



**SAVIO**

**Manufacturer of industrial Fans & Multistage Blowers since 1945**

**CENTRIFUGAL FANS**

Over 15 different series to solve all possible ventilation problems, direct coupling or belts and pulleys transmission. Volume up to 600.000 m3/h and pressure up to 25.000 Pa.

**AXIAL FANS**

Turn or fixed blades series available in different materials with direct coupling or belts and pulleys transmission. Volume up to 150.000 m3/h and pressure up to 1.650 Pa.

**MULTISTAGE BLOWERS**

Our blowers are not only used for pneumatic conveyance, gas conveyance etc., but are also suitable for water oxygenation and cleaning.

Volume up to 5.000 m3/h and pressure up to 100 KPa.



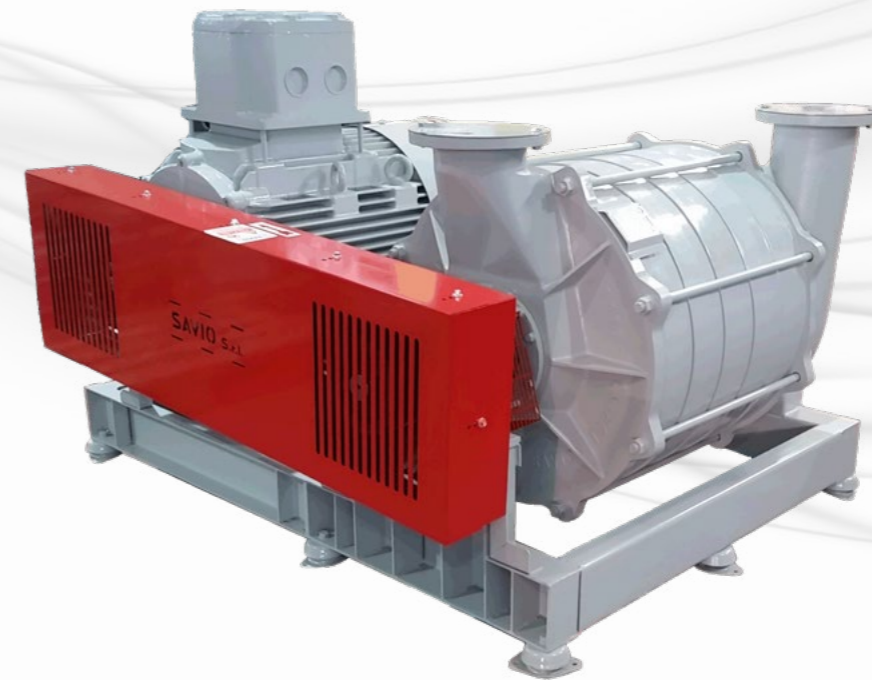
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01

INDUSTRIAL FANS & MULTISTAGE BLOWERS

# Multistage blowers



**Industry**  
**Aeration**  
**Extraction and filtering**  
**Various**



03



04

**We are specialized in studying and manufacturing Gas & Biogas blowers.**

Know-how, design capability and operating abilities of our company are founded on the commitment and experience of over 70 years in the field.

On demand all products are available in ATEX version, our Technical Department is at your disposal for more information.

## Industry

Packaging machines, for blowing and sucking - Pneumatic transport of plastic granulate, blasting grit, meal, coinage - Vacuum tables for board-cutting machines, laser-cutting machines - Air cushion tables for board-cutting machines - Vacuum lifting machines for porous materials - Blowing in dry tunnels (energy saving) - Testing welding joints in tanks and compartments - Cooling of "hot spots" - Draining drums due to over-pressure - Filling tankers due to under-pressure - Sulfur recovery units at petroleum refineries - Fluidized bed systems in the incineration of low BTU fuels - Carbon black production - Flue gas desulfurization - LNG Vaporization - Fly Ash Conveying - Loopseal Blower Air - Flue Gas Desulfurization - Filter Scouring - Circulating Fluidized Bed Boiler - Yeast Fermentation - Wet Scrubbers: Oxidation Air - Fiberglass Manufacturing.

## Aeration

Galvanisation baths - Fish farms - Ovens - Swimming pools and bubble baths - Water games - Sludge Incineration - Aeration of flotation cells in the mining - Aeration of compost - Aeration of Powders - Furnace Blowing - Aerobic digestion - Anaerobic digestion - Grit Chamber Aeration.

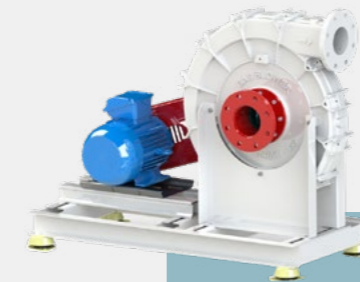
## Extraction and filtering

Spot-suction in welding and soldering areas - Laser-cutting machines - Central extraction in bodywork workplaces - Central extraction from sanding lines - Vacuum aspiration table - Conveying system - industrial vacuum cleaners - Central Vacuum system - Absorption dryers - Backflush of sand filters - Waste water treatment - Galvanic systems.

