

# 

f

0

We would like to introduce ourselves one of the leading Equipment and Processing Plant manufacturing company in India. **"Dynemix India"** specializes in the design and construction of all type of customized jobs and turnkey project solutions related to material handling system in construction, cement, plastics, steel, Biomass, Food & Pharmaceutical industries and chemical & petrochemical industry.

We are offering comprehensive, turn-key material handling solutions which include state-of-the-art equipments, expert engineering design and top quality construction. **Dynemix India** is Ahmadabad (Gujarat) based renowned organization, focused on providing quality products and services.

**Dynemix India** is registered under MSME & workout of Start-up India program for new innovation and providing unique solutions in the field on material handling system.

### **Customized & Turnkey Solutions :**

- → All Types of Bulk Powder Handling Solutions
- → Hydraulic & Pneumatic Automation Solutions
- Packing Solutions
- → Dust Collection System
- → Silo with Conveying System
- Pneumatic Conveying System
- → Lime Handling System

### **Customized & Products :**

- → Screw Conveyors
- → Stationary and Mobile Belt Conveyors
- → Automatic Bag Slitting Machine
- → Jumbo Bag Loading / Unloading Systems
- → Lump Breaker
- → Lime Slaker
- → Dense Phase System
- → Agitators with Drive Unit

# LIST OF CUSTOMERS WITH SUPPLIED EQUIPMENT / PROJECT

SR. NO.	NAME OF CUSTOMERS	LOCATION	EQUIPMENT / PROJECT SUPPLIED
01	Aarti Industries Limited	Vapi	Automatic Bag Sliting machine Trunky Solution on Reactor charging
02	Aarti Industries Limited	Jhagadiya	Lime Slaker Package
03	Aarti Industries Limited	Dahej	Lime Feeding System for 14 TPH Boiler
04	Aarti Industries Limited	Jhagadiya	CaCl2 Bagging machine
05	FAITH Industries Limited	Ahmedabad	Turnkey Solutions for Powder & Liquid Handling System
06	GRASIM Industries Limited	Vilayat	Lime Slurry Production Plant
07	Metito Overseas, Qatar	Doha-Qatar	Lime Preparation plant
08	Murugappa Morgan Thermal Ceramics Limited	Ahmedabad	Mix Batch feeding system
09	Premier Energies International (1) Pvt. Ltd	Hyderabad	MOL Produciton Plant
10	SUEZ (Veolia) Water Technologies Solutions (1) PVt Ltd	Mathura	Lime & Soda Ash Handling & Slurry Production Plant
11	UPL Limited (UPL-1)	Ankleshwar	Automatic Bag Stitching & Conveying System
12	UPL Limited (UPL-1)	Ankleshwar	Lime Handling System
13	UPL Limited (UPL-12)	Dahej	CPC Handling System
14	UPL Limited Unit-12	Dahej	Lime Handling System
15	Deccan Fine Chemicals (India) Pvt Ltd	Tuni & Goaj	Screw Feeders for Various Conveying Application
16	Chem Process Systems Pvt Ltd	Sanad, Gujarat	Lime Handling System, Belt Conveyors, Agitators, Screw Feeders
17	Bodal Chemicals Limited	Vadodara	Screw Conveyors and Belt Conveyors
18	Nuberg Engineering Limited	Noida	Screw Feeder
19	Godrej Industries Limited	Valia	Inclined Trough Conveyor
20	Meghmani Organics Limited	Dahej	Stationary Belt Conveyor
21	Wacker Metroark Chemicals Limited	Kolkatta	Automatic Bag Slitting Machine - SS 304
22	DSM Nutritional Products (I) Pvt Ltd	Hydrabad	JBDS with 25- 50 Kg Bagging Machine
		11	

# Automatic Bag Slitting Machine

- **Client** : Aarti Industries Limited
- Supply: Automatic Bag Slitting Machine<br/>With Reactor Charging SystemMaterial: Customised MaterialLocation: Vapi, Gujarat

### **Description of Supply:**

- Automatic Bag Slitting Machine supplied to remove the Human interaction with the Hazardous material.
- Automatic Bag Slitting Machine Cut the Bag and transfer the material towards the defined utility as per requirement.
- → First the bag passed through the belt conveyor and transferred to the Bag Slitting Unit.
- → Bag Slitting Unit will cut the bag and unload the material in to the Material Hopper.
- → Material Hopper consisting of a vibrator to make proper unloading and it will further pass the material to Weighing Hopper as per requirement.
- After the material collected in weighing hopper it will further conveyed to the defined utility.
- → At the time of slitting, if the material is in powder form it will start shattering in to the drum surround. This shattered material is collected by Dust Collector provided on the Top of the Bag Emptying Unit and re-purge in to the drum itself.
- → Dust Collector Consisting of number of Filter Bags of customised material and automatic purging system equipped with actuated valves will throw the pressurised air and clean the Filter Bags. The material removed from the Filter Bags is emptied into the Bag Emptier so, there is no material waste occurs during the process.

