

# Blower Package Pressure and Vacuum SILENTFLOW

SILENTFLOW packages include the new generation of Hibon positive displacement blowers **NX** series designed to provide large volumes of air or gases at various pressure or vacuum.

This new design incorporates the benefits of this new range with the latest improvements offering increased reliability with minimal maintenance.

## Range

Flow : From 100 m<sup>3</sup>/h to 4 635 m<sup>3</sup>/h\* Pressure: Up to 1 bar g. — Vacuum up to 500 mbar

\* At maximum speed, except internal leak of the machine.

The latest requirements of EPD (European Pressure Directive) and CE safety requirements are incorporated.

## **Benefits**

- High mechanical and volumetric efficiency.
- Lifetime reliability.
- 100% oil free operation.
- Reduced noise levels.
- Easy and minimal maintenance.
- Small foot print.
- Safety.
- "Plug and Play" design.

## Main applications and markets

- Biological Aeration, agitation, filters cleaning
- Pneumatic conveying
- Fluidisation, homogenisation
- Desulfurization
- Combustion air
- Centralised cleaning
- Gases compression
- Gases recovery
- Oxidation air
- Dust cleaning





- Wastes water treatment or drinking water plants
- Cement works
- Metallurgy
- Food Industries
- Chemical and petrochemical industries
- Paper Industries

## Effective Acoustic Treatment

The choice and design of each accessory of the group have been specifically designed to provide equipment that meets your environmental requirements.

#### The Suction Filter Silencer

Combines sound attenuation and filtering functions. Filtration protects blowers against premature wear and tear.

#### Silencer base

The design is totally reactive to ensure a broad spectrum sound attenuation without risk of fibrous migration to the downstream process.

Suitable to operate at all speed variations



#### **Acoustic enclosure**

The plenums for inlet and outlet air are specific sized and acoustically treated to reduce the potential for noise breakout to the outside of the enclosure.

It is built to withstand harsh weather conditions and ensure a long life.

Forced ventilation is by