

Product Catalogue







USTOMIZED SOLUTIONS THAT MATCH YOUR REQUIREMENTS

# **DeGATECH!** One Stop Industrial Engineering Solutions Company...!!

We take this opportunity to Introduce M/s. **DeGATECH Engineering Solution India Pvt Ltd** as a leading Industrial Solutions Provider Company. DeGATECH is the Sister concern company of M/s. Adroit Automation Engineers which was established in 1993.

DeGATECH solutions improve people's lives, enhance equipment performance, productivity and protect our Environment. DeGATECH and its professional employees have offered Several Engineering Solutions to thousands of their Industrial customers across the globe.



Worldwide DeGATECH offers diverse Engineering Solutions for different Industrial segments and caters to almost all industries -

Vehicle automotive exhaust	Food & Beverages	Paints	Tobacco	Detergents
Chemical	Gold Manufacturing	<b>Engineering Plastics</b>	Ship Building	Ceramics
Batteries	Power plant	Carbon black	Electronics	Aerospace
Pharmaceutical	Wood Working	Cable	FMCG's	Railways
,	Chemical Batteries	Chemical Gold Manufacturing Batteries Power plant	ChemicalGold ManufacturingEngineering PlasticsBatteriesPower plantCarbon black	ChemicalGold ManufacturingEngineering PlasticsShip BuildingBatteriesPower plantCarbon blackElectronics

DeGATECH Company aims at improving work space environment and reducing maintenance needs in different Industrial applications.

**DeGATECH** is engaged in Designing, Engineering-Procurement-Construction (EPC), Project consultation, Manufacturing, Exporting and also Offer Engineering Services to all Industrial clients. For special items DeGATECH has technical collaboration with manufacturers who are well-equipped infrastructural unit using up to date techniques and high quality raw material in fulfilment with the international quality standards.

**DeGATECH** unit is divided into different parts such as procurement, manufacturing, assembly, production, quality control, warehousing, packaging, sales and marketing. At DeGATECH we believe in providing engineering solutions and customer delight.

Our customers are most important part of our business, and we work to ensure complete Customer Satisfaction. **DeGATECH** always believed in delivering the best Engineering Solutions to its customers which adds value to the process and enhances productivity.

In India, **DeGATECH** Head Office is located in Thane (Mumbai) and Sales/Service branch office is located in Pune.

DeGATECH overseas business partners are based in Sri Lanka, Dhaka (Bangladesh), Singapore, Russia & Australia.

#### Vision:

DeGATECH vision is to be the leading global engineering solution provider

#### Mission:

**DeGATECH** is committed to provide quality products and unsurpassed customer service.

#### **Core Values:**

- Customer Focus
- Integrity

- Commitment to Quality
- Co-operation

ADROIT











# **Baghouse Dust Collection System**

Bag Filter Houses ranging from small capacities 1500 CMH to 2,00,000 cmh. Higher volumes can also be offered as add on modules. Can handle high dust loads less than 75 gms/m<sup>3</sup> and above Variety of media used, Polyester Non Woven Needle Felts, Cotton, with coatings and membranes like PTFE, Glass Fibre, Anti Static etc. Features:

- High performance
- Low maintenance required
- Tough construction
- 5 Years Workmanship Warranty

#### Cartridge Dust Collection System

Volumes ranging from small capacities 500 CMH to 75000 CMH. Higher volumes can also be offered as add on modules. Can handle moderate dust loads below 20 gms/m<sup>3</sup>. Capable of handling very fine submicron dust with a high filtration efficiency. Variety of Filter media used is polyester Spun Bond, Antistatic, Conductive, Nano-fibre, Flame Retardant, Fibrous media and Cotton, with coatings and membranes like PTFE, Anti Static etc.



