



Leadership Through Excellence

Smart Integrated Automation Solutions for **Plastics Processing** Industry





About Us

Since 1998, Aerodry is serving the plastic processing industry with auxillary equipment and systems. We have been expanding our business continuously in order to serve our valued customers with latest technology and a personalized service support system. Our constant endeavor has been to provide total solution in the field of **drying, conveying, dosing, blending, heating & cooling, recycling, automation, extrusion process control and complete supervisory system**. In our pursuance to excel we have forged partnerships with leading companies in our field. We offer the latest technology with a highly efficient support system to our valued customers.

We have a modern manufacturing facility at Noida and regional support offices to serve our valued customers with our wide range of auxiliary equipments. Our corporate statement "leadership through excellence", defines our goal to be a global enterprise in our area of operation.

We have a collaboration with Ferlin B.V of the Netherlands, & Nova Frigo Engineering S.r.l Italy to deliver the best technologies meeting global standards.

Our manufacturing plants are equipped with the latest machines to ensure the high quality end products. We are an ISO 9001 certified organization ,our products are CE marked and are exported into world wide markets. We are constantly expanding and upgrading our systems and technology to set a new bench mark in our field.



Hot Air Dryers

Aerodry's IHD Series Hot Air Dryers are specifically designed for the plastic processing industry for pre-heating & drying of various plastics & petrochemical materials in granular or pellet form. These insulated Hot Air Dryer not only provide better temperature control & performance but also consume less energy as compared to conventional Non Insulated Hot Air Dryer.

Salient features

- Unique air distribution system ensures uniform pre-heating & drying.
- State of art temperature control with digital display.
- All parts coming in contact with material are made of stainless steel.
- Air flow control dampers are provided with filter wire mesh to check entry of foreign particles into the hopper.
- Double walled temperature insulated, thus saving energy upto 60%.
- Easy to clean door/window provided with sight glass to ease cleaning.
- Light weight aluminium blowers with precisely designed 'air to material' ratio ensures faster drying
- Safety thermostat for dual protection.
- Stand for mounting (optional)
- Seven days programmable timer (optional)



Range: 40 to 2500 Ltr.



Dehumidifying Dryers

EAD Series Dehumidifying Dryers are equipped with latest desiccant drying technology used to dry and pre-heat all the important engineering hygroscopic plastic materials such as PC, ABS, PET, ACRYLIC, PBT, NYLON, SAN, DELRIN, HIPS, ACETAL, CELLULOSE, ACETATE, NORYL etc. The system works on close loop basis thus unaffected by the ambient conditions. Continuous dew point of less than (-) 55°C is achieved for ensuring optimum drying.

Salient features

- PLC control.
- Online process display for easy monitoring.
- Swiss molecular sieve in beaded form.
- Highly efficient cartridge filters for both drying & regeneration side.
- Modular designs with multiple drying hoppers.
- Process heater bank is an integral part of insulated drying hoppers. Thus power saving.
- Unique air distribution system ensuring faster drying.
- Return air cooler for consistency in drying.
- Auto changeover valve system.
- All SS-304 insulated drying Hoppers with window.
- Online dew point check option
- Heat recovery system for high heat models.



Range: 50 m³/hr to 2000 m³/hr



Hopper Loaders

Aerodry AVL Series Vacuum Loaders are Specifically designed & manufactured to suit the tough industrial conditions for conveying of bulk plastic materials to single as well as multiple machines. Hopper Loaders are available in various options i.e. Ratio, Duo, Tria, Quatra and 6 Stations

Salient features

- Side Channel blower with silencer for silent operation.
- Micro processor based controller.
- SS Flapper valve with level switch.
- Cyclone made of mirror class SS304 stainless steel.
- Easy to handle pickup nozzle.
- Dual Filters to avoid dust pollution.
- Audiovisual alarm to draw operator's attention.
- Audiovisual Empty bin alarm.



Range: 0 Kg/hr to 2500 Kg/hr



Centralized Plants

Aerodry ACS series centralized plants are fully automatic pneumatic conveying systems for automatic raw materials handling from debagging stations to silos and further to extruders, injection, blow moulding machines in plastic processing industry. Offered system helps in material saving and ensure state of art plant aesthetic. Modular in nature for future expansion makes it unique choice over conventional auto loaders for individual machines.

Salient features

- Touch screen PLC control upto 42 stations.
- SS 304 mirror finish cyclone.
- SS Flapper valve with level switch.
- Dual Filters to avoid dust pollution.
- Audiovisual alarm to draw operator's attention.
- Networking between central blower stations and cyclones.
- Expandable into multiple blower station with single control system.
- Line cleaning valves for automatic flushing of material lines.
- Proportionate valves for reground mix control.
- Auto/Manual material changeover systems for quick material change.
- Day bin with multiple outlet vacuum suction box.
- Connectivity with automatic dosing and blending and other auxiliary equipments.



