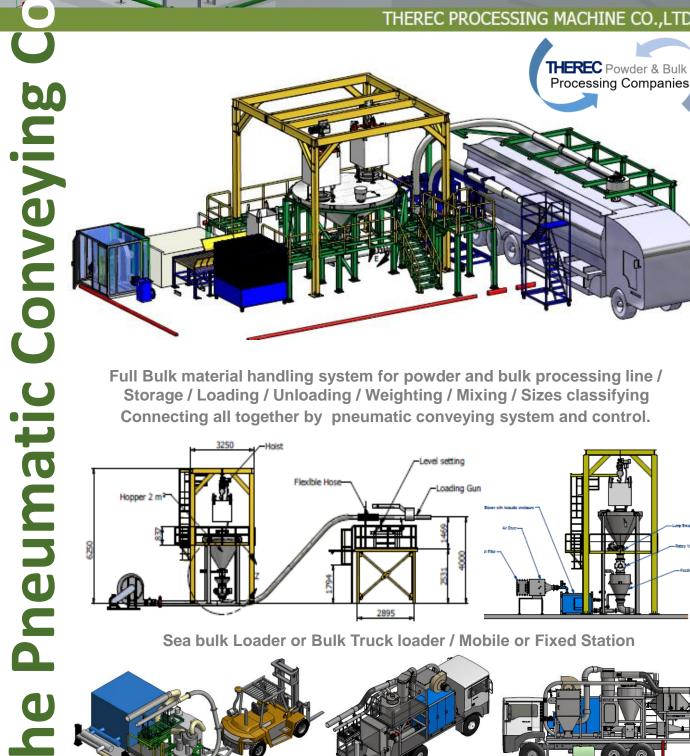
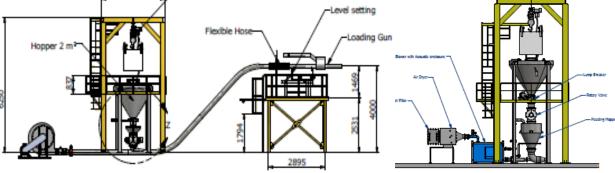
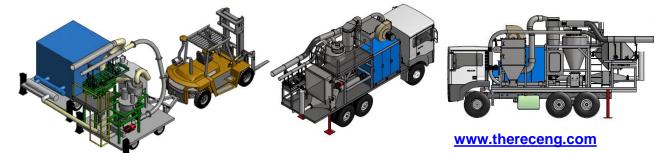
ENGINEERING & CONSULTING CO., LTD.

THEREC PROCESSING MACHINE CO., LTD





Sea bulk Loader or Bulk Truck loader / Mobile or Fixed Station





Container Loading & Unloading system

CONTAINER LOADERS

Loading shipping containers at 90 degrees enables companies to fill 100% of a container's volume, therefore optimizing freight efficiency. Shipping containers can be inserted either directly with a standard trailer or from above with a forklift, crane or reach stacker.

OTHER BENEFITS:

- Speed up the container loading process.
- → Reduce labor.
- Weight the container during loading.
- Maximize operator safety.



COFFEE



Kraft Foods in France uses an A-Ward container loader to load coffee beans into shipping containers for domestic storage.



PLASTIC GRANULES



Coca-Cola, Tetra-Pak, Indorama, Abu Dhabi Polymers and Bumi Mulia all use A-Ward container unloaders to unload polymers.

A-WARD

CONTAINER UNLOADERS

A-Ward container unloaders enable immediate and controlled unloading of shipping containers and remove the reliance on expensive and scarce tilting trailers. Shipping containers can be inserted either directly with a standard trailer or from above with a forklift crane or reach stacker.

OTHER BENEFITS:

- Maximize operator safety.
- Reduce labor.
- → Control unloading speed by adjusting tilt angle.
- Ability to unload over a longer period of time.