# High Efficiency Multi Cyclone Dust Collection System

Multi cyclone Collectors Pollution Control Equipments are more efficient, because they use a number of small- diameter cyclone tubes mounted in a single chamber. Commercial multi cyclone Pollution Control Equipment units have many tubes depending on the Boiler capacity and air Volume. The higher centrifugal forces within the small (3 to 12 in.). Tubes of a multi cyclone increase the collection efficiency for small particles. This increased efficiency is achieved at the expense of a higher static pressure drop (2 to 8 inch Water Column) across the unit.

Mechanical collectors control particulate pollutant emission by using gravity settling, inertia, and dry impaction. Static pressure drop is the most important factor in evaluating these control devices. Capacity and solids discharge rates are other factor helpful when evaluating mechanical collector performance. These are most effective in arresting smaller size particles.

Features:

- Air Volume Capacity from 2000 CMH to 1,50,000 CMH
- Noiseless & hassle free operation
- Precisely design
- Low maintenance

# DeGATECH Customized Insertable / Bin Vent Dust Collector

**DeGATECH** Insertable Dust Collector is used for collecting and filtering dust at Source. Applications Catered by this equipment is venting of pneumatically filled silos, Conveyor Transfer Points, Chute Discharge, Bucket Elevator discharge and other Individual applications. This is available in wide range of customized Solutions. Equipment can be fabricated in stainless & Mildsteel Construction.

Depending upon the site feasibility, this equipment can be custom fabricated which can contain vertically or Horizontally mounted Filters.

- Captures dust at Source of generation
- No Ducting Work, no accumulation of dust inside the ductline.
- 50% saving on the motor power, reduced operating cost
- Occupies existing unutilized space, hence saves on expensive landspace
- Start and Stop of equipment can be interlocked with the process
- No Material Discharge System and no manual intervention to dispose the dust.
- No Material Discharge System and no manual intervention to dispose the dust.
- Integrated Body Flange and Reverse Pulse jet System Integrated Filter
   efficiency: 99.9%





Flexible Extraction Arms

Extraction unit that is suitable for the wide range of applications where the extraction and removal of large amounts of welding fumes and fine dust at source is required. Extension crane increases reach area of the unit and provides additional mounting options for larger working areas

Extraction arm that is suitable for the wide range of applications where the extraction and removal of large amounts of welding fumes, dust & Mist at source is required.

# Port of the second seco

Grinding/Welding Downdraft Tables

Professional welding downdraft table with filtration system. Equipped with extraction arm, protection screen, luminescent lamp, turning table for small parts

and adjustable legs.

# Portable Dust-Fume Collectors

DEGA-M-2 is a versatile mobile filter unit designed for extraction of dust and fumes from a temporary or mobile workstations. Capacity of the unit is enough for two extraction arms.

M-2 is equipped with filter cleaning system of high efficiency that allow cleaning filter cartridge of the unit without interruption of working process. Filter cleaning system requires connection to external compressed air supply or can be equipped with built-in air compressor.

# Individual Dust Collector-Gold Dust

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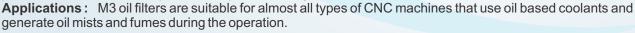
entralized Mist Collection System

The Centralized Mist Collection System is a modular filtration system that captures oil smoke/mist. For handling oil mist you shall choose the MT-41. If you need to handle both oil mists and oil smoke you require MT-42 that is equipped with additional HEPA filter. All MT filter units and filter banks are modular and can be tailored to your needs.

Processes and applications Cutting, boring, drilling, honing using various metalworking equipment and CNC machine tools Cold pressing and stamping operations Hardening and wet grinding of metal

Machine Mount Mist Collection System(M3)

Machine Mount Mist Collection Unit is designed for stationary installation, direct on a machine tool with no need for ducting or additional use of floor space. The filter will effectively collect coolant smoke or mist from the machine process, and if necessary, return the recovered coolant back to the machine. The filter unit is provided with a number of options for a quick and easy installation.



