



# About us



SWam, a leading engineering company and global leader specializing in design, engineering, manufacturing, supply of Rotary Air and Gas Blowers, Truck Blowers, Centrifugal Fans, Turbo Blowers, Liquid Ring Vacuum Pumps and Compressors, Dry Screw Vacuum Pumps, Vacuum Boosters, Sliding Vane Compressor, Vacuum systems packages and related equipments.

Swam, a group known for technology, innovation and excellence has acquired exceptional product design & development capabilities to meet stringent quality and performance requirements and to confirm to the customers tough and diversified specifications Swam, emphasis on innovative design, precision engineering, advanced technology, excellence in performance and quick responsiveness to customers.

With over three decades of experience the company has adequately matured to execute different projects and is today represented in over 15 countries. Our quality system has been accredited with ISO-9001 quality standards and procedures. The company's head office & work ane located at Noida near New Delhi the capital city of India. The company has FOUR manufacturing plants equipped with CNC Machines and in-house testing facility upto 1000kw.

Our highly motivated engineers and work force faces, each contract with commitment to meet the client process specification and quality requirements. The company has executed many prestigious projects under the stringent quality compliance

The company's quality system is as per IS09001:2008 and has very high regard for safety and environment and hence bas all plants certified to ISO 14001 and OHSAS 18001.









# Our Mission

## 35

Swam Pneumatics, has continued to grow. From its humble beginnings to an international supplier of high quality products. Part of its success is due to the inherited nature to continually improve in every aspect of its business, our mission statement also reflects our focus and drive.

To be the best global company that we can be. By providing the right product for the right application.

#### We achieve this by:-

- · Being environment friendly
- By providing a safe working environment
- By continuously improving manufacturing practices
- State of the art engineering processes
- Responding and listening to the customer requirements
- Continuous product development





## Our Vision



Swam's vision is to provide globally the best manufactured products. Its focus is on meeting our customers' requirements, while being competitive. Swam sees itself as being recognised as a world leader, providing high quality robust products.

SWAM's ongoing strength is due to its commitment to:-

- · Working alongside its customers.
- · Being flexible and innovative.
- · Meeting and exceeding international standards.
- · Stringent quality control and testing.
- Using only internationally recognized and approved key components.

# **Engineering & Design**



- Swam offers a complete Turn Key service from concept, engineering and design, All the way to manufacturing, testing, installation and commissioning of various blower and vacuum products.
- Swam's engineering and design team are fully qualified and skilled as Mechanical engineers, process engineers, electrical, instrumentation and control systems.
- Incorporate appropriate health criteria and factors into business decisions as well as selection and placement of personnel at appropriate levels and assigning the responsibility thereof.
- Provide & maintain safe and healthy work place through operational procedures, safe systems and method of work.
- Our team is also fully conversant with the many international standards, such as ISO, BS, API, CE, Atex and others just to mention a few. Swam prides itself by listening to our customer, we work with the objective of offering most energy efficient products and system.
- As an engineering manufacturing company Swam is very adaptable, with regard, to materials, suitability / compatibility, both for the process and the environment.

# Research Development



"Research is creating new knowledge" - Neil Armstrong

- Swam engages, some of the brightest and innovative minds, within its Engineering Department.
- Engineers who not only think outside the square, but engineers who also work with an objective of finding solution for every problem and what is the customer requirements.
- Our Research and Design team consists of professional engineers, specializing in disciplines as mechanical, electrical, controls and instrumentation.
- Their focus is not just on new developments; their expertise is also utilized in ongoing improvements to our existing product range, both with regard to design improvements and manufacturing techniques.
- Swam's R&D team are working to provide the best possible products, energy efficient complying to international standard in the most economical manner.





## 77

# Advanced Manufacturing System

SWAM has the most advance manufacturing system with a large number of CNC machines installed in our four plants. The blowers and other products are manufactured with most optimum profile resulting in higher efficiencies, high displacement, lower slippage. Thus our products are more energy efficient compared to others.









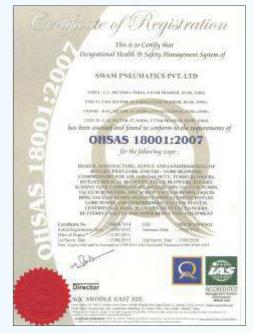
# Focus on Quality & Reliability

Emphasis on quality and performance is a commitment of every individual at Swam beginning at grass root level. The quality control is practiced at all levels of the organization and all its aspects are thoroughly complied with the specified standard and specification ,till the product gets delivered.