Range: 12 to 42 stations



Gravimetric Batch Blending Unit

AGB Series Gravimetric Batch Blending Unit is economical, reliable and user friendly batch control blending systems. It is suitable for Large extruders, blow molding machine, the system is designed for efficient dosing for free flowing thermoplastic materials.

Salient features

- Plug in handheld touch screen pendant for operating single or multiple Gravimix.
- Central touch screen control to operate and monitor upto 16 blenders. (Optional)
- Rigid European Stainless steel construction with easy to use stroke restrictor for minor components.
- Window based Software supplied to manage and operate upto 16 Gravimix blenders through ordinary PC (optional).
- Reports i.e. Alarm history, recipe change, material consumption batch wise.
- Unlimited memory storage as per PC configuration.
- Software allows production data to be exported directly to MS excel.



Range: upto 3500 Kg/hr
10 Components



Volumetric Dosing unit

Aerodry ADU Series Dosing, blending units ensure precise and accurate dosing, blending of master batches in granular/pellets form for plastic processing, thus maintaining uniformity in colour. These units are fully automatic with features of synchronization with main extruder, injection molding machine.

Salient features

- Microprocessor based control to set inspection refill time for screw speed.
- Direct dosing screw eliminating separation.
- Easy to calibrate for accurate dosing.
- Reliable variable speed maintenance free motor stepper.
- Easy emptying for fast material change.
- Synchronisation with machine ensures change of Dosing with changing speed of machine extrusion model.
- Built in alarm with auto load facility.
- Can feed upto 200 recipe as per production need.
- Steel worm conveyors may be installed with diameters 12/16/20/24/30/35/40/50 mm.
- Special connector for signal from solenoid valve for press plasticising injection models..



Range: 0.25-500 kg/hr.



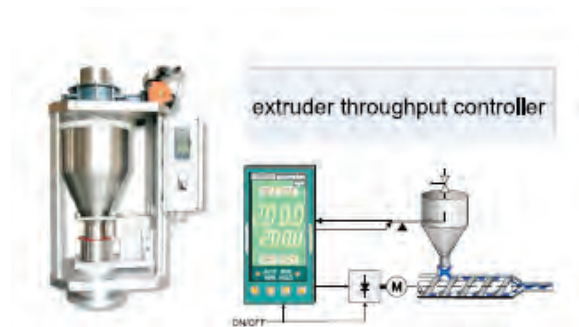
Automation for extrusion

Aerodry offers extrusion process control solution based on weight in loss principle in Joint Venture with Bolder automation GmbH Germany

These solutions are widely used for blend control in co-extrusion, blow molding, pipe extrusion for controlling the weight per meter and self corrective blend feeling through control of extruder haul off. Incorporation of extrusion process control ensures consistency in quality of end product and substantial cost saving.

Salient features

- High blending stability
- Equal layer distribution in co-extrusion
- Constant extruder feeding
- Material savings
- Precise measurement, optimal control
- Adaptive hopper refilling
- Adaptive control
- Start-up and change of working points in control
- Diagnostics by detailed status information
- Configurable alarms
- Supervision and control of the drive module



Temperature Control Solutions

Mold Temperature Controllers

Aerodry TAC Series Mold Temperature Controllers are ideal for heating/cooling with water/thermic oil as the heat transfer media for maintaining temperature in various applications of plastic moulding & extrusion process, with precise temperature control.

Salient features

- European Anti-corrosive pump.
- In-built auto cooling circuit to avoid temperature surge.
- Audiovisual Alarm in case of faults.
- Insulated SS-304 oil/water tank.
- In-built vent with oil/water filling cap.
- Overload and level protection for pump.
- Dual temperature safety.
- Switchable from oil to water mode.
- PID Temp. Controller.
- Forward Reverse Mold drainage facility.
- Large size PHE model for special application (optional).
- High pressure water based model upto 120°C (optional).



Range: 3 kW to 25 kW



Water Chillers

ACU Series Packaged Water Chillers are designed to meet diversified process cooling requirements of the Modern plastic Industry, meant to enhance productivity & quality. They are equipped with the latest safety features and microprocessor controls easy to handle and maintain.

Salient features

- Microprocessor based control.
- PHE (Plate heat exchanger) Evaporator.
- Large size inbuilt insulated tank.
- Shell &Tube / Large size finned condenser.
- High pressure chilled water pump
- Safety features ie Single phasing prevention, LP / HP cut outs, Anti freeze, dry running protection etc.
- Audio Visual Alarm against operational failure to draw attention.
- Crank case heater to prevent liquid migration of refrigerant in Compressor.
- Filter dryer to ensure moisture free system.
- Water re-feeding valve to maintain level in the tank automatically.