# **DeGATECH ENGINEERING SOLUTIONS INDIA PVT LTD**

**Product Range** 

# Wet Scrubbers - Packed Bed Type

**DeGATECH** Packed bed scrubbers are versatile, reliable systems that serve the widest variety of processes. DeGATECH packed scrubbers are highly recommended for the efficient removal of inorganic gases, odors and fumes, and are particularly appropriate where gas streams have extreme pH. They are well suited for use as primary or secondary systems in conjunction with thermal oxidizers, and are also used in a series where there are multiple-contaminant gas streams.



Product Range



# Wet Scrubbers - Venturi Type

DeGATECH offer a wide range of venturi scrubbers that is widely used in both applications of a particulate collection as well as pollution control equipment. A venturi scrubber is designed to effectively use the energy from the inlet gas stream to atomize the liquid being used to scrub the gas stream. Particle and gas removal occur in the throat section as the inlet gas stream mixes with the fog of tiny liquid droplets. The inlet stream then exits through the diverging section, where it is forced to slow down. Venturis can be used to collect both particulate and gaseous pollutants, but they are more effective in removing particles than gaseous pollutants.

DeGATECH Plate Type Wet Scrubber offer single or multi stage plate scrubber in SS/PP+FRP construction.

An impingement-plate scrubber is a vertical chamber with plates mounted horizontally inside a hollow shell. Impingement-plate scrubbers operate as countercurrent particulate matter (PM) collection devices. The scrubbing liquid flows down the tower while the gas stream flows upward. Contact between the liquid and the particle-laden gas occur on the plates. The plates are equipped with openings that allow the gas to pass through. Some plates are perforated or slotted.





Designed and manufactured to perfection, we are one of the most excellent and leading manufacturers and exporters of Industrial Air Washer. Our entire assortment is widely acknowledged for its features like strong body construction, low power consumption, easy installation and durability. Manufactured under the supervision of team of diligent experts, we also offer customized air washers as per the specifications provided by our clients. Our eco friendly Industrial Air Washer is applicable for effective cooling through a natural process and provide fresh ambiance.

Advantages:

- Power Consumption 1/10 Th of air-conditioning plant.
- Regular features like bleed-off/Auto cut-valve and rubber-Mountings
- Fitted with High-Cooling-Efficiency (Above 86%) Cellulose pad.

Designing, Consultancy and Manufacturing of Heat Exchanger On Site servicing of all type of Heat Exchanger Off Site (In house) Servicing

CIP (Cleaning in Place or Cleaning in Process) Systems for on-line or In process cleaning.

Annual Rate Contracts for PHE Servicing

Genuine Spares for all reputed makes PLATE HEAT EXCHANGER

ALFA-LAVAL

- FUNKE
- SONDEX
- GEA(Kelvin) TRANTER



We at **DeGATECH** are identified as the most reputed supplier of excellent range of filter bags, cartridges and accessories for all make dust collectors. We supply a huge array of Dust Collector Filter Bags for pulse-jet and manual shaking system. These bags are made of high quality needle-felt non-woven and woven fabrics such as Glass

Our filter bags are very efficient and provide long lasting performance as they are designed and manufactured by highly experienced team with the help of State-of-the-Art technology. These bags are widely used for pollution control and filtration in industries like Cement, Power, Lead, Coal, Fertilizer, Chemical, Pharmaceutical, Flour,

Media Type : Non Woven and Woven

Rating 0.1 to 1000 micron

Fibre, Ryton, Polyester, Poly-propylene, PTFE, P84, Nomex etc.

• polypropylene

Glass Fiber

Polyacrylic

Cellulose

Product Range

Food & Beverages etc.

• Polyester

Antistatic

Specifications :

Ryton

• PTFE

Material Of Construction

- DeGATECH have developed broad range of cross-reference-fit filter cartridges in MERV 13, MERV 15 & MERV 16 filtration efficiencies. These Filters are available in wide range of different filter media which are basically an imported filter media. DeGATECH is adding value to most of its customers by offering best compatible media which not only exceeds expectations by delivering superior quality but tremendously reduces filter buying cost, this can be a huge lifetime saving for major endusers.

