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www.dynemix.com

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 type of customised Powder Handling Solutions
- → Hydraulic & Pneumatic Automation Solution
- Packing Solutions
- → Dust Collection System
- Silo with Conveying System
- 🔸 Industrial Gas Skid
- 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	LOCATION	EQUIPMENT / PROJECT SUPPLIED
01	Metito (Overseas) Qatar WLL	Doha-Qatar	Lime Preparation Unit
02	UPL-1	Ankleshwar	Lime Handling System
03	UPL-2	Ankleshwar	Screw Feeder & Rotary valve
04	UPL-5	Jhagadia	Screw Feeders in various project
05	UPL-1	Ankleshwar	Automatic Bag Stitching & Conveying System
06	Grasim Industries Limited	Vilayat	Lime Slurry Production Plant
07	Aarti Industries Limited	Vapi	Automatic Bag Sliting machine Trunky Solution on Reactor charging
08	Faith Industries Limited	Ahmedabad	Trunkey Solution for Powder and Liquid Material Handling system
09	Deccan Fine Chemical (INDIA) Ltd	Hydrabad & Goa	Screw Feeders for Various Conveying Application
10	Chem Process Systems	Sanad, Gujarat	Lime Handling System, Belt Conveyors, Agitators, Screw Feeders
11	Maxwel Aircon INDIA Pvt. Ltd.	Silvasa	Trunkey solution, Manual Bag custing & dumpaing system with screw feeder with mixer
12	Bodal Chemicals Limited	Vadodara	Screw Conveyors and Belt Conveyors
13	Huntsman Corporation	Vadodara	Screw Conveyors
14	Fair Mate	Vadodara	Ribbon Blender and Drum Agitator
15	Dupont	Vadodara	Cutomised Trolley
16	Deepak Nitrite	Vadodara	Screw Conveyor
17	Ramdev Chemical Industries	Ankleshwar	Manual Slide Gate valve in coal plant
18	Bectochem Consultants & Engineers Pvt. Ltd.	Ankleshwar	Screw Feeder for GSN & GSK for food industries Also Hallar coated rotary valve for AICI3
19	Nuberg Engineering Limited	Noida	Screw Feeder
20	Penta Autofeeding INDIA Ltd.	Mumbai	Screw feeder and Micro batch feeder and silos aeccorries for plastic industries
21	Afcon Infrastructure Ltd	Kodinar	Automatic Bag Slitting Machine, Mobile Concrete Placer

### Lime Preparation Unit

- Client : Metito Overseas, Qatar
- Supply : Lime Preparation Unit
- Material : Hydrated Lime
- Location : Doha Qatar

### 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 :

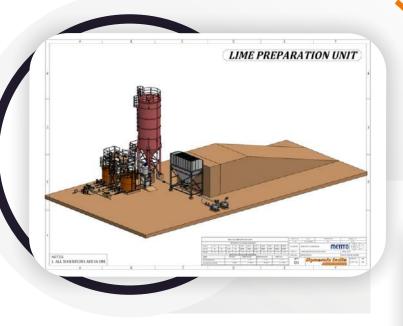
- → Material Unloading Hopper
- Storage Silos with Required Accessories
- → Roots Blowers
- → Screw Conveyors
- Weighing Hoppers
- → Slurry Tanks
- Slurry Pumps

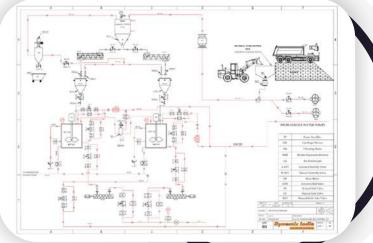
- → Dust Collector
- → Fume Scrubber
- → Actuated and Manual Isolation Valves
- Actuated Diverter Valves
- → Level Indicators and Sensors
- Self Actuated Pressure Relief Valves

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## METITO

## Layout of Lime Preparation Unit





### P&ID of Lime Preparation Unit



### Lime Handling System

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



### Description of Supply :

- → 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.