The quality assurance system encompasses self quality control by each worker & supervised by quality control engineers. Each blower and pump undergoes thorough and stringent tests at different stages of manufacturing and are test run for several hours prior to despatch as per the relevant code, customers' specification and approved quality plan.









# Testing & Quality System

SWAM is ISO 9001, ISO 14001 and OHSAS 18001 certified company and therefore quality and safety is the first thing to maintain. Besides this all our product comply to International Standards and are CE certified. The quality control is practiced at all levels in the organization and in general the quality level is maintained through the established quality manuals and plans. This also follows the quality control manual and procedures through the ISO\_9001 quality certification.

Swam has in-house testing facility for testing Blowers, Compressor, Vacuum Pump, Centrifugal Fans etc. with a number of test beds. Each product made to run for several hours as per the standard and codes before taken for painting and despatch. The company has in-house testing facility upto 1000 KW. and for 415 v, 690v, 3.3 kv, 6.6 voltage range.



# Turnkey Project Jobs at SWAM





- BLOWERS PACKAGES FOR SRU PLANTS
- BLOWERS PACKAGES FOR LIME KILNS
- MIXED GAS BOOSTERS & GAS BOOSTING STATIONS IN STEEL PLANTS
- VACUUM SYSTEM FOR STEEL DEGASSING PLANTS
- CONDENSER EXHAUSTER PACKAGE FOR STEAM TURBINES
- TURBO BLOWERS / COMPRESSORS PACKAGES

- HYDROGEN GAS CONVEYING AND BOOSTING
   BLOWERS / COMPRESSORS
- HIGH PRESSURE GAS CONVEYING & BOOSTING
   BLOWERS / COMPRESSORS
- HIGH VACUUM PACKAGE FOR PROCESS INDUSTRIES
- ULTRA HIGH VACUUM SCREW PUMP PACKAGES
- BIO GAS COMPRESSORS PACKAGES



## **BLOWER DIVISION**

#### **Rotary Piston Blowers**

(Twin &Tri Lobe Design)

Economical and ideal for pneumatic conveying Blending and Fluidizing of powdered or granular materials and aeration of liquids. The flow capacities upto 85,000 M³/Hr and pressures upto 1.lkg/cm². The blowers for high suction pressures are with mechanical seals and pressurized lubrication and other design change.

Capacity upto 85000M³/Hr Pressure: Upto 1.1 bar g, VAC.-0.5 bar

#### Vacuum Pumps with Secondary Suction / Air Injection

For negative suction, the pump are ideally suited for processes requiring medium vacuums such as degassing, exhausting and pneumatic conveying. pump with seconday cooling (MHV series) develop vacuum upto 8500 mmwg. The operation is completely dry. (Can also be used as Truck Blower Application).

M.H.V SERIES & K.H.V. Series Capacity: upto 38000 M<sup>3</sup>/Hr., Vacuum: upto 85%



#### Turbo Blowers

High efficiency Swam Turbo Blower are most advanced single stage centrifugal machine based on high speed focused specialized technology oil less operation.

Capacity: upto 21000M³/H



#### Process Gas Blowers/Gas Boosters

Boosters are used for circulation of gases for chemical proocess. The gases handled are Hydrogen, Nitrogen, oxygen, Biogas, Carbon-Di-Oxide, Methance, Mixed Gas, BF Gas, Coke Oven Gas etc. The boosters are fitted with improved Sealing system to make it leak-proof. The mechanical seals are fitted, if application so warrants. The construction materials are special, depending upon the nature of gas.

Capacity upto 85,000 M³/Hr. Pressure: upto 1.1 bar 'q'





### **BLOWER DIVISION**

#### **Truck Blowers**

Swam bulk vehicle truck blowers have been specifically designed to meet he operating requirements of bulk and silo vehicles in the generation of pressure and loading and unloading of the bulk materials.

SHV SERIES & KHV SERIES Capacity: upto 12000 M³/Hr



#### **Centrifugal Fans and Blowers**

Static pressure upto 1800 mmwg in single stage, higher static pressure by multi-staging ID/Fd Fans Suitable for positive conveying and negative suction. Manufactured out of special materials for Gas conveying and fitted with Mechanical & Semi-mechanical seals.