## Various

Cabbage peeling - Displays for fairs - Tube mail systems - Testing mastic roofings - Food - Vacuum cleaner - Air knives - Waste vacuum cleaner - Industrial manipulator - Soil remediation - Air lift bank and dam - Pneumatic post systems - Washing tanks - Steam and condensate extraction - Coal Bed Methane Recovery - Froth Floation - Landfill Gas Extraction - Silica Dust Control.

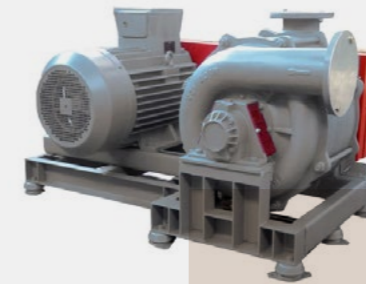
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**Blower SAB**

SINGLE STAGE  
BLOWER SAB

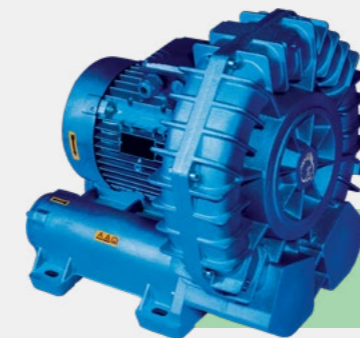
2



**Blower MICO**

MULTISTAGE  
BLOWER MICO

3



**Blower LCX**

SIDE CHANNEL  
BLOWER LCX

**Blower SAB**

# SINGLE STAGE BLOWER SAB

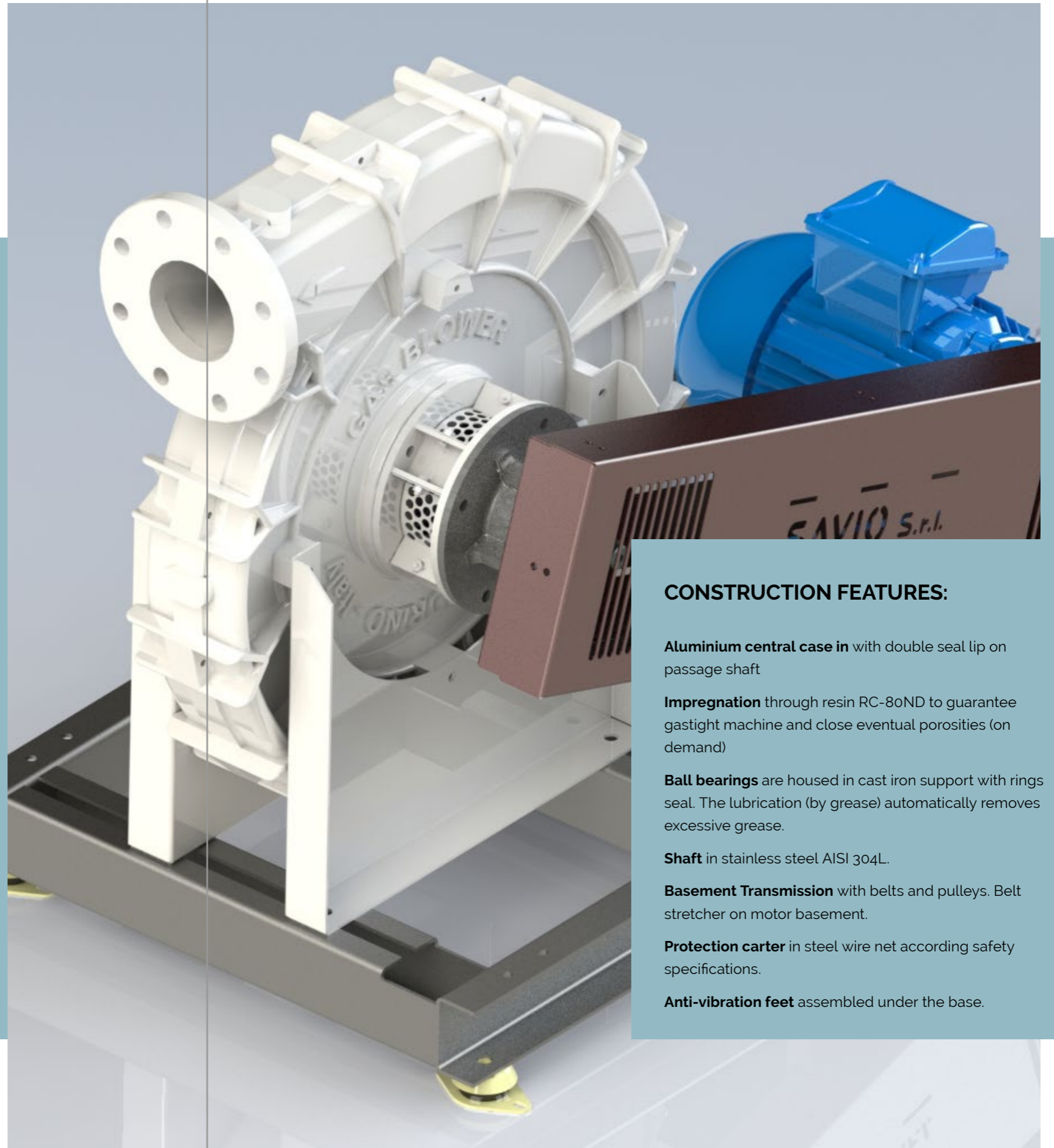
# 1

## Single stage blower for gas and air boosting.

High-pressure centrifugal blower with a wide range of applications:

Centralized cleaning systems - Pneumatic conveying systems - Liquids agitations - Air jets - Air curtains - Cooling - Drying - Blowing - Gas feeding under strong pressure - Gas burner - Gas line booster - Gas welding under pressure - Naphtha burners - Engine test room - Chips removing - Spraying system - Suction under strong depression for bulk transportation - Blowing and sucking in the typographic machines.

Atex version for Zone 1 and Zone 2.



### CONSTRUCTION FEATURES:

**Aluminium central case in** with double seal lip on passage shaft

**Impregnation** through resin RC-80ND to guarantee gastight machine and close eventual porosities (on demand)

**Ball bearings** are housed in cast iron support with rings seal. The lubrication (by grease) automatically removes excessive grease.

**Shaft** in stainless steel AISI 304L.

**Basement Transmission** with belts and pulleys. Belt stretcher on motor basement.

**Protection carter** in steel wire net according safety specifications.

**Anti-vibration feet** assembled under the base.

## Blower MICO

# MULTISTAGE BLOWER MICO

# 2

### Multistage centrifugal blower.

Our Multistage blowers MICO are suitable for air, gas and biogas transportation. The blowers can be manufactured in gastight version following ATEX Directive, with capacity up to 4.500 m<sup>3</sup>/h and pressure up to 100 Kpa for air and 70 kPa for Biogas.

#### APPLICATIONS:

High pressure centrifugal multi-stage blowers with a wide range of applications for use :

Pneumatic cleaning - Pneumatic conveyors - Pneumatic placing and sampling - Liquids shaking - Liquids removal by air jets - Air curtains - Tunnels ventilation - Air hardening - Cooling - Drying - Blowing in cubicles - Heat exchangers - Feeding of various gases under strong pressure - Gas burners - Biogas conveyor - Gas line suppressors - Pressurised gas welding - Diesel burners - Combustion engines testing - Chips and swarf removal - Spraying systems - Suction under strong vacuum for suction caps and similar - Blowing and suction in printing presses - Water oxygenising - Centralised dust suction.

When in operation, the MICO blowers could cause a noise level over 80 dB (A) according to the performance values of the flow rate and the pressure, and according to the reverberation characteristics of the environment. Inlet fluid max. temperature: 100°C (referring to air). The temperature  $\Delta t$  of the fluids treated by the blower between intake and delivery is ~ 50°C



#### CONSTRUCTION FEATURES:

**Aluminium central casing** with intermediate stages consisting of diffusers and back channels assembled by tension rods.

**Aluminium inlet/outlet headers** with labyrinth seals on shaft passage.

**Rotor group** composed by Aluminium blades and aluminium or SS AISI 304 disks.

**The impellers** are keyed on special shaft in tempered carbon steel or SS AISI 431 and they are statically and dynamically balanced.

**Ball bearings** are housed in cast iron supports with rings seal. The lubrication (by grease) automatically removes excessive grease.

**Basement Transmission** with belts and pulleys.

**Belt stretcher** on motor basement.

**Protection carter** in steel wire net according safety specifications.

**Anti-vibration feet** assembled under the base.

**Blower LCX**SIDE CHANNEL  
BLOWER  
LCX

3

**Side channel blower for  
compression and for  
exhausting.**

Single double and atex version.

50/60Hz blower delivers pressure up to 650 hPa(g) & flow rates up to 2000m<sup>3</sup>/hr.

50/60Hz blower achieves pressure of -450 hPa(g) & flow rates of 2000m<sup>3</sup>/hr.

**APPLICATIONS:**

Biogas boosting (in waste water plants, landfill and anaerobic digestion processes) - Gas and air boosting for boilers and burners - Waste water treatment (water oxygenation) - Industrial vacuum cleaner - Cooling and drying systems - Pneumatic transportation - Vacuum devices (packaging, textile, cement plants)

**CONSTRUCTION FEATURES:**

**Aluminium central case** in AlSi9 Cu1 Mg gravity casting.

**All Aluminium parts treated** through anodic oxidation (on demand).

**Impregnation** through resin RC-80ND to guarantee gastight machine and close eventual porosities (on demand).

**SM** (Solid Motor) or **CLB** (Coupling/Lantern/ Basement) construction

**Shaft** in stainless steel AISI 316 (on demand)

**FLEXIBLE, LOW NOISE, EFFICIENT**

**Savio Srl**

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