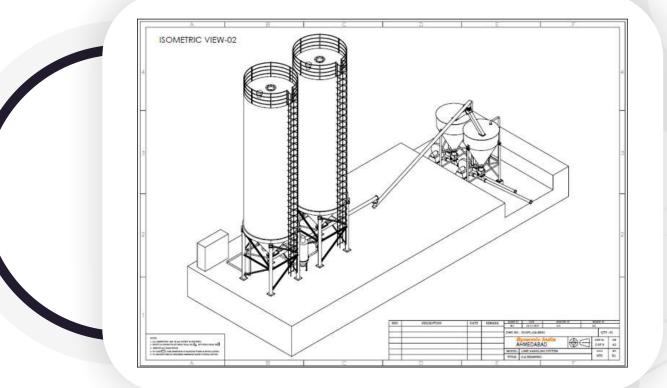
#### Lime Handling System

### Comprises of Equipment / Instruments as followed :

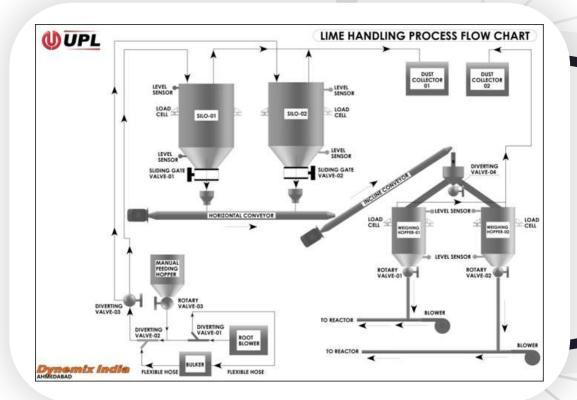
- Storage Silos of 02 Nos. with Required Accessories
- → Horizontal Screw Conveyor
- → Inclined Screw Conveyor
- → Actuated Diverter Valve
- → Weighing Hoppers with Actuated RAVs.
- → Manual Feeding Hopper with Actuated RAV
- → Roots Blowers of 02 Nos. with Diverter

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

### Layout Drawing of Lime Handling System



### Process Flow Chart of Lime 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 valve 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**

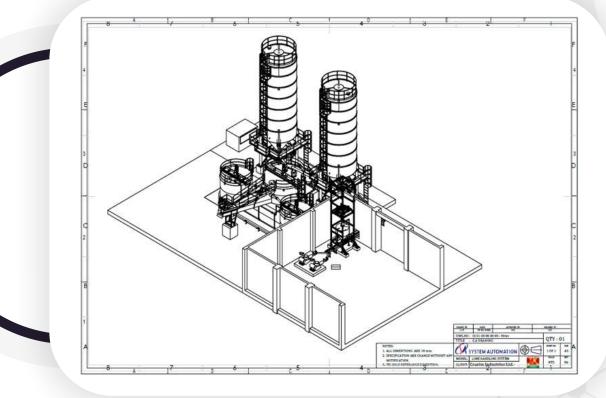
### Comprises of Equipment / Instruments as followed :

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

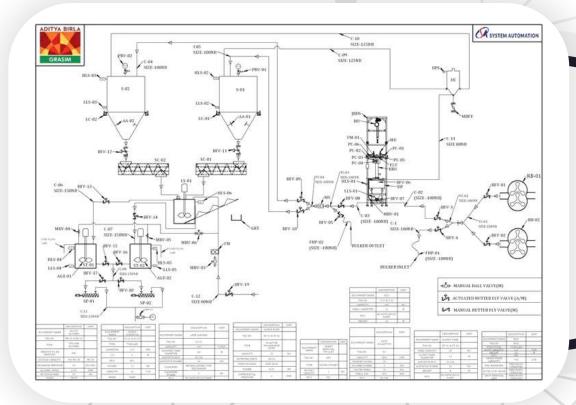
- Actuated and Manual Isolation Valves
- Actuated Diverter Valves
- → Greet Collection Trolley
- Level Indicators and Sensors
- → Self Actuated Pressure Relief Valves
- Control Panel

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### Layout Drawing of Lime Slurry Production Plant



### Process Flow Chart of Lime Slurry Production Plant









## 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 :**

- → 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**

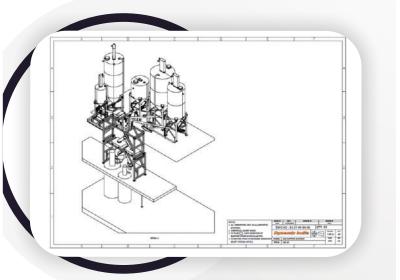
### Comprises of Equipment / Instruments as followed :

- → 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



### Layout Drawing of Material Handling System



### P&ID of Material Handling System



## Automatic Bag Slitting Machine

Client : Aarti Industries Limited

- Supply : Automatic Bag Slitting Machine
- Material : Customised Material
- Location : Ahmedabad, 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.