Acrylic

Nylon

Nitrile

Viscose

Engineered to perfection, our comprehensive range of Hepa Filter is capable in meeting the requirement of very fine filtration up to 0.3 micron at high efficiency of 99.99 %. Grade G-4, G-5, G-7, G9, Hepa Grade H9, H11, H13, H13, H14, Fine Filter G7, G9, G8

Frame are made out of Aluminium and MS Powder Coated sheets. These AHU Filters which are widely used for filtering the air and thus, ensure clean air for healthy breathing. Further, these filters are available in many variants:

**Fine Filters** 

Metalic filter

- **Pre Filters**
- Pocket filter
- Salient Features of HEPA Filter:
- Efficiency: 99.99% down 03 micron
- Media: Glass fibre
- Initial pressure drop: 11.5 mm WG or as per requirement

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DeGATECH offers a wide range of process filters, which is designed to give maximum filtration efficiency. longer life and least maintenance. We also supply original or replacement filter elements / filter cartridges, filter bags, and filter modules / lenticulars for the removal of particles, bacteria, odour, and flavour. Filter elements for the removal of bacteria are available for fluids, carbon dioxide and other gasses, as well as for the aeration and venting of buffer tanks. Regarding process filters we supply the replacement filter cartridges for following makes. e.g. Domnick Hunter/ PTI / Parker, Porvair Filtration, Amazon filters, Cuno / 3M, Gaf / Hayward / Eaton, Graver, Millipor, FSI / Pall, Sartorius, etc.

Assurance : If we supply replacement filter cartridges, we assure that the quality of these filter elements is equal to, or higher than, that of the above mentioned brands. We supply bacteria filters and Bèta Ratio 5000 filter cartridges with a "Certificate of Compliance".

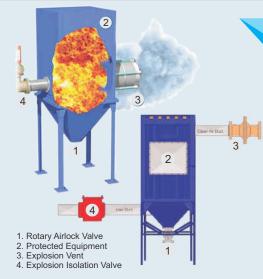




# DeGATECH ENGINEERING SOLUTIONS INDIA PVT LTD

## **Process & Liquid Filters**

- Hepa filter
  - Cellulose pads



# ATEX Compliant – Dust Collectors and Fans

Dust explosions can occur if flammable solid material is divided into fine particles dispersed in air. Fine particles may also be formed during handling and processing of granules due to abrasion. The finer the particles, the more sensitive the dust cloud with regard to ignition sources and the more violent the explosion. For a worst case assessment, the fraction below a mesh size of  $63\mu$ m is usually chosen.

At atmospheric conditions, dust explosions normally show the following characteristics: Explosion range: from 20g/m3 to several kg/m3;

Maximum explosion over pressure: 9 bar for organic material and up to 13 bar for metal powder;

Maximum rate of pressure rise in a one cubic meter vessel: 100–300 bar/sec for organic material and up to approximately 1000 bar/sec for metal powder.

Explosion Venting solutions will be as per NFPA guidelines.

## BIBO Systems for Dust Collector

Designed for contaminant dust filtration and collection, the dust collector with bag-in bag-out design can let operators replace the dust bags and filter elements completely isolated from dusts, protecting the operators and environments. The collector has compact structure, quiet operation, no need for compressed air. They are the ideal choice for intermittent dust collections.