Capacity upto 1,20,000 M³/Hr Pressure : upto 1800mm wc in single stage

#### Bio Gas Blowers/Compressors

Available in wide range & available in two designs the Rotary lobe type and sliding vane compressors and are available in various MOC's CI, CS , SS etc. They are available with following parameters.

Rotary Bio-Gas:- Capacity upto 20,000 M³/h Pressure:- upto1.0 bar "g" Sliding Vane Compressors:- Capacity upto 4500 M³/h Pressure:- upto 3.0 bar "g" They are available in various Moc's Cl, CS, SS etc.



#### SR Series Rotary Blowers

Swam offers its advanced technology, Next Generation SR-Series Blowers, equipped with latest features, enabling it more reliable, energy efficient and lower maintenance.

Blowers are ruggedly built appropriate rotor shaft design, aiming at low deflection and sound level The rotor profile of SR-Series are computer generated, enabling better uniform clearance and higher volumetric efficiency The Blowers are readily available for flows upto 1300 M³/hr and pressure upto 0.6 kg/cm².





## **COMPRESSOR DIVISION**

#### **Rotary Sliding Vane Compressors**

SWAM Rotary Sliding Compressors are available in wide range.

Capacities: - 4500 M<sup>3</sup>/h Pressure: - 3.0 bar 'g'



- Capacity 8000 M³/Hr.
- Pressure upto 4.0.Bar g
- Suitable for Positive and Negative conveying and Boosting



## **VACUUM & PUMP DIVISION**

#### Dry Screw Vacuum Pumps

SWAM dry screw vacuum pumps are designed under SWAM's unique screw profile engineering to fulfill wide range of chemical and industrial processes. It is operating by rotating a paired screws that efficiently admit gases from inlet into the chamber and compress through the screw's swept volume toward the discharge.

Capacity: upto 3500M³/Hr., Vacuum: upto 0.0I Torr



#### Mechanical Vacuum Boosters

The vacuum boosters in combination with conventional Vacuum mechanical pumps boost high vacuum upto one micro. Ideal for low cost high displacement and vacuum from 50 Torr to one micron.

Capacity Difference models with capacity from 500 M³/Hr. to 52000 M³/Hr. Pressure: Upto 10-3 Torr in multi stage





## **VACUUM & PUMP DIVISION**

#### Liquid Ring Vaccum Pumps

- Capacity 30000 M³/Hr.
- Vacuum upto 90%
- Suitable for vacuum and Negative conveying and Boosting

Capacity: Upto 30,000M³/Hr. to 90% vacuum



#### Vacuum Systems and Packages

Swam offers complete turnkey vacuum system packages with very high vacuums. The system consists of backup pump with vacuum boosters, condensers, gauges, switches, starter panels etc. Thus Swam ready to provide optional total package solution and will deliver package performance as per client requirements. Combination of backup pumps with one booster, two booster, three booster upto five booster with condenser cashpot.



#### Condenser Exhausters Vacuum Pump packages

Swam offers advanced design Condenser Exhauster for hogging and holding service in power generation. The system consists of liquid ring vacuum pump, separator, heat exchanger and ejector (optional) with total recirculation.

Capacity: 10 SCFM 20 SCFM 30 SCFM

40 SCFM

# Mechanical Vapour Re-Compressor (MVR) Swam offers its advanced technology, Next General

Swam offers its advanced technology, Next Generation Mechanical Vapour Re-Compressor, equipped with latest features, enabling it more reliable, energy efficient and lower maintenance.

Blowers/Compressors are ruggedly built appropriate rotor shaft design, aiming at low deflection and sound level The rotor profile are computer generated, enabling better uniform clearance and higher volumetric efficiency They are readily available for flows upto 35,000 M³/hr and pressure upto 1.1 kg/cm² & Vacuum up to 60%.





## **VACUUM & PUMP DIVISION**

#### Oil Sealed Vacuum Pump

Swam offers its advanced technology, Next Generation Oil Sealed Rotary Vane Pump, with gas blast valve, equipped with latest features, enabling it more reliable, energy efficient and lower maintenance.

Capacity: 30 m³/hr to 600 m³/hr Vacuum upto 0.001 torr



#### Single Stage Vane Vacuum Pump

Swam offers its advanced technology, Next Generation Oil lubricated single stage as well as double stage direct driven vacuum pumps. The pumps have inbuilt gas blast valve and most simplest and reliable oil re-circulating system.