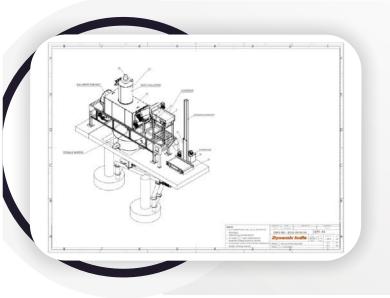
### **Automatic Bag Slitting Machine**

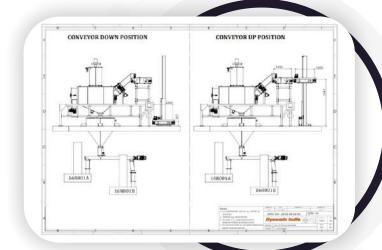
#### Consist of the Following :

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

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

### Layout of **Automatic Bag Slitting Machine**













## 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







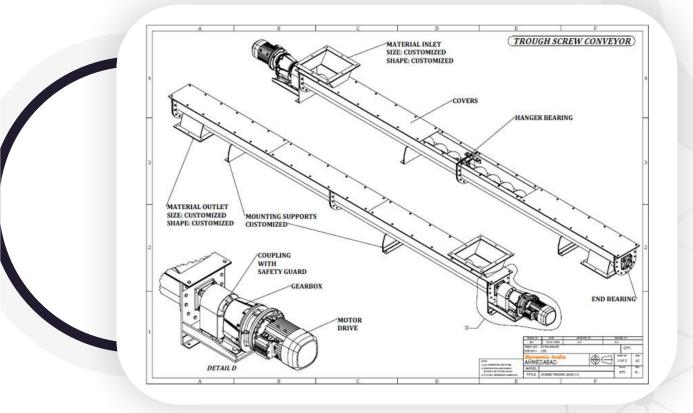
### Customized Screw Conveyors (Tubular and Trough)

SR. NO.	NAME OF CUSTOMER	TYPE OF SCREW CONVEYOR	FOR MATERIAL
01	CHEM Process Systems	Tubular & Trough	Customised Material
02	Deccan Fine Chemicals (India) LTD	Tubular & Trough	Customised Material
03	Nuberg Engineering LTD	Tubular & Trough	High Temp. Material
04	Huntsman	Tubular & Trough	Dyes Powder
05	Deepak Nitrite	Tubular & Trough	Urea
06	Bodal Chemicals LTD	Trough of MOC: Alluminium	Customised Material
07	Bectochem Consultants & Engg. PVT LTD	Tubular & Trough	Plastic Powder
08	Penta Autofeeding India LTD	Tubular	Micron Plastic Granular
09	UPL Limited	Tubular & Trough	Lime Powder
10	GSPL	Tubular	Filter Press Cake