HEPA Filter with Casing, BIBO & DOP Provision

A complete Containment System is constructed of modular sections that are factory assembled and tested to suit the demands of a specific application. Filter elements installed in Containment Systems include particulate High-Efficiency Particulate Air (HEPA), Ultra-Low Penetration Air (ULPA) filters, activated carbon High-Efficiency Gas Absorbers (HEGA) filters, and associated prefilters installed to increase service life of downstream filters

 Inflatable Gaskets
 Specialty & Food Grade Hoses

 VFD / Logical Control Panel
 Implementation

 Flame - Proof Panel
 ATEX - Compliant

 Implementation
 Implementation

Robotic Welding Fume Extraction (Individual Solution)

Industrial Vacuum Collection



## Industrial Air Purifier





Screw Conveyor

## Plasma Cutting Table

Product description:

Rugged, thick cast body & end covers, rigid vanes, solid shaft, outboard bearings, minimum air leakage, trouble free performance rotary valves for severe duty conditions. Our range includes numerous sizes, models, rotor combinations compatible to their applications. Pressure equalizer provision for high differential pressure applications, gland purging with lantern rings to avoid dust leakage. Screw Conveyor systems can be custom designed to provide the intended rate of material delivery and distance. Each custom screw is designed and manufactured specifically for its intended purpose and conveying application.

ATECH

Available in a wide range of designs and materials. Mild Steel, galvanized steel and stainless steel.

Supplier of Plasma Cutting Fume Extraction Systems with Down draft table for CNC plasma cutting systems. We are counted amongst the eminent organization offering the superlative quality Plasma Cutting Fume Extraction Systems & Water Bed Table. Our product is widely used for the purpose of cutting steel and variety of other metals with the help of a plasma torch. roduct Rang



#### Vehicle Exhaust Extraction Systems Car / M.Bike / DG's

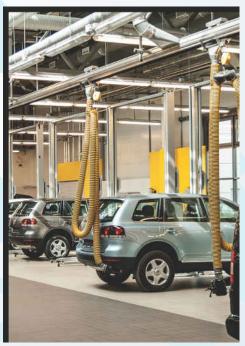


Vehicle exhaust / Engine extraction systems normally involve the collection and extraction of exhaust gases at significantly higher temperatures than those generated from standard passenger cars. This increase in exhaust gas temperature is due both to the greater power outputs of the engines under test and the fact that in the majority of cases, engines are run on rolling road or fixed dynomometer under full load.

These extremes of temperature require the use of extraction hoses with very high temperature rating (400°c or 600°c) and extraction fans generating a high entraining airflow in order to reduce the exhaust gas temperature within the hose itself. These special extraction fans can have air flows three fold that of standard type extraction systems.

Twin extraction points are usually offered to cover the occurrence of split style exhaust tailpipes either side of the vehicle.

AES high temperature hoses increase airflow by having a smoother internal construction hose from snagging. We also offer elevated weighted stands for capture of fumes from all types of motorsport vehicles



#### **Pneumatic Cylinder**

Bore 25mm to 600mm.Max Stroke : 4500mmMax Working pressure : 10 kg/Cm2Cushioned & Non Cushioned Single Acting & Double ActingSingle ended & Double endedDuplex TandemAdjustable StrokeTie Rod & Welded ConstructionPneumatic & Electro Pneumatic Positioner Mountings - Flange, Pivot, Adj Trunion, Foot & Nose Built to perform.

**DeGATECH** Engineers 's pneumatic cylinder series covers a wide range of applications from custom tie-rod cylinders to special cylinders. With bores ranging from 6mm thru 600 mm as catalogue standards and larger as custom, with pressure ratings up to 150 PSI, these reliable, long-lasting cylinders bring Adroit Automation Engineers performance anywhere you require pneumatic cylinders.



#### Pressure Intensifier

Bore 25mm to 600mm.Max Stroke : 4500mmMax Working pressure : 350 kg/Cm2 Cushioned & Non Cushioned Single Acting & Double Acting Tie Rod & Welded Construction Mountings

- Flange
- Pivot,
   A di Tanui
- Adj Trunion,
- Foot

Bore 25mm to 600mm.Max Stroke : 4500mmMax Working pressure : 350 kg/Cm2Cushioned & Non Cushioned Single Acting & Double Acting Tie Rod & Welded Construction\Mountings - Flange, Pivot, Adj Trunion, Foot Built to last.