Sea Bulk loading system (PE Pellet) SCG Chem (TPE) Warehouse

- 1 of 18.0 tons Pneumatic conveying systems
- 1 of Big bag unloading stations, 1 rail, 2 hoist operated, 3,000 litre hopper
- 1 of Fixed feeding gun for container truck, 4 directions and swing
- 1 of High pressure Centrifugal blower 18.5 kw / 25.0 hp
- 1 of Heavy duty air lock granular rotary valves (pellet valve), Stainless steel 304
- 1 of Electrical control box, with SIEMENS LOGO PLC

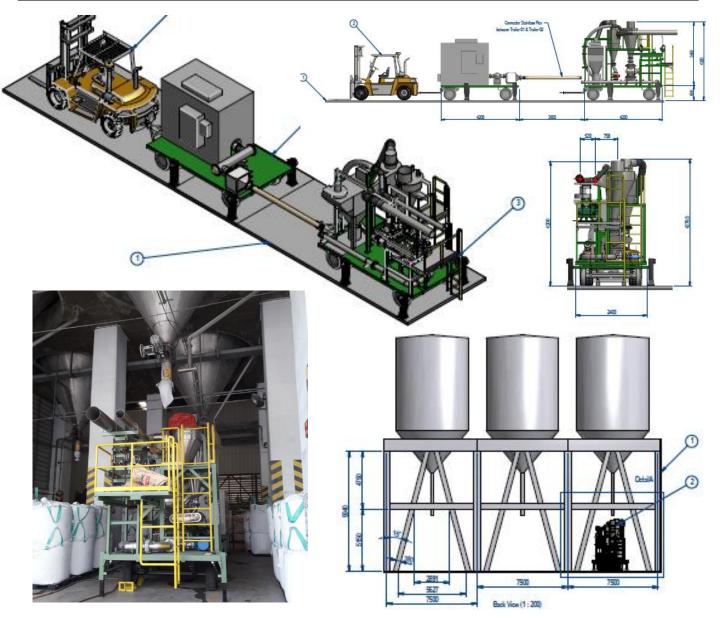




Sea Bulk loading system (PVC Powder) SCG Chem (TPC) Warehouse

- 1 of 18.0 tons Pneumatic conveying systems
- 1 of Fixed feeding gun for container truck, 4 directions and swing
- 1 of High pressure Roots blower 37kw / 50.0 hp
- 1 of Cyclone for dust controlling system, with 1,300 m³ centrifugal fan
- 1 of Bag filters for dust controlling system, with 1,300 m³ centrifugal fan
- 2 of Heavy duty air lock rotary valves (powder valve), Stainless steel 304
- 1 Stainless steel air cooler, air to water (cooling tower water) type
- 1 Stainless steel housing in line air filter, HEPA element
- 1 of Electrical control box, with SIEMENS LOGO PLC

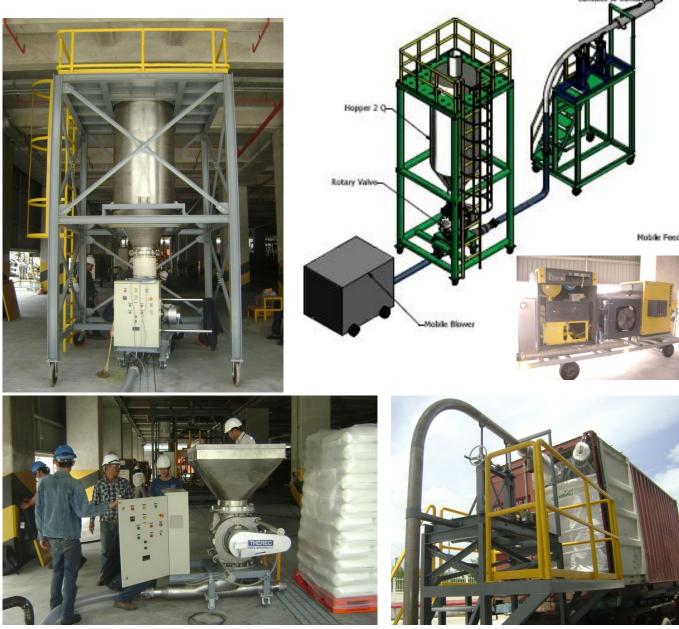




Sea Bulk loading system (PVC Powder) SCG Chem (TPC) Warehouse

- 1 of 18.0 tons Pneumatic conveying systems
- 1 of Fixed feeding gun for container truck, 4 directions and swing
- 1 of High pressure Roots blower 45kw / 60.0 hp
- 1 of Cyclone for dust controlling system, with 1,300 m³ centrifugal fan
- 1 of Bag filters for dust controlling system, with 1,300 m³ centrifugal fan
- 2 of Heavy duty air lock rotary valves (powder valve), Stainless steel 304
- 1 Carbon steel air cooler, air to water (cooling tower water) type
- 1 Stainless steel housing in line air filter , Mini pleat element
- 1 of Electrical control box, with Mitsubishi PLC

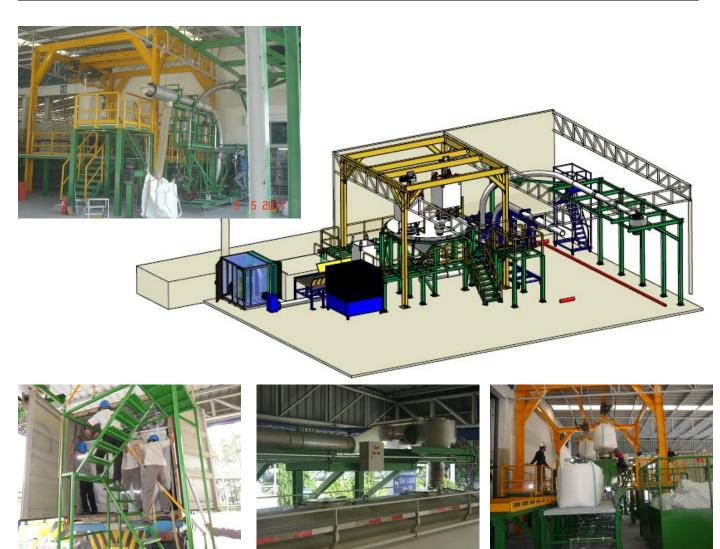




Sea Bulk loading system (PE Pellet) PTT PL Warehouse

- 1 of 18.0 tons Pneumatic conveying systems
- 1 of Big bag unloading stations, over head crane operated, 1,500 litre hopper
- 1 of Small bag dumping stations, manual operated, 100 litre hopper
- 1 of Moveable feeding gun for container truck, 4 directions and swing
- 1 of High pressure air compressor 75.0 kw / 100.0 hp
- 2 of Heavy duty air lock rotary valves (powder valve), Stainless steel 304
- 1 of Electrical control box, with SIEMENS LOGO PLC

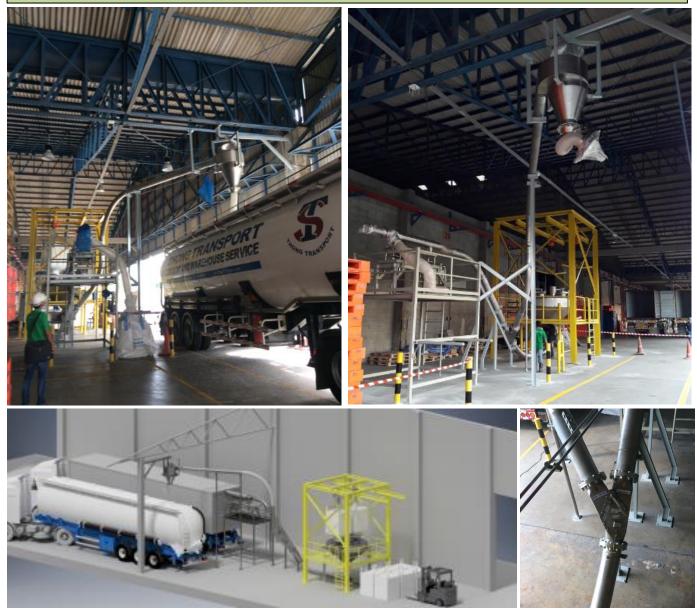




Sea Bulk loading system (PE Pellet) Ptt Global Chem Warehouse

- 1 of 25.0 tons Pneumatic conveying systems
- 3 of Automatic roller conveyors for bulk bag feeding
- 1 of Big bag unloading stations, 2 rails, 2 hoists operated, 4,000 litre hopper
- 1 of Moveable feeding gun for container truck, 4 directions and swing
- 1 of Feeding pipe, Loading cyclone and Loading bellow for Bulk truck
- 1 of High pressure Centrifugal blower 30.0kw / 40.0 hp
- 1 of Heavy duty air lock granular rotary valves (pellet valve), Stainless steel 304
- 2 of Bag filters for dust controlling system, with 3,500 m³ centrifugal fan
- 1 of Electrical control box, with SIEMENS S7 300 PLC with PROFACE touch screen , suitable for full automatic operation and SCADA system requirement

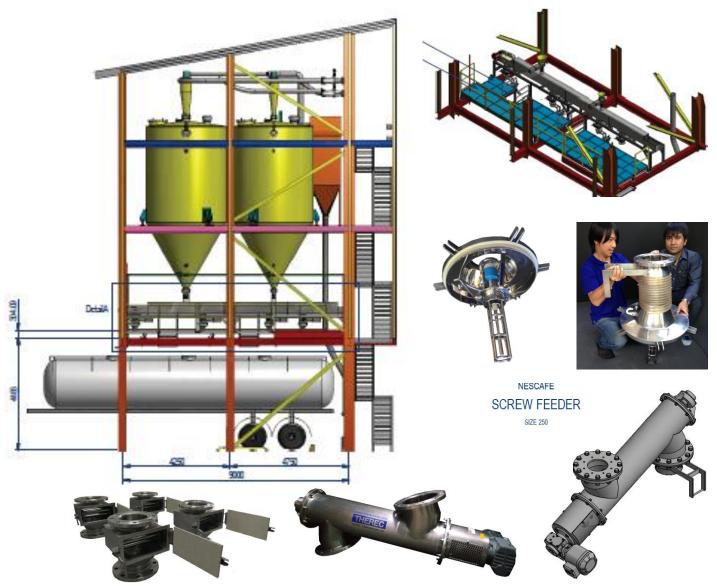




Sea Bulk loading system (PE Pellet) SMC Logistic Warehouse

- 1 of 18.0 tons Pneumatic conveying systems
- 1 of Big bag unloading stations, 2 rails, 2 hoists operated, 3,000 litre hopper
- 1 of Moveable feeding gun for container truck, 2 directions and swing
- 1 of Feeding pipe, Loading cyclone and Loading bellow for Bulk truck
- 1 of High pressure Centrifugal blower 18.5 kw / 25.0 hp
- 1 of Heavy duty air lock granular rotary valves (pellet valve), Stainless steel 304
- 1 of Flap type diverter valve size 8.0 inches, manual version
- 1 of Electrical control box, with SIEMENS LOGO PLC





Bulk Truck loading system (Green Coffee) Quality coffee (Nest Café)

- 2 of 38 m³ Carbon Steel silos, with Nitrogen purge system & plate form structure
- 1 of Load cell system set and automatic hanging load cell calibrating set
- 1 of 5.0 tons Pneumatic conveying systems
- 2 of Bag filters for dust controlling system, with 1,500 m³ centrifugal fan
- 1 of Big bag filling stations with load cell
- 1 of Chain conveyor set for bulk truck loading
- 4 of Magnetic separator sets
- 4 of Light duty feeding rotary valves (pellet valve), Stainless steel 316
- 1 of Heavy duty screw conveyor, Stainless steel 316
- 4 of Loading bellow with level sensor, Stainless steel 316



BTK 02





Bentonite clay powder) Amcol

The tool system consisting of :

- 2 of 100 tons Carbon Steel silos, plate form Structure" Vale 1
- 2 of Load cell system set

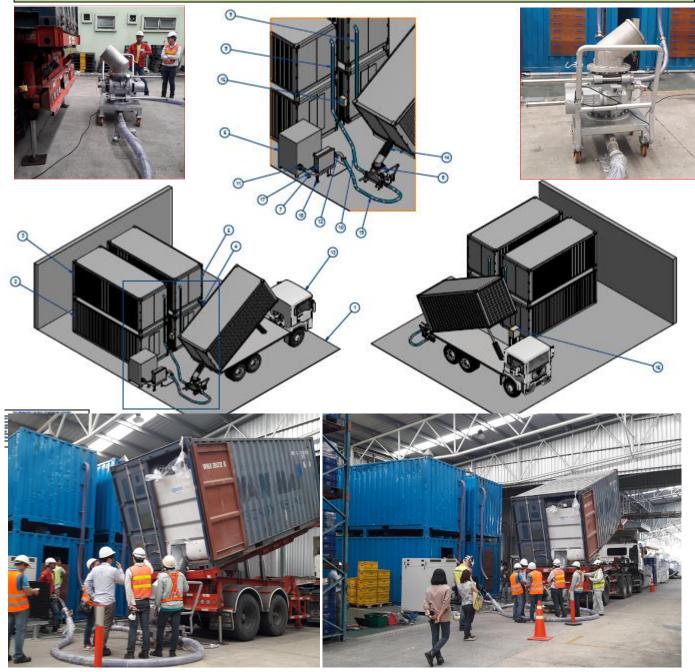
Blov

Bag

Bulk

- 1 of 7.0 tons/hr Pneumatic conveying systems
- 2 of Bag filters for dust controlling system, with 1,000 m³ centrifugal fan
- 2 of Light duty feeding rotary valves (pellet valve), Carbon steel
- 2 of Loading bellow with level sensor, Carbon steel J&H

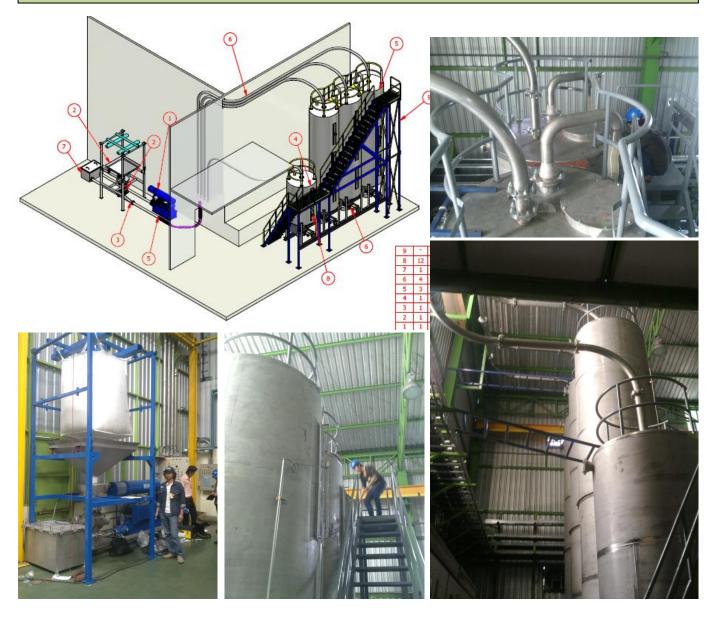




Container Unloading system (PE Pellet) Grand siam composit / Aeroklas

- 4 of 20 tons Carbon Steel container, for storage
- 1 of 30 kw roots blower with acoustic enclosure
- 1 of 18 tons/hr Pneumatic conveying systems
- 1 of Heavy duty feeding rotary valves (pellet valve), Stainless steel
- 1 of Air to Air unit air cooler

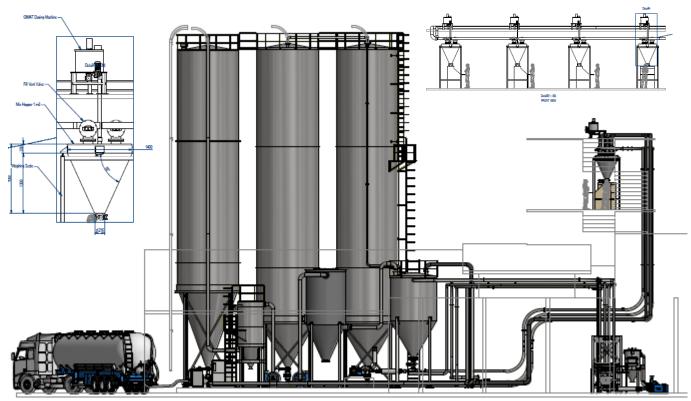




Sea Bulk loading system (PE Pellet) SCG Chem (TPC) Warehouse

- 1 of 7.0 tons Pneumatic conveying systems
- 1 of Big bag unloading stations, fork lift operated, 50 litre hopper
- 1 of High pressure Roots blower 18.5 kw / 25.0 hp
- 1 of Bag filters for dust controlling system, with 1,300 m³ centrifugal fan
- 1 of 4.0 m³ Stainless steel silos
- 3 of 8.0 m³ Stainless steel silos
- 1 of Heavy duty air lock rotary valves (powder valve), Stainless steel 304
- 1 of Electrical control box, with SIEMENS LOGO PLC





Silos Weighting system (PVC powder & Calcium Carbonate Powder) Saha Aree, Twin Lion brand PVC pipe factory



- 3 of 200 m³ (100 tons) Stainless Steel 304 silos
- 1 of 20 m³ (12 tons) Stainless Steel 304 silos
- 4 of 200 tons load cell sets, Thames Sides Sensor , Smart Indicator , Junction box and Low profile mounting load cell assemble set
- 4 of 1.0 m³ (350 kg) Stainless Steel 304 silos
- 4 of 1200 kg load cell sets, Thames Sides Sensor , Smart Indicator , Junction box and Lever mount loadcell weighting assembly
- 12 of Scale valves size 4.0"
- 1 of Electrical control box, with SIEMENS S7 1200







Silos loading system (PE Pellet) CNC International (CPPC group)

- 1 of 5.0 tons Pneumatic conveying systems
- 1 of 1.0 tons Pneumatic conveying systems
- 1 of Big bag unloading stations, 1 rail, 1 hoist operated, 2,000 litre hopper
- 5 of Big bag unloading stations, 1 Overhead Crane operated, 6,000 litre hopper
- 1 of High pressure ring blower 7.5kw / 10.0 hp
- 1 of High pressure roots blower 37.0kw / 50.0 hp
- 1 of Heavy duty air lock rotary valves , Stainless steel 304 , 10.0 inches
- 4 of Medium duty air lock rotary valves , Stainless steel 304 , 6.0 inches
- 4 of 200 m³ (100 tons) J&D Aluminium knock down silos
- 4 of 200 tons load cell set
- 1 of Electrical control box, with SIEMENS LOGO PLC





Silos Weighting system (PE Pellet) CNC International (CPPC group)

The total system consisting of :

- 4 of 200 m³ (100 tons) J&D Aluminium knock down silos
- 4 of 200 tons load cell sets, Thames Sides Sensor, Smart Indicator, Junction box and Low profile mounting load cell assemble set
- 1 of Electrical control box, with SIEMENS LOGO PLC



Low profile mounting assembly **Atex & IECEx Certification**



Install and Removal without lifting tool









Smart Digital Display

Junction box



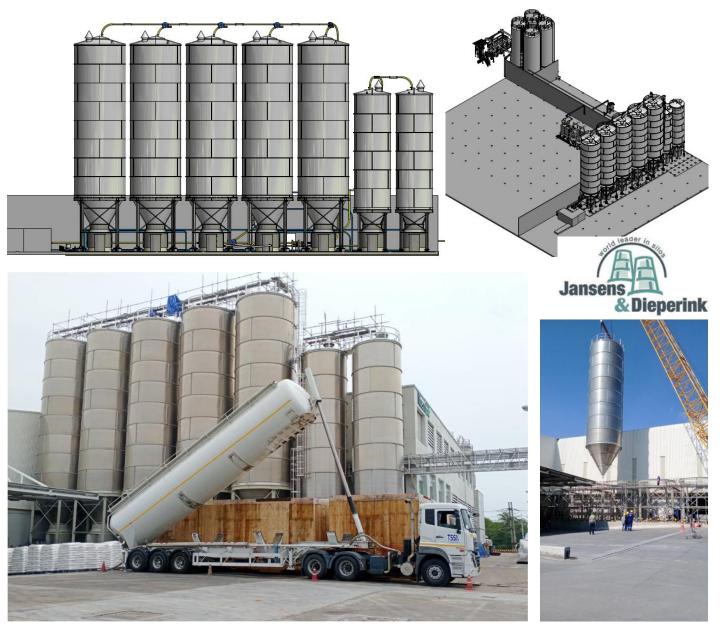
Silo mount



Silos system (PET Pellet) Covestro (Thailand) Co.,Ltd.