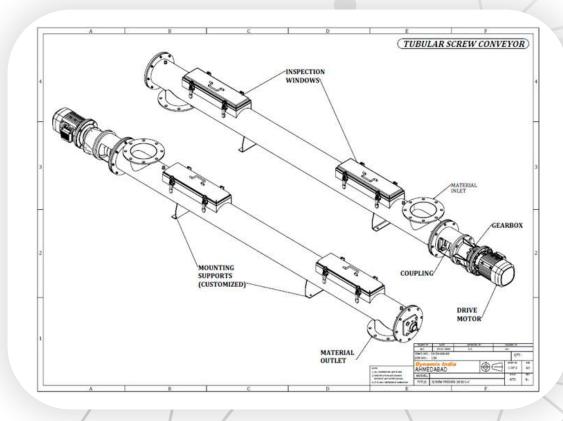
### **Customized Belt Conveyors**

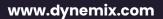
SR. NO.	NAME OF CUSTOMER	TYPE OF BELT CONVEYORS	FOR MATERIAL
01	CHEM Process Systems	Horizontal Weighing	Customised Material
02	UPL Limited	Horizontal, Inclined and Radial	Ammonium Chloride, Mancozeb, SE-367 Powder
03	Aurangabad Distillory Limited	Horizontal Conveyor	Molesis Cake
04	Bodal Chemicals Limited	Inclined Conveyor	Dyes Filter Cake
05	Shivalaya Construction	Mobile Belt Conveyor	Concrete Slurry
06	Rithwik Projects Pvt Ltd	Mobile Belt Conveyor	Concrete Slurry
07	SS Infra Projects	Mobile Belt Conveyor	Concrete Slurry
08	Millenium Construction	Mobile Belt Conveyor	Concrete Slurry
09	Bekem Infra Projects Pvt Ltd	Mobile Belt Conveyor	Concrete Slurry
10	Mantovani Di Dharti Pvt Ltd	Mobile Belt Conveyor	Concrete Slurry
11	Gujarat Infracon	Mobile Belt Conveyor	Concrete Slurry
12	Birampur Construction Pvt Ltd	Mobile Belt Conveyor	Concrete Slurry
13	Baijnath Nirman India Pvt Ltd	Mobile Belt Conveyor	Concrete Slurry
14	Harekrishna Construction Company & Suresh Shivdhan Chandak (Stone Crusher)	Mobile Belt Conveyor	Concrete Slurry
15	Afcon Infrastructure Ltd	Mobile Belt Conveyor	Concrete Slurry

### General Layout of Trough Screw Conveyors



### General Layout of Tubular Screw Conveyors









### Agitator

Client	: CHEM Process Systems
Supply	: Agitator
Material	: Low Viscous Material
Location	: Sanand, Gujarat

#### **Description of Supply :**

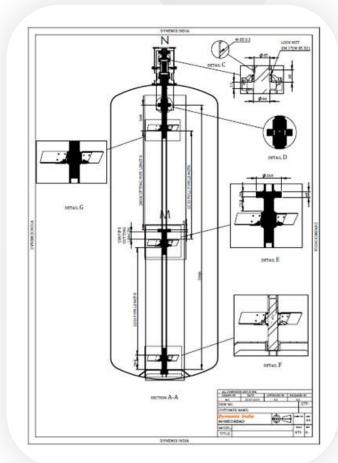
- → Agitator with Motor drive and Gearbox Equipped with required Mechanical Seals and Blades designed and manufactured for a specific vessel.
- → MOC of Agitator was being selected in accordance with the desired product
- → material properties i.e. Bulk Density, Viscosity, Corrosiveness and Working Temperature – Pressure etc.
- → Motor power and gearbox selection is derived by a Mathematical Model.
- → Mechanical Seal selection is also depending onto the material properties.
- Agitator blades may either fabricated or replaceable depending on consumer requirement.

### Agitator

Consisting of the Following:

- → Electric Drive Motor
- → Gearbox
- Agitating Impellers
- → Mechanical Seals
- → Heavy Duty Fabricated Shaft
- Mechanical Couplings
- Latern Stool





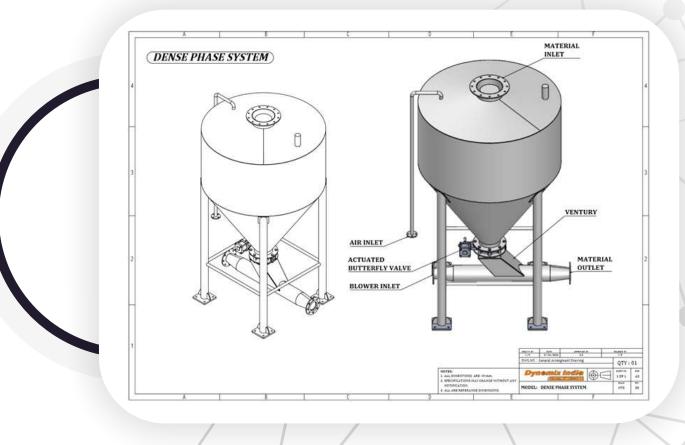


### **Material Handling Equipments**

#### **Dense Phase System**

→ Dense Phase Pneumatic Conveying is a method for moving difficult, abrasive or firable material at slow speed. It pushes material along an enclosed pipe in a plug form using small amounts of air at alow pressure and high volume positive displacement. Most commonly, the process from a single collection point to either a single or multiple



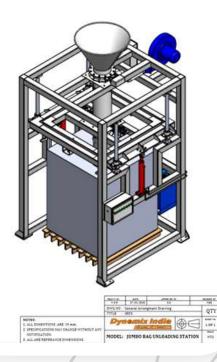


### Jumbo Bag Loading and Unloading Stations

→ Dynemix India Jumbo Bag Unloading systems and Loading Systems also known as Bulk Bag Discharger and Charger are specifically designed to provide an easy, clean and economical way to discharge or charge the entire contents of Jumbo Bags. These stations are designed by accommodating Human safety and Operation Ergonomics.