### **Automatic Bag Slitting Machine**

### Consist of the Following :

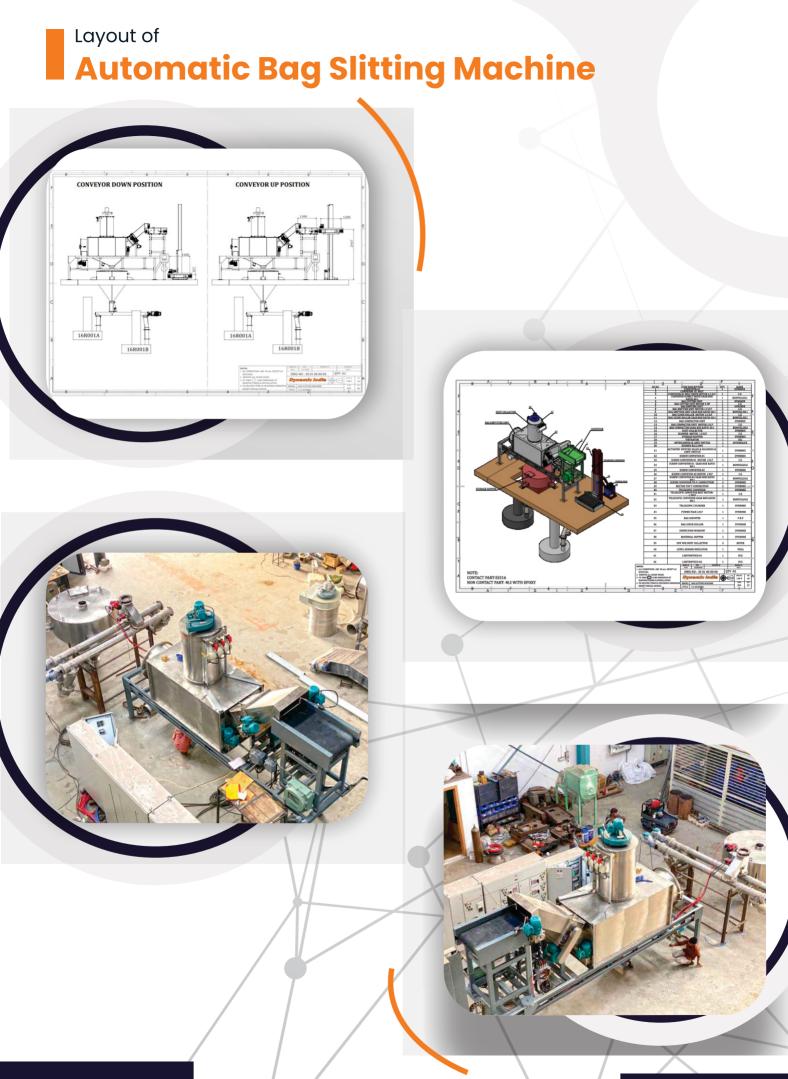
- → Bag Transfer Conveyor
- → Bag Slitting Unit
- → Bag Emptying Unit
- → Material Storage Hopper
- Dust Collector

- Bag Compactor
- → Weighing Hopper
  - Actuated Rotary Airlock Valve
- Control Panel

#### www.dynemix.com

Page -04





#### Lime Slaker Package

- Client : Aarti Industries Limited
- **Supply** : Lime Slaker Package
- Material : Hydrated Lime
- Location : Jhagadiya, Gujarat

### **Description of Supply :**

- → The Lime Slaker project has been installed at Aarti Industries in Vapi, along with instrument and controlling stations.
- → This project serves a significant application for the company.
- → The raw material is received either in Jumbo Bags or 50 Kg bags and is then transferred to the dense phase system. From there, the material is further transferred to the Silo using a Pneumatic Conveying System.
- → To control the flow, an actuated butterfly valve is provided at the bottom of the Silo. The material then moves into a screw conveyor which fills the retention hopper.
- → At the bottom of the retention hopper, a micro batch feeder is installed to regulate the material flow. It then passes through to fill the slurry tank accordingly.
- The Lime Slaker is equipped with an Agitator and Cyclone feeder to maintain the desired material properties
- → Additionally, a dust collector is installed to prevent excessive dusting within the system.

### Lime Slaker Package

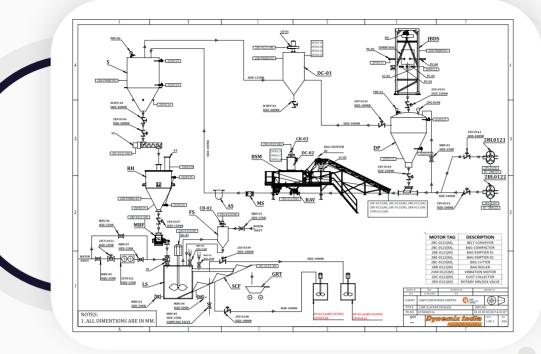
### Consist of the Following :

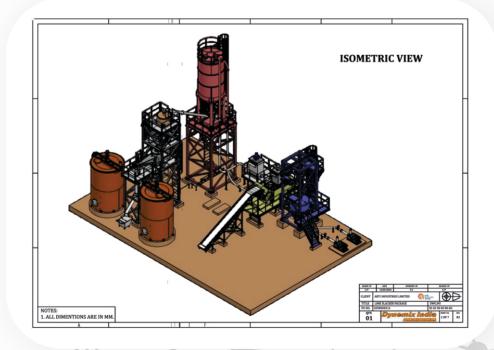
- → Roots Blower
- → Jumbo Bag Discharge Station
- → Dense Phase
- → Automatic Bag Slitting Machine
- → Storage Silo
- → Screw Conveyor
- → Retention Hopper
- Jime Slaker

- → Dust Collector
- → Actuated Butterfly Valve
- Level Indicators & Sensors
- Air Stainer & Magnetic Separator
- → Cyclone Feeder
- → Fume Scrubber
  - Rotary Air Lock Valve



# Layout of Lime Slaker Package





www.dynemix.com

Page -07

# Lime Lime Feeding System for 14 TPH Boiler

Client: Aarti Industries LimitedSupply: Lime Feeding System for 14 TPH BoilerMaterial: Quick LimeLocation: Dahej, Gujarat