- 1 of 1,760 m³ (1,000 tons) J&D Aluminium Welding silos
- 2 of 784 m³ (500 tons) J&D Aluminium Welding silos
- 3 of Stainless steel vent bag filter
- 3 of Galvanized steel support skirt for all silos



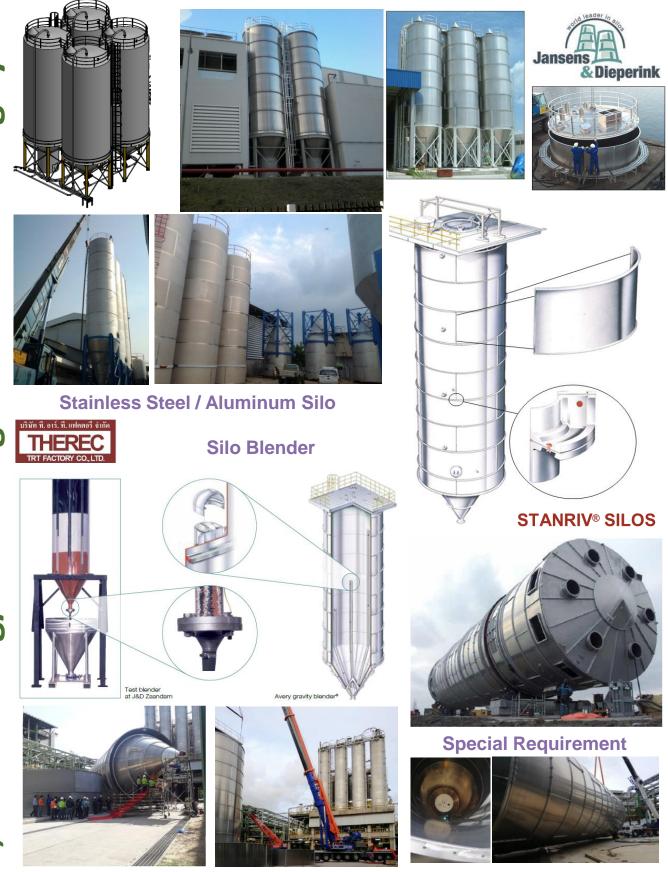


Silos loading system (PP&PE Pellet) Fitesa CNC (CPPC group)

- 2 of 4.5 tons Pneumatic conveying systems
- 2 of Big bag unloading stations,1 hoist operated, 2,000 litre hopper
- 1 of Big bag unloading stations, 1 hoist operated, 6 ports drop out box
- 2 of High pressure ring blower 15.0kw / 20.0 hp / FPZ
- 8 of Heavy duty air lock rotary valves , Stainless steel 304 , 8.0 inches /TRC
- 11 of Heavy duty air lock diveter valves , Stainless steel 304 , 5.0 inches /DMN
- 5 of 400 m³ (200 tons) J&D Aluminium knock down silos
- 2 of 160 m³ (80 tons) J&D Aluminium knock down silos
- 5 of 200 tons load cell set / Thames side sensor
- 5 of 80 tons load cell set / Thames side sensor
- 1 of Electrical control box, with SIEMENS S7 1200 PLC



Aluminium Silos / Stainless steel Silos / Silo Blender Silo feeding / Silo Unloading / Silo Weighting and Leveling



Therec Engineering & Consulting Co, Ltd. www.thereceng.comTel (662) 893 9003-4 (5 lines)Fax : (662) 893 9005 ,893 917888 Soi Karnjanapisek 4/2 Karnjanapisek Rd. Bangbon Bangkok 10150ThailandCharler of the construction of the c