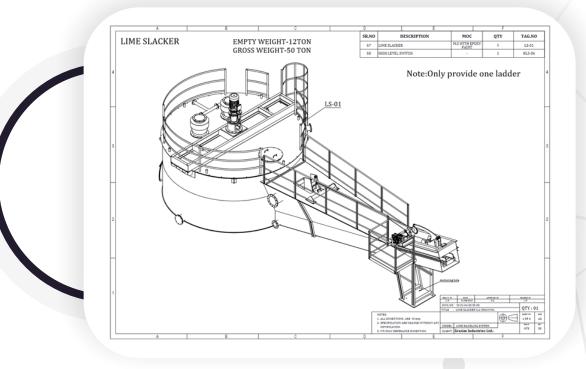


(JUMBO BAG LOADING STATION)





→ High-consuption lime industries are preffering lime slaker to convert hydrated lime or raw lime into lime slurry. Typically, a Lime Slaker is comprised or two chambers, first chamber is called the slaking chamber and the second is usually used as a Grit Removal Chamber.





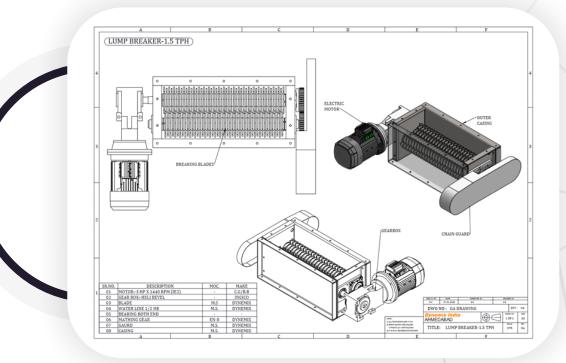
### Automatic Bagging Machine

→ Dynemix India provide complete turn-key solution for your Automatic Bagging Machine System requirement. A variety of materials and bulk products are packaged by using open mouth filling systems. The process of involves feeding, weighing and dumping into the bag which is clamped on an pneumatic holder. The bags are picked and placed automatically by the bag placer system. The bag is then released and dropped onto a conveyor. The semi-automatic heat sealing machine and stitching machine further seal the inner liners and stitch the outer fo closing of the bag.





The Lump Breaker is ideal for making a breaking operation of the material having tendency to form clumps. The rapid rotation of the blades auses the fragmentation clods. The fast rotation of specially shaped blades through a fixed mesh gives efficient lump breaking action. The presence of two rotors allows high through put required.

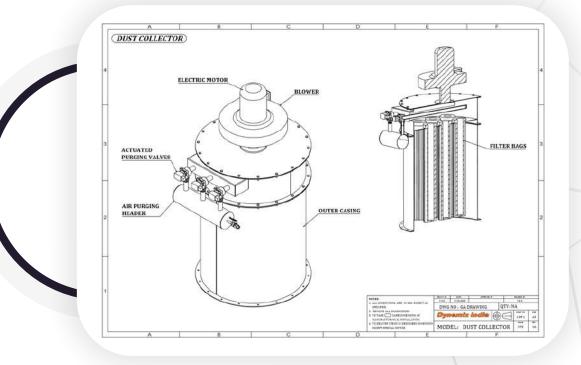




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### **Dust Collector**

→ Dust Collectors are equipped with a cylindrically shaped steel body and 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. As an option for applications with top-mounted suction fan or in case of limited headroom, it can be equipped with a large front door which facilitates access to the filter elements in case of inspection or maintenance.







#### **END USERS :**



#### OEMs:



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



### **Appreciation Letters**

Date: 26.08.2021



#### TO WHOMSOEVER IT MAY CONCERN

Ms, Aarti industries limited, Jhagadia had awarded the erection & commissioning of 30T Lime transferring system & Agilator with drive unit assembly to M/S. Dynemix india through PO NO : 4550320046, 4550307595 Dt: 10.09.2020. M/S Dynemix india has executed this installation of the system as per the agreed terms and conditions.