Range: upto 100 TR



Crystallisation Solutions

CHD Series Crystalliser

Aerodry offers CHD Series Crystallisers for continuous crystallization of amorphous materials such as PET. Recycling is becoming more and more important considering the environment and ever increasing cost of raw materials. Crystalliser helps not only in better processing of recycled PET but also help in avoiding the lump formation during drying at high temperature. The agitator Hopper is equipped with geared motor drive. The amorphous material in the hopper is kept in motion at a controlled temperature until crystallization is concluded. The system is equipped with various sensors to ensure the uniform crystallisation of the material for further processing in Extrusion or injection molding process.

Salient features

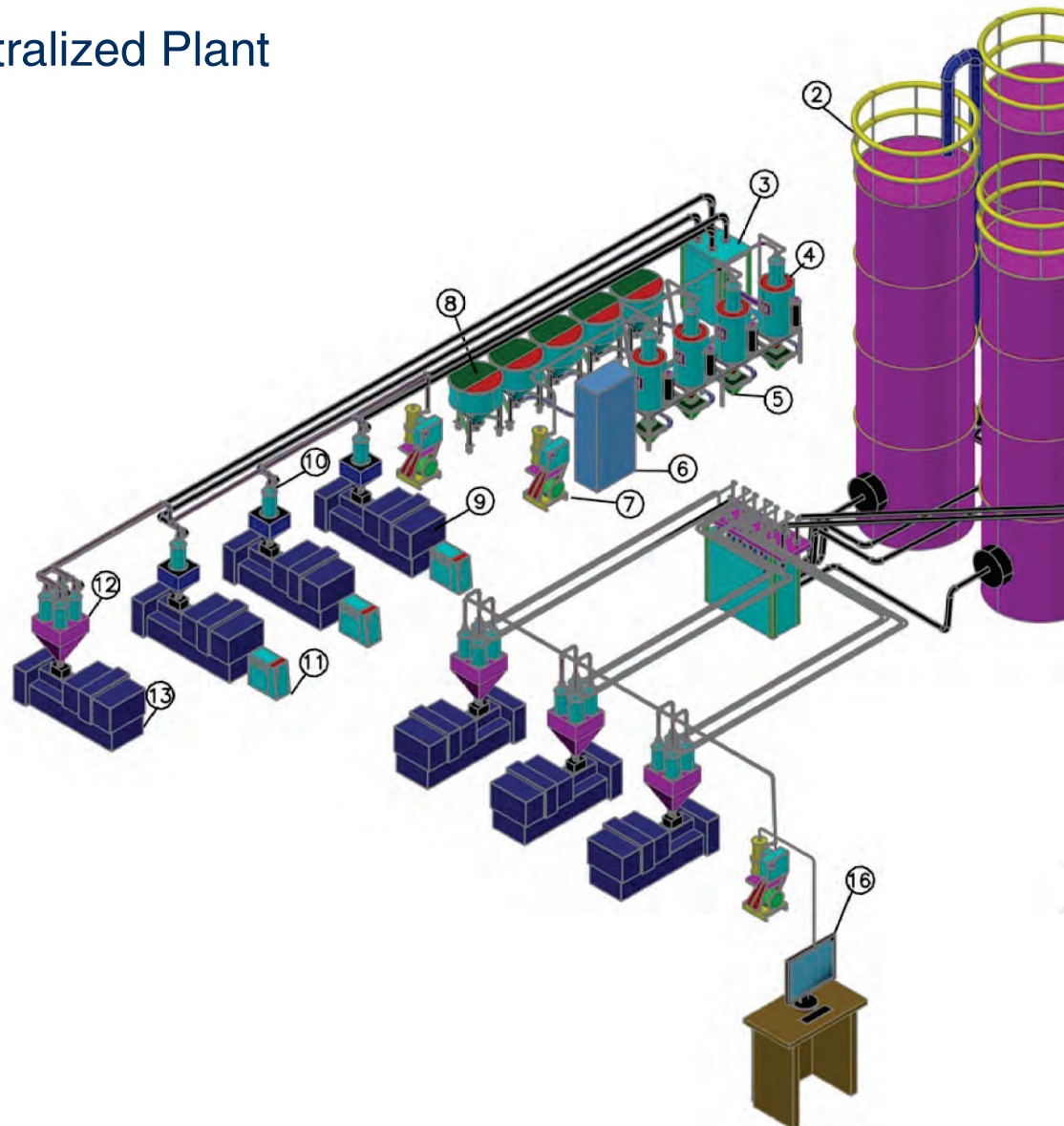
- Hopper is in SS -304 material of construction.
- Start-up program for auto or manual mode.
- Extra strong agitator arm to ensure long life.
- Sensors to ensure the even crystallisation.
- Removable section of cone thus easy maintenance.
- Inbuilt primary and secondary conveying for direct use.
- Energy saving option in built in the system.
- User friendly PLC controls.
- Dust separator in built.
- Open / close loop system as per application.
- Can be used as stand alone or with processing machine.
- Can be offered with Dehumidifier as per application.