### **Description of Supply:**

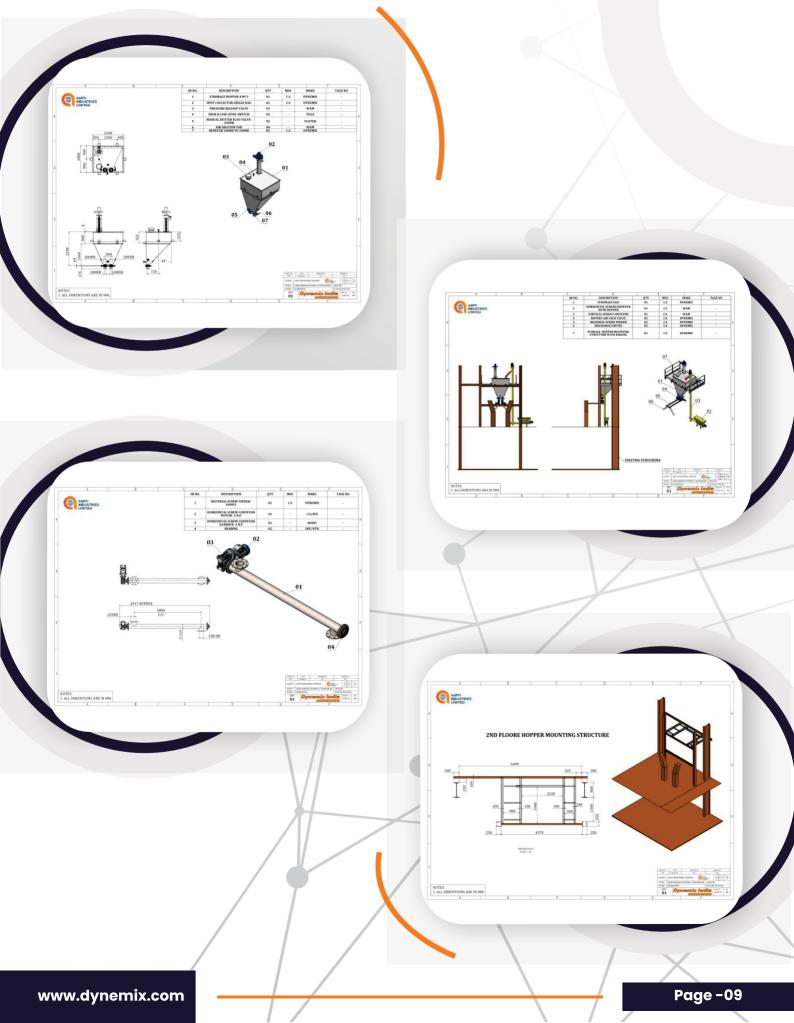
- → The objective of the project was to introduce automation for feeding Lime into the 14 TPH Boiler.
- → Initially, the Raw Material was manually loaded into the hopper.
- Subsequently, the material was transferred to the vertical screw conveyor through a horizontal screw.
- → The material in the vertical screw conveyor was then stored in a storage silo. 
   The discharge of the material from the bottom of the silo was facilitated by a Rotary Air Lock Valve and a screw feeder.

### Lime Feeding System for 14 TPH Boiler

### Consist of the Following :

- → Horizontal Screw Conveyor
- → Verticle Screw Conveyor
- → Storage Hopper
- → Material Screw Feeder
- Discharge Chute

# Layout of Lime Feeding System for 14 TPH Boiler



### CaCl2 BAGGING MACHINE

- **Client** : Aarti Industries Limited
- Supply : CaCl2 Bagging machine
- Material : CaCl2 Calcium Chloride
- Location : Jhagadiya, Gujarat

### **Description of Supply:**

- → A bagging machine is utilized to stitch bags of CaCL2.
- Raw materials are transported to a silo through a trough screw conveyor and a vertical screw conveyor.
- → The materials are then transferred from the silo to a semi-automatic weighing machine, where they are filled into bags with a capacity ranging from 25 to 50 kilograms.
- Subsequently, the bags move through a heat sealing machine before reaching the bag stitching machine, where they are stitched.
- → To prevent excessive dusting, a dust collector has been installed within the system.

### **CaCl2 Bagging machine**

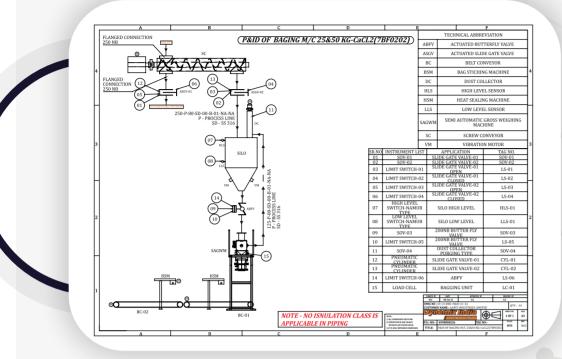
Consist of the Following :

- → Screw Conveyor
- → Storage Silo.
- → Gravity Feeder
- → Weighing unit with feeding Spout
- Impulse sealer with peeler and belt conveyor
- → Stitching machine with belt conveyor
- Dust Collector

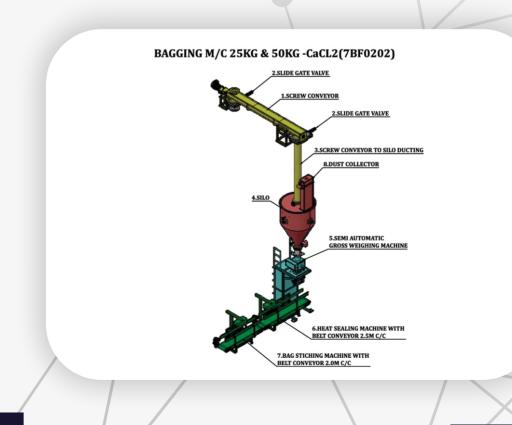
- → Limit Switch & Sensors
- → Manual Butterfly valve
- → Solenoid Valve
- Pneumatic Cylinders
- → Slide Gate Valve
- → Load Cell