We are very much satisfied with the quality of the work done by M/s. Dynemix india & would look forward to keep them associated with us for further process

For Aarti industries Itd.,

Authorized Signatory

www.aarti-industries.com | Cilk: L41100L/1969PLC007301 Pegd. Ottios: Prov. 801, 80128, Uirc Phase, GDC Upp-Seldish, Tak- visiadi INDA. T: 0260.240068 Paciery: Pictus - 75811-64, GDC, Pico 24, Judged 533110, Det Bhuruch. NDV. T: 550701711, 550701811. Admin. Office: 17.105yg.Reletis, 5-d Floor, Maland Dongson L4K Rod. Malard (M. Mar-Bit-40020, INDA T: 026.9709006, T: 1025.6903641 | E: intildeatif industries.com



Tn.

UPL United, Unit - 1 Precision, 1772-178, GDC Unit, Bharuch, Andredman, 203 OC Granina, India Weispield Commission (ed. 2044) 201073

Dynemix India

21/A, Madhav Estate, S.P.Ring Road Odhav, Ahmedabad, Gujarat -382415

Kind Attn Mr. lignesh Patel / Mr. Sanjiy Gajjar

Sub - Appreciation Letter for Dynemix India Products

#### Dear Sir,

We are happy to know that M/s Dynemix India has Successfully completed our various type of Jobs like Screw Conveyor, Dense Phase System, Lime Handling System in UPL-01 Ankleshwar.

My Heartiest congratulation to you & your entire team. We are sure that you will do good work in future and will be able to give complete solution for customized powder handling solution.

Thanking You

Name – Harish Maheshwari

LT0

Designation - Sr.Manager (Engineering )

Company name- UPL Limited ,Unit-01 -Ankleshwar



#### deccan®

Dynemix India 2A, Satva Industrial Park, Ahmedabad – Indore Highway, Vill. Kuha, Ahmedabad – 382433.

Kind Attn: Mr. Jignesh Patel & Mr. Sanjiv Gajjar

Subject: Appreciation Letter for Dynemix India's Products & Systems

Deccan Fine Chemicals (India) Private Lin 6.2-94/02/4/200, Intel No. 9, adden Him, Indenhal 500-577, "charges, refehd, v22-40-4/455555, fox. - 01.46-20000771 (response Him, 9241770, phage senses)

We are happy to know that M/S. Dynemix India has successfully completed our various types of jobs like Tubular Screw Conveyors. Trough Screw Conveyors and Surge Bin Storages at various projects of Deccan Fine Chemicals (India) Limited.

My Heartlest congratulations to you & your entire team. We are sure that you will do good work in future and will be able to give complete solution for customized equipments & bulk powder handling system.

Thank you, Name: K.V.L.P Raju

Designation: Technical Director Company Name: Deccan Fine Chemicals (India) Pvt Ltd





To, Dynemix India 18,Shreenathji Estate, Vatva, Ahmedabad

Gujarat

K.A. Mr.Jignesh Patel / Mr.Sanjiv Gajjar

Sub: Appreciation letter

Dear Sir,

We are happy to know that Ms.Dynemix India has Successfully completed the our various type of Job, Like SS Screw Conveyor for the Ms.GE D/I & Gas (California – USA Project) for the Biomass gas/ficition plant & Other Aluminium Screw for the Chemical Industries domestic Supply.

My hearties congratulations to you and your entire team. I am sure that you will continue the good work done, and will be able to complete solution for the Customized Solution.

Thanking You, Harsh Patel Sr. Engineer Projection

15. Nacial Schurcht Kehnen, Samarak Verangener Hyperen, Therese Univers. Theorem. 200; 175: Homodaland Josla, Int. 1 (4) (3) (277) 234-144-44; Fara Vera (3) (277) 234-156; Veral Color 20050000 Konstal Color Dimensional Annual Workship, Computer procession. 2005.



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🛚 sales@dynemix.com

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- 2A-Satva Industrial Park, Ahmedabad-Indore Highway No. 59, Village – Kuha (Kothiya), Ta. Daskoi, Ahmedabad – 382433 Gujarat – India.

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