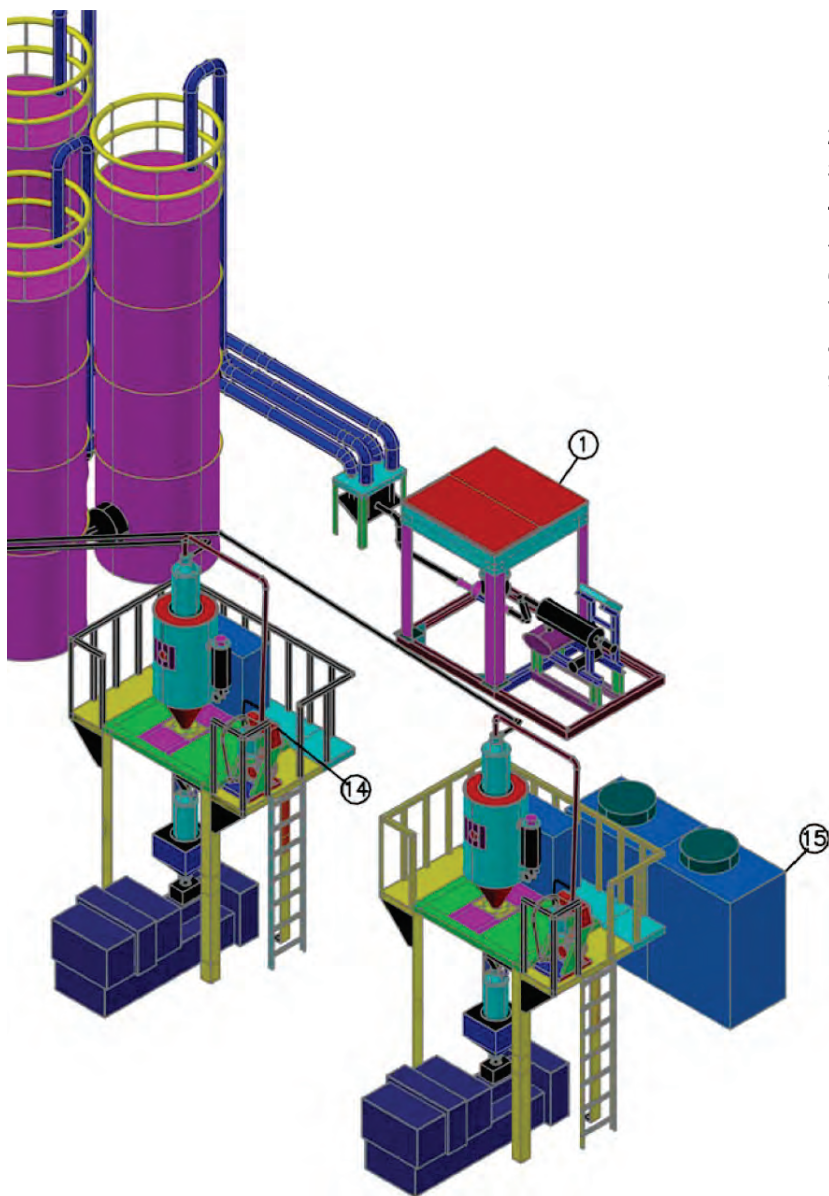


Range: Upto 1000 Kg/hr



Typical centralized Plant





LEGEND:

- 1- DEBAGGING STATION
- 2- RAW MATERIAL SILO
- 3- SELECTION TABLE
- 4- HOT AIR DRYER
- 5- VACCUM TAKEOFF BOX
- 6- DEHUMIDIFYING DRYER
- 7- CENTRAL BLOWER STATION
- 8- DAY BIN
- 9- INJECTION MOLDING MACHINE
- 10- RAW MATERIAL CYCLONE
- 11- MOLD TEMP. CONTROLLER
- 12- GRAVIMETRIC BLENDING UNIT
- 13- EXTRUSION PLANT
- 14- AUTO LOADER
- 15- PROCESS CHILLER
- 16- CENTRAL CONTROL STATION







At Aerodry, it is our constant endeavor to provide the best quality product and services with technological innovations and a continuous development for total customer satisfaction.





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