### P&ID of CaCl2 BAGGING MACHINE



# Layout of CaCl2 BAGGING MACHINE



Page -11

# Material Handling System

- Client : FAITH Industries Limited
- Supply : Material Handling System
- Material : Powder Cao, TBLS, CaCo3, PbO, PEW : Liquid - BPA, RM-8, RM-9
- Location : Ahmedabad, Gujarat

### **Description of Supply:**

- D, PEW :
- → The Material Handling System for above mentioned powder and liquid is produced to maintain the recipe and quality of fine goods.
- The Dense Phase System placed at the procurement store to convey the Raw Material of Powder comes from the bags.
- → Roots blower is attached to make pneumatic conveying of material
- → The material comes from the Dense Phase directly conveyed to the Header. These all material coming from the bag is being collected into the Header and transferred pneumatically to the respective Storage Silo.
- All Storage Silos are equipped with required accessories and at the bottom of Silo Screw
   Conveyor is provided to charge the Weighing Hopper.
- → The 5 Nos. of different silo's materials and the liquid are charged to the weighing hopper as per recipe. And from here the material will further transferred to the Retention Hoppers.
- Retention Hoppers are being charged from the weighing hopper by switching the flow through actuated Diverter Valve.
- → Two more Liquid Tanks equipped with RAVs are there which will directly add the material into the utility Reactors.

### **Material Handling System**

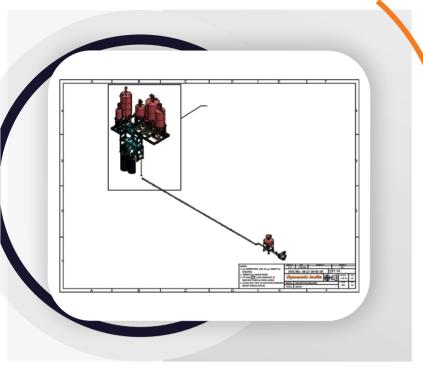
### Comprises of Equipment / Instruments as followed :

- → Storage Silos with Required Accessories
- → Liquid Storage Weighing Tanks
- → Screw Feeders
- Weighing Hopper
- → Retention Hoppers
- → Dense Phase System

- Actuated Isolation Vales
- Actuated Diverter Valves
- Actuated RAVs
- Roots Blower
- Control Panel

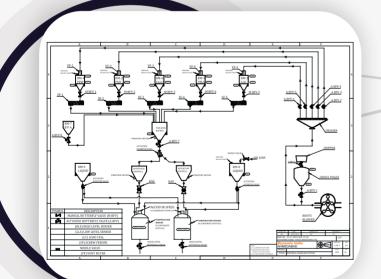
#### www.dynemix.com





P&ID of Material Handling System





# Lime Slurry Production Plant

- Client : GRASIM Industries Limited
- Supply : Lime Slurry Production Plant
- Material : Hydrated Lime
- Location : Vilayat, Gujarat

### **Description of Supply :**

- → The Project supplied to GRASIM Industries Limited to produce the Lime Slurry and Removal of unused Greet.
- Raw Material comes from Jumbo Bag or Bulker is being transferred to the Storage Silos by Pneumatic Conveying System.
- The Roots Blowers are connected with Diverter value to switch the flow between Bulker Line and Jumbo Bag Unloading Station.
- Storage Silos are equipped with required accessories to monitor and operate the material flow.
- Screw Conveyors at the bottom of Silos transfers the material towards Lime Slaker. Lime Slaker stands to create the Lime Slurry with desired recipe and further removes
- → unnecessary greet and transfer fine goods to Slurry Tank.
- → Slurry Tanks equipped with Agitators to maintain the material properties and further transfer the fine goods towards utility by means highly efficient Slurry Pumps.
- → Dust Collector provided to prevent the system from Dustin.

### **Lime Slurry Production System**

- → Storage Silos with Required Accessories
- → Jumbo Bag Unloading Station with Dense Phase
- → Roots Blowers
- → Screw Conveyors
- → Lime Slacker
- → Slurry Tanks

- → Lime Slaker
- Slurry Tanks
- Actuated and Manual Isolation Valves
- Actuated Diverter Valves
- Greet Collection Trolley
- → Level Indicators and Sensors
- → Self Actuated Pressure Relief Valves
- Control Panel



Layout Drawing of
Lime Slurry Production Plant

Process Flow Chart of
Lime Slurry Production Plant



# Lime Preparation Unit

Client	: Metito Overseas, Qatar
End User	: Qatar Steel Ltd. Doha, Qatar
Supply	: Lime Preparation Unit
Material	: Hydrated Lime
Location	:Doha

### **Description of Supply :**

- → The Project supplied to Metito Overseas to prepare the Lime Slurry.
- → Raw Material comes from shovel is being transferred to the Storage Silos by Pneumatic Conveying System.
- The Roots Blowers are connected with Diverter valve to switch over to the standby roots blower.
- Storage Silos are equipped with required accessories to monitor and operate the material flow.
- → Screw Conveyors at the bottom of Silos transfers the material towards Weighing Hopper. The weighing hoppers are equipped with the required accessories and accessible platforms, railings and ladder for maintenance.
- → The Weighing hoppers are located at the top of the slurry tanks. These slurry tanks stands to create the Lime Slurry with desired recipe and transfer fine goods to the utility.
- → Slurry Tanks equipped with Agitators to maintain the material properties and further transfer the fine goods towards utility by means highly efficient Slurry Pumps.
- → Dust Collector provided to prevent the system from Dustin.

### **Lime Preparation Unit**

### Comprises of Equipment / Instruments as followed

- → Material Unloading Hopper
- → Storage Silos with Required Accessories
- → Roots Blowers
- → Screw Conveyors
- → Weighing Hoppers
- → Slurry Tanks

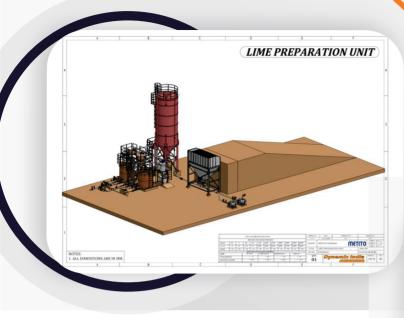
- Slurry Pumps
  - Dust Collector
  - → Fume Scrubber
  - Actuated and Manual Isolation Valves
    - Actuated Diverter Valves
    - Level Indicators and Sensors
  - → Self Actuated Pressure Relief Valves

#### www.dynemix.com

Page -16



# Layout of Lime Preparation Unit





### P&ID of Lime Preparation Unit



### Mix Batch feeding system

- Client : Murugappa Morgan Thermal Ceramics Limited
- Supply : Mix Batch feeding system
- Material : Lime + Dolomite + Quartz
- Location : Ahmedabad, Gujarat



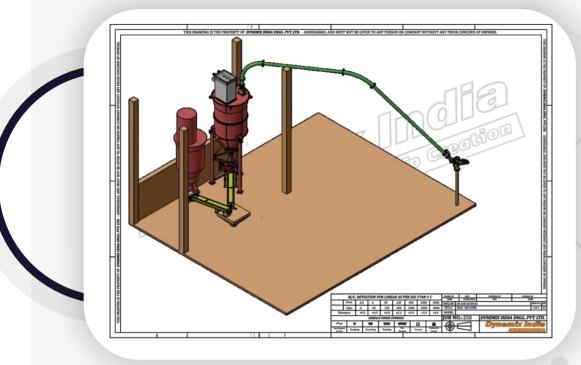
### **Description of Supply:**

- → The raw material is transferred into the silo using pneumatic conveying.
- → From the bottom of the silo, the material is then transferred to the desired location using a Rotary Air-Lock Valve and screw feeder.
- → To prevent dusting during operation, a dust collector is provided.

### **Mix Batch feeding system**

- → Silo
- → Vent Filter
- → Rotary Air Lock Valve
- → Screw Feeder
- → Fabricated diverter valve
- → Ball valve
- → Bin Activator
- → Pressure relief valve
- → Load cell with weighing indicator
- → Dust Collector

### GAD Mix Batch feeding system



WRO FLOW BIN

### MOL Produciton Plant

**Client** : Premier Energies International (1) Pvt. Ltd.

Supply : MOL Produciton Plant

Material : Calcium Hydroxide Ca(OH)2

#### Location : Hyderabad

### **Premier** Energies

### **Description of Supply:**

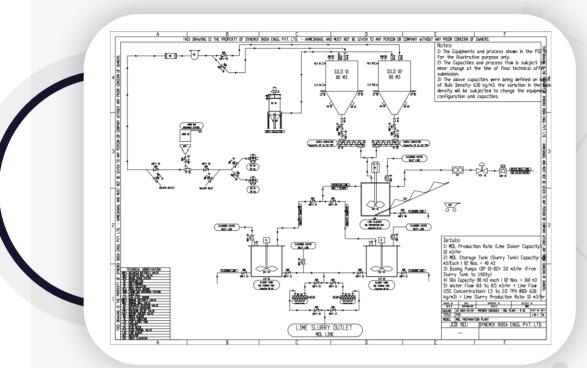
- → A MOL production plant is equipped to prepare a slurry with a concentration of 15%.
- → The raw material, Hydrated Lime, is transferred from Bulker / Jumbo Bags to a storage silo using pneumatic conveying.
- The hydrated lime is then transferred from the silo to a lime stacker with the help of a screw conveyor.
- → In the lime slacker, water is added to prepare MOL, also known as Milk of Lime.
- → The MOL is collected in a slurry tank from the Lime Slacker. From the slurry tank, the MOL is transferred to the desired location using a slurry dosing pump.
- → To prevent the system from producing excessive dust during operation, a dust collector is provided.

### **MOL Produciton Plant**

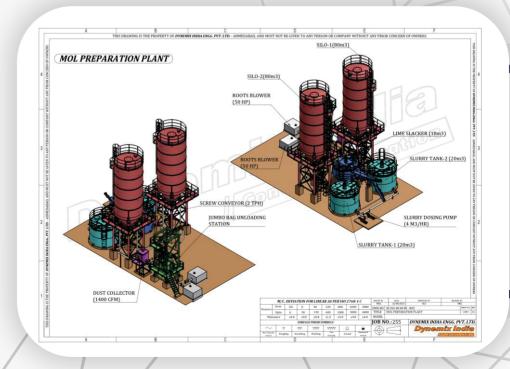
- → Roots Blower
- → Jumbo Bag Discharge Station
- → Rotary Air-Lock Valve
- → Magnetic Seperator
- → Air Stainer
- → Storage Silo
- → Screw Conveyor
- → Retention Hopper
- → Lime Slacker

- → Dust Collector
- → Slurry Tank
- → Slurry dosing pump
- → Actuated / Manual Butterfly Valve
- → Level Indicators & Sensors
- → Aeration Pad
- → Diverter Valve
- Pressure relief valve
- → Flow control valve & agitator

### P&ID of MOL Produciton Plant



### GAD MOL Produciton Plant



# Lime & Soda Ash Handling & Slurry Production Plant

- Client : Suez (Violia) Water Technologies Solutions (I) Pvt. Ltd.
- End User : Pepsico
- Supply : Lime & Soda Ash Handling & Slurry Production Plant Material : Lime & Soda Ash
- Location : Mathura

### **Description of Supply :**

- → This system is designed for handling lime and soda ash.
- → The raw material, which is delivered in jumbo bags, is emptied in the dense phase and then transferred into silos through a pneumatic conveying system.
- → For raw material that comes in 25-50 kg bags, there is an automatic bag slitting machine for unloading.
- The bags are separated from the material in the bag emptying unit, and the separated material is stored in the silo.
- The material that comes out of the silo is then stored in the slurry tank to be mixed with water.
- → To minimize dusting, all the equipment and instruments, including the dust collector, are arranged in a close passage configuration.

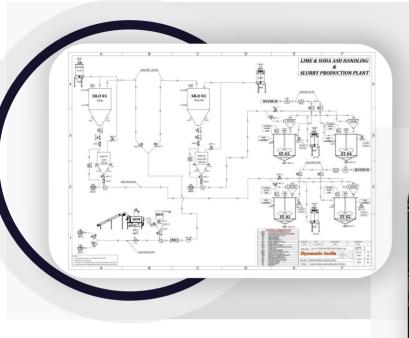
### Lime & Soda Ash Handling & Slurry Production Plant

- → Roots Blower 50 HP
- → Jumbo Bag Discharge Station
- → Automatic Bag Slitting Machine
- → Rotary Airlock Valve
- → Inline Magnetic Separator
- → Air Strainer
- → Storage Silo 70 m
- → Storage Silo 88 m

- → Weighing Dense Phase Systems (Soda Ash & Lime)
- → Ground Mounted Dust Collector (For Silos)
- → Roots Blower (Conveying from Dense Phase to Slurry Tank)
- → Cyclone Feeder (Individual for Each Slurry Tank)
- → Slurry Preparation Tanks Lime 35 m
- Slurry Preparation Tanks Soda Ash 25 m
- Ground Mounted Dust Collectors (For Slurry Tanks)



### GAD Lime & Soda Ash Handling & Slurry Production Plant





### GAD Lime & Soda Ash Handling & Slurry Production Plant



LIME & SODA ASH HANDLING SYSTEM



# Automatic Bag Stitching and Conveying System

Client : UPL Limited (UPL-1)

Supply : Automatic Bag Stitching and Conveying System

- Material : CaCl2 Bags
- Location : Ankleshwar, Gujarat

### **Description of Supply :**

- → Bag Conveying System is a combination of different Belt Conveyors with Compatible attachments and spacing.
- → All the conveyors are having a separate Motor Gearbox Drives.
- Empty bags are placed at the first conveyor and it is a mounted on Load cell. One Weighing Indicator with Cabinet is placed at eyesight level to read the weight reading of bag.
- → After completion of filling, the bag is transferred further and flipped from vertical to horizontal orientation by means of a Special Attached Mechanism
- → In the length of conveyor there is one Bag Counting sensor is provided to maintain the production record.
- → After this, filled bag will stitch by an Automatic Bag Stitching Machine and the conveyor further moves the bag towards the application.
- Bag Cleaning Rolls are equipped with the smooth brushes to clean the bag from outside.

### Automatic Bag Stitching and Conveying System

### Consisting of the Followings:

- → Belt Conveyors of Customised Lengths and Drives Bag Guide Flappers in all Conveyors
- → Bag Turner
- → Bag Counter
- → Automatic Bag Stitching Machine
- → Bag Cleaning Roll Brush

- Dust Collector
- → Steel Structure and Supports
- Walk Ways and Ladders
- → Radial Belt Conveyor
- → Decline Belt Conveyor
- → Roller Belt Conveyor



### Layout of Automatic

# **Bag Stitching and Conveying System**









## Lime Handling System

Client: UPL Limited (UPL-1)Supply: Lime Handling SystemMaterial: Lime PowderLocation: Ankleshwar, Gujarat

### **Description of Supply :**

UPL

- → A Lime powder handling system installed with the subjective instruments and controlling stations for a significant application to UPL.
- Raw material comes from the Bulker is being transferred to the Storage silos by means of compatible Roots Blowers and Diverter Valves.
- → Manual Feeding Hopper provided to load the silos for material comes with small bags.
- Further, material of silos transferred through Horizontal Screw Conveyor and Inclined Screw Conveyor to charge the Weighing Hoppers by switching the flow from Actuated Diverter Valve.
- → At the bottom of Weighing Hopper, RAVs are provided for isolation and the desired good is conveying to the applicant Reactors by Pneumatic Conveying Systems.
- → All the Equipments / Instruments are manufactured / used as a close passage phenomenon so as to minimize the Dustin. Ground Mounted Dust Collectors are provided to minimize the internal Dustin of Storage Silos and Weighing Hoppers.

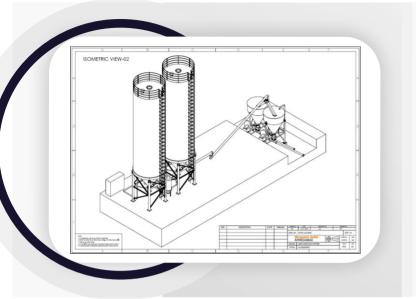
### Lime Handling System

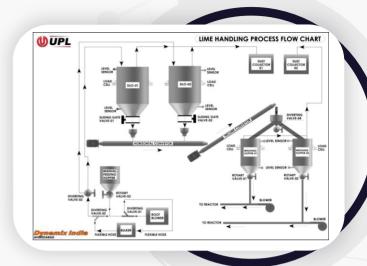
- → Storage Silos of 02 Nos. with Required Accessories
- → Horizontal Screw Conveyor
- → Inclined Screw Conveyor
- → Actuated Diverter Valve
- → Weighing Hoppers with Actuated RAVs.
- → Manual Feeding Hopper with Actuated RAV
- → Roots Blowers of 02 Nos. with Diverter

- → Ground Mounted Dust Collectors
- → Reactor Charging Routing Lines with Compatible MOC
- → Actuated Diverter Valve
- Actuated and Manual Isolation Valves
- → Pressure Relief Valves
- → Control Panel



# Process Flow Chart of Lime Handling System











# CPC Handling System

- **Client** : UPL Limited (Unit UPL-12)
- Supply : CPC Handling System
- Material : Calcined Petroleum Coke
- Location : Dahej, Gujarat

### **Description of Supply :**

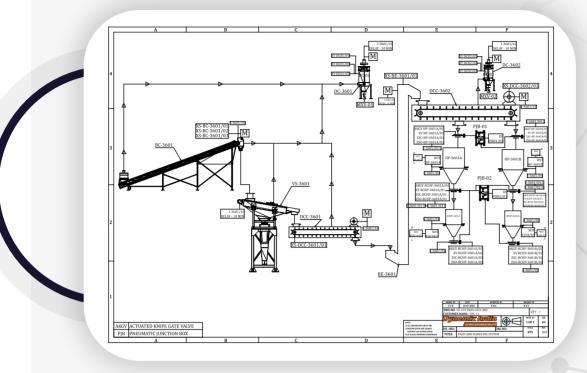


- → The raw material, known as CPC (Calcined Petroleum Coke), is transported to a vibrating screen using a belt conveyor.
- → From there, the material is collected by Drag Chain conveyor -1 and transferred to another Drag Chain Conveyor -2 with the help of a bucket elevator.
- The material that comes out of Drag Chain conveyor is then transferred to the reactor through a weighing hopper.
- → To minimize the amount of dust generated, all the equipment and instruments, including the Dust Collector, are placed in close proximity to each other.

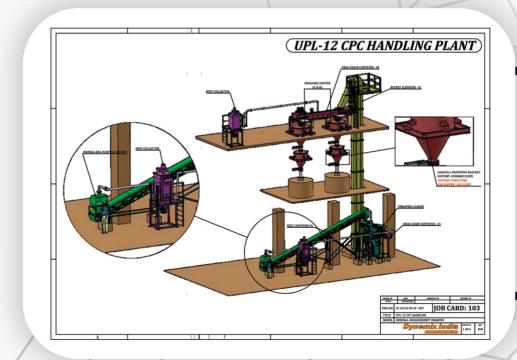
### **CPC Handling System**

- → Belt Conveyor
- → Vibrating Screed
- → Drag Chain Conveyor
- → Bucket Elevator
- → Retention Hopper
- → Weighing Hopper
- → Load Cell
- → Actuated Knife Edge Gate Valve
- → Purging Valve
- → Butterfly Valve

### P&ID of CPC Handling System



### Layout of CPC Handling System



## Lime Handling System

Client : UPL Limited (UPL-12)

- Supply : Lime Handling System
- Material : Hydrated lime
- Location : Dahej, Gujarat

### **Description of Supply:**



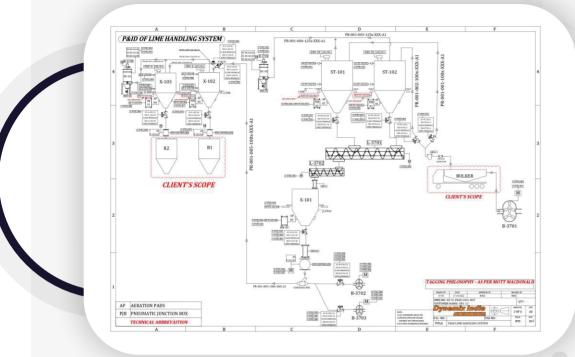
- The Lime Powder handling System is equipped with instruments and a controlling station to fulfill an important application.
- → To begin, the Raw Lime is received from a bulker and then transferred to a storage silo using a Roots Blower.
- At the Bottom of the silos, Screw conveyors are installed to transport the material to a weighing hopper.
- → To ensure precise conveying of the lime, a RAV (Rotary Airlock Valve) is provided at the bottom of the weighing hopper. This valve enables the use of a Pneumatic Conveying System to transfer the lime into the reactor.
- → To address dusting concerns, a dust collector is included in the system. This feature effectively eliminates dusting throughout the entire system.

### **Lime Handling System**

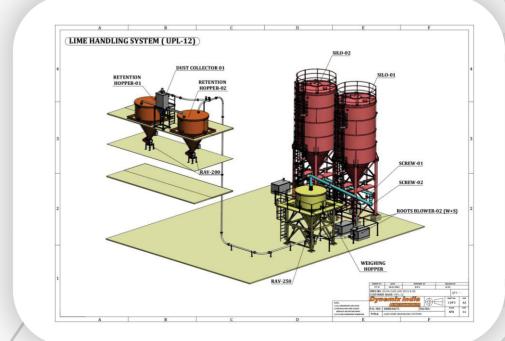
- → Roots Blower
- → Bulker Unloading Station
- → Magnetic Separator
- → Air Stainer
- → Silo
- → Screw conveyor

- → Weighing Hopper
- → Rotary Air Lock Valve
- Retention Hopper
- → Actuated and Manual Butter Fly Valve
- → Pressure Relief Valve
- → Dust Collector

### P&ID of LIME Handling System



# Layout of LIME Handling System



# MATERIAL CONVEYING EQUIPMENTS

#### **Tubular and Trough Screw Conveyor**



#### Screw conveyors are bulk material transportation system composed of a rotating, spiral screw inside tubular casing or a trough. As the screw rotates, dry or semi dry bulk material is pushed forward through the conveyor from one area to another. Screw conveyor systems handle all kinds of different substances, including powder, dust, flakes, granules etc.

#### **Belt Conveyor**



Belt Conveyor, any of various devices that provide mechanized movement of material, as in a factory; they are used principally in industrial applications but also on large farms, in warehousing and freight-handling, and in movement of raw materials. Conveyors may be only a few inches in length, or they may be integrated systems several meters long.

#### **Dense Phase System**



Dense Phase Pneumatic Conveying is a method for moving difficult, abrasive or friable materials, at slow speed. It pushes material along an enclosed pipe, in a plug form, using small amounts of gas, at a low pressure and high-volume positive displacement. Most commonly, the process will mean moving material from a single collection point to either a single or multiple reception points.

#### **Micro Batch Feeder**



The Micro-Batch Feeders for powder and granular product feeding are particularly suitable for poorly flowing materials which tend to clog, along with adhesive products. The MBFs are also beneficial for the nominal flow of high & low dense material in the application of volumetric feeding.

### Pneumatic/Vacuum Conveying System

The principle of Pneumatic/Vacuum conveying is based on the fact that bulk goods can be moved by means of air through pipelines. The flowing conveying air transmits a propulsion force on the bulk material and thus conveys it through the conveying line. DYNEMIX INDIA combines modern computerized technology with innovative mechanical and Pneumatic/Vacuum design to produce ingredient handling systems that not only free operators of physical effort but also perform sophisticated Pneumatic/Vacuum conveying operations with little human assistance. Each system we design is custom engineered for the application parameters provided by the customer, to ensure that the system will perform to exact requirements.

#### **Storage Silos & Accessories**



#### and many more. Drag Chain Conveyor



### **Bucket Elevator**



### **Tube Chain Conveyor**



Drag chain conveyors work on the Principle of a chain-and-flight combination pulling a volume of material along. The chain is equipped with different flights/paddles and drags the material from various charging points to a number of discharging points.

Bulk materials in powder and granular

form are used in wide range of

industrial processes. Dynemix

provides reliable solutions for bulk

solid storage systems and silos from

concept design to turnkey

installations with complete

accessories i.e. Dust filters, level

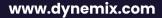
sensors, butterfly valves, Pressure

Relief Valve, Actuators, Bin activators

The Bucket Elevators comes in three basic types: centrifugal, continuous, and positive discharge conveyors according to the applications. Bucket elevator mostly used for the granular ands solid material to convey vertically at higher elevation and small as well.

A tube chain conveyor moves materials inside a tube, pulled by a chain. It offers a convenient way for conveying bulk material from one location to another, and also multiaxially. Tube chain conveyors are used for transporting, feeding, dosing, distributing and discharging pourable bulk materials.





# MATERIAL HANDLING EQUIPMENTS

### **Dust Collector**



#### **Lump Breaker**

flanged ring which contains vertically mounted filter bags of various types. An air jet filter element cleaning system is integrated in the top cover. Dust Collectors are available with or without suction fans.

The lump breaker is ideal for making a

breaking operation of material having

a tendency to form clumps. The rapid

rotation of the blades causes the

fragmentation of clods. The fast

rotation of specially shaped blades

through a fixed mesh gives an

efficient lump breaking action.

# Dust Collectors are equipped with a cylindrically shaped steel body and



General-purpose screening machines for fractioning or protective screening with 1 to 3 decks. Vibrating Screen made with a screening surface vibrated mechanically at high speeds and used especially for screening ore, coal, or other fine dry materials.

### Manual Bag Dumping Station



Bag dump stations are designed to minimize dust emissions during the manual process of bag opening and dumping. The system reduces material waste and eliminates the need to clean a remote dust collection site, while protecting workers and preventing plant contamination.

### Actuated and Manual Slide Gate Valve



**Agitators** 

We endow our customers with an enviable range of Liquid Agitators that have a huge demand and serve a wide number of industrial applications. These are primarily used for mixing and blending various types of liquids namely semi – liquids and others.

#### **Automatic Bag Slitting Machine**



The Automatic Bag Slitting Machine is a versatile automatic emptying machine and earns it's name owing to its ability to empty any type of bag be it paper, or HDPE of 25 - 50 kgs capacity. The main application of this machine is to load the desired material storage.



### Lime Slaker

Actuated Slide Gate Valves are made with utmost accuracy and are very reliable. Our engineers design valve after collecting all technical information from the clients – hence each valve offered to the client is exactly suitable to the application.



High-consumption lime industry use Dynemix lime slaker to convert hydrated lime or raw lime into lime slurry. Typically, a Lime slaker is comprised of two chambers. The first chamber is called the slaking chamber and the second chamber is usually used as a grit removal chamber.

### Jumbo Bag Loading and Unloading Station



Dynemix India Bulk Bag Unloading Systems, also known as Bulk Bag Dischargers manufacturers of material handling equipment, is specifically designed to provide an easy, clean and economical way to discharge the entire contents of bulk and semi-bulk bags, especially when the material is less than free-flowing. Our massage paddles have a proprietary design to discharge the contents of the bag dust-free into your process, to a Pneumatic Conveying System, a Flexible Screw Conveyor or an Aero-Mechanical Conveyor.

#### **Key Features**

- Heavy Duty Welded Tubular Frame Construction
- Lift Off Guards protecting plant personnel
- Lift out corner panel and Quick Release massage paddles for cleaning and maintenance
- Partial Bag Cut-off





### **END USERS :**



### OEMs:



### **CONSULTANTS IN TOUCH WITH:**



# **Appreciation Letters / Certificates**







### Dynemix India Engg. Pvt. Ltd.

- 🖕 +91 99041 36900 | +91 82380 11559
- 🗷 sales@dynemix.com
- www.dynemix.com
- B 1006 to 1009, The Gateway, Near Parikh Hospital, Opp. Torrent Power Sub Station, Nikol, Ahmedabad - 382350, Gujarat
- 2 A & B-Satva Industrial Park, Ahmedabad-Indore Highway, Village – Kuha (Kothiya), Ta. Daskoi, Ahmedabad – 382433, Gujarat – India.

