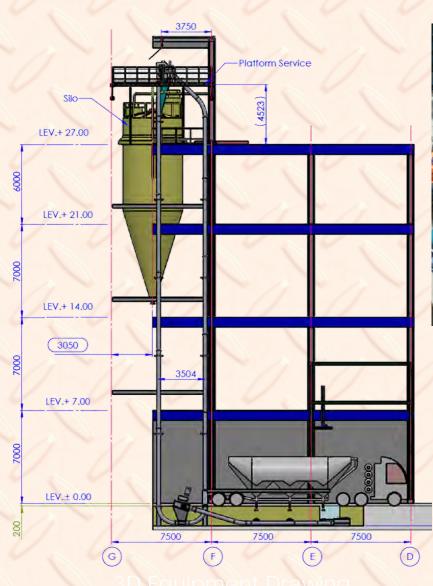




Un loading - Un Packing & Installation Work



Installation Chain Tube Conveyor for PTA Powder (35 Ton / Hr.)











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Buffer Holpper 1000

Platform Service Hopper

Big Bag Filler with weight scale. Batching Control Accuracy +- . 0.3-0.5%

600

1600

Podium Control







JOB REFERENCE. Belt and Bearings Co.,Ltd . Supply Main



Ingenium Co.,Ltd . Support for Installation work.













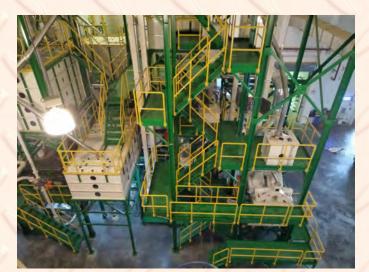


Belt and Bearings Co.,Ltd . Supply Main Ingenium Co.,Ltd . Support for Installation work.















Installation for Animal Feed Factory

- Installation Steel Structure Frame for Building.
- Installation for PET Food Machine 1 Line. Complete with.-
 - ✓ Raw Material Receiving
 - ✓ Batching System
 - ✓ Mixing System
 - ✓ Grinding System
 - ✓ Pulverizer System
 - ✓ 2nd Mixing System
 - ✓ Extrusion system
 - ✓ Drying System
 - ✓ Liquid Coating & Cooling System
 - ✓ Finish Products System
 - ✓ Packaging System
 - ✓ Liquid Adding System
 - ✓ Electrical Control System



Steel Structure Installation

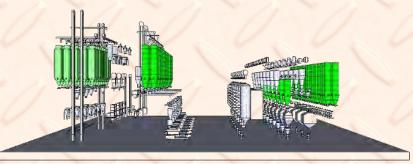




Installation for PET Food Factory

Installation Main Machine for PET Food Machine 5 Line.
 Complete with.-

- ✓ Unloading machine to storage area(Over 300 Container)
- ✓ Raw Material Receiving
 - External LIPP Silo Dia 8 m. x H18 m. (1000 m3) @ 2 Unit
 - External LIPP Silo Dia 5.5 m. x H12 m. (350m3) @ 7 Unit
 - External Flat Silo Dia 5.5 m. x H12 m. (350m3) @ 5 Unit
- ✓ All Silo and Dia 2 m. x H12 m. Bin @ 147 Unit
- ✓ All Bucket Elevator
- ✓ Batching System
- ✓ Mixing System
- ✓ Grinding System
- ✓ Pulverizer System
- Extrusion System
- ✓ Drying System
- ✓ Coating System
- ✓ Finish Products Bin
- ✓ Platform and Support
- ✓ Piping for Pneumatic Transfer





Un-loading and Un-Packing and Move to Storage area

The maximum number of containers in 1 unloading job is 300 containers.







Complete Progress report Unloading



Complete Progress report Unload



ne: 8.00 - 9.10

al No. 23 120



















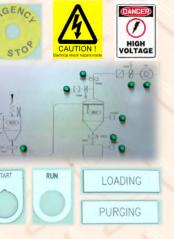


Our panel are designed and program by people who understand panel, ever to operate the system and maintenance the panel. Since we also support our and other vendors products.





Control With AB PLC



Mimic Diagram & Nameplate



Control With S7-300 PLC



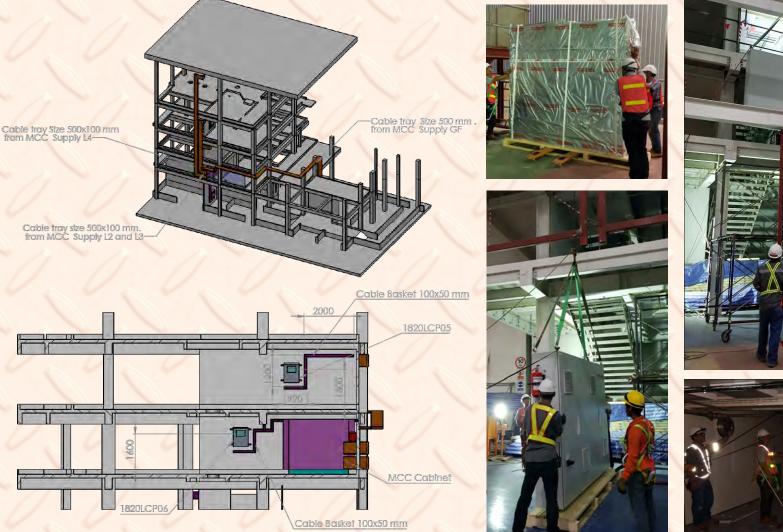
Electrical with Pneumatic Control







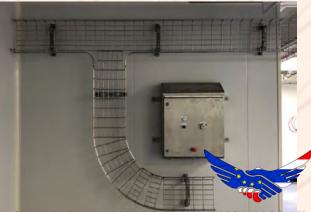
Main Equipment . Dinnissen Process Technology Ingenium . Supply Electrical Component and Installation Work











Electrical Installation Work.



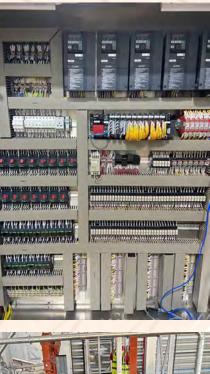












1.1

EXHIBITION OF INGENIUM PROPAK VICTAM ASIA

COFFEE



CORPORATE SOCIAL RESPONSIBILITY (CSR)









Thank you