With quality, reliability and the ability to handle ultra-high pressure, **DeGATECH** make manufactured by Adroit Automation Engineers hydraulic cylinders bring numerous advantages to every application, from custom tie-rod cylinders and hydraulic actuators to cylinders.

With bores ranging from 40mm thru 300mm as catalogue standards and larger as custom, with pressure ratings up to 5000 PSI (350 kg/cm2), these reliable, long-lasting cylinders bring Adroit Automation Engineers performance anywhere you require Hydraulic cylinders.



- Light-duty hydraulic cylinders
- Medium-duty hydraulic cylinders
- Heavy-duty hydraulic cylinders
- Ultra high-pressure hydraulic cylinders

# Product Description:

We Specialize in the manufacture of STANDARD and CUSTOM made Hydraulic Power Pack. The Pumps and valves used in our system are of high quality and international products.

#### Design:

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- Steel Tank 16,30,55,75,100 & 180 Litre
- Aluminium Gear Pumps / Cast Iron Gear Pumps
- Pressures upto 400bar
- Flow rates to 100 liters / minute
- Suction filter 90 micron
- Quality
- Return filter 25 micron

- Submerged Pump
  - Cetop subplate options
- 1 Phase to 3kw
- 3 Phase to 30kw
- 100% functional testing
- Tanks with painted finish
- Motors IEC frame B5 IP55
- Supplied with C to C

## Pneumatic Valves & Fittings

Size: 1/8" to 1" BSP2/2 ways, 3/2 ways, 4/2 ways, 4/3 ways, 5/2 ways, & 5/3 Ways.Max Working pressure: 10 kg/Cm2Spool type & Poppet type ValvesPush Button/Palm Button/lever/Turning/Roller Lever actuated ValvesHand Lever ValvesHand Rotary Valves Foot ValveBall Valves 2/2 & 3/2 Ways.Hand Slide Valves/Shut Off Valve Single Pilot Operated & Double Pilot Operated Valves



# Pneumatic & Hydraulic Gaskets (Standard & Customized)



Hydraulic seals & pneumatic seals are designed for the reciprocating motion that is common in hydraulic and pneumatic applications, such as Cylinders.

Types : Hydraulic seals & Pneumatic seals include:

- Piston seals
   U-cups
- Rod seals
   Vee Cup
- Piston & Flange Packing



Industrial PEB Structures/Sheds

# Natural Draft / Motorized Roof-top Ventilation



The Air vent turbine ventilator operates by utilizing the velocity energy of the wind to induce airflow by centrifugal action. The centrifugal force caused by the spinning vanes creates a region of low-pressure area, which draws air out through the air vent turbine ventilator.



# Few of our Prestigious Clients





**DeGATECH** offers annual maintenance contracts. These services provide our clients with comprehensive support plans to address requirements of managing our client's infrastructure. Moreover, our services are fully customizable – and we can create a support plan just as required by our clients.

Our several years of expertise in providing support services helps us deliver Annual Maintenance Services – regardless of your OEM brand. What's more, we have been identified by most leading brands as their authorized service provider – for meeting the highest service standards through strong commitment to customer satisfaction and continuous improvement.



**DeGATECH** undertakes complete Consultancy, turnkey and energy conservation projects. Our Technical Services staff works closely with our clients to analyze specific problems, develop concept ideas, and determine ideal system solutions.

Turnkey projects can be implemented commercially on Outright Purchase or BOOT (Build, Own, Operate & Transfer) basis. Following are the steps involved in Turnkey Project implementation:

- Capacity/load calculation.
- Sizing of Plants, Machinery & Equipment.
- Design of Project, plant & Equipment.
- Fabrication, Supply of Plant & Equipment.
- Installation & Commissioning of plants
- Operation & Maintenance
- Supply chain management

With over several years of experience and expertise, our team has added value by offering numerous solutions to its end users by revamping existing non performing equipment and restoring back to satisfactory operation.



DeGATECH ENGINEERING SOLUTIONS INDIA PVT LTD

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