Capacity: 65 m³/hr to 300 m³/hr Vacuum upto 0.37 torr



## OTHER PRODUCTS

#### **Acoustic Enclosures & Silencers**

Acoustic Enclosure comprises of modular frames made out of steals plates & sheets and perfabricated sections for high performance acoustic panels. The enclosure is designed acoustically and mechanically to the desired noise level specified by the customer. The thickness of the panel is based on the design requirement.



#### Shell & Tube Type Heat Exchangers

Shell & Tube Type Heat Exchangers are built in a wide variety of size and capacities. The Heat Exchangers are fabricated as per TEMA/ASME unfired pressure vessels codes & ASHRAE standard.Heat Exchangers for sea water marine application or with steels shells are per customer specific requirement.



# \*\* APPLICATIONS

Swam have wide range of products like Blowers, Vacuum Pumps & Compressors which have extensive application in various process industries. some of the applications are listed below, though there are many other applications.



## Metallurgy

Steel, Aluminium, Mining, Copper, Nickel Plants

- · Lime Calcination Plants · Pneumating Conveying · Oxygen Plants (VPSA)
- Mixed Gas, Coke over, BF Gas Boosting Smelting plants
- DRI Plants Engine driven emergency blowers



- Vacuum Boosting
   Oil Free Conveying of Industrial Gases
- · Vacuum Cleaning & Drying · Fluid Bed Combustion · Super Charging





#### Water, Waste Water Treatment Plants & Environment Sector

- · Tank Aeration · Digester Gas Processing · Big Gas Boosting
- · Air Sparging · Air Scouring · Vacuum Truck blowers
- Mechanical Vapour Re-Compressor

# \*\*APPLICATIONS



#### Refineries, Petrochemicals

- · Sulphur Recovery & Dewaxing · Nitrogen Boosting & Conveying
- $\cdot$  Hydrogen Generation units  $\cdot$  Utilities  $\cdot$  FCC units  $\cdot$  Pneumatic conveying
- Handling Corrosive Gases Gas Boosting, circulation & exhausting
- Solvent Vapour Recovery
   Vacuum Distillation

### Power Plants

- Ash ConveyingFluidisation
- Flue Gas Desulphurisation
- Vacuum Conveying
   Condensor Vacuum Pumps



### **Cement Plants**

- Conveying Fluidising
- · Air lift · Blending
- Pneumatic conveying

# \*\*APPLICATIONS



#### Chemical & Process Plants

- Pneumatic conveying Handling Corrosive Gases
- · Gas Boosting, circulation & exhausting
- Vacuum Distillation
   Vacuum Drying
   Solvent Recovery
- Fraction Distillation

## Food Processing, Dairy & Yeast Industry

- Pneumatic conveying
- Fluidisation
   Exhausting
- Vacuum Drying
   De-odourisation





## General Industry

- Conveying
   Fluidising
- Air lift Blending
- Pneumatic conveying

# \*\*APPLICATIONS



## Transformer Oil & Waste Oil Re-refining

- Transformer Oil Filtration & Dehydration
- · Waste Oil Re-refining

#### Pharmaceutical

- Fractional Distillation
- $\cdot \, \mathsf{Solvent} \, \, \mathsf{Recovery} \cdot \mathsf{Tray} \, \mathsf{Drying}$
- Shot Path Distillation





## Metallising & Vacuum Degassing

- $\cdot \, \text{Object Metallising} \, \cdot \, \text{Roll Metallising} \\$
- Steel Degassing (VD & VOD)
- Air Evacuation

# Some of Our Esteemed Clients

































































## SWAM PNEUMATICS PVT. LTD.

(ISO-9001:2008 Quality Certified)

#### Corporate Head Office & Plant-I:

C-2, Sector-3, Noida-201301, Gautam Budh Nagar (INDIA) Tel: +91-120-4696222, Fax: +91-120-2443283, 4696200

E-mail: sales@swamatics.com

Plant-II : B-9, Sector-57, Noida-201301 (INDIA)

Plant-III: B-111, Sector-67, Noida-201307 (INDIA)

Plant-IV: C-52, Sector-57, Noida-201301 (INDIA)

Website: www.swamatics.com

For details of our local contact office in your region, contact H.O. or log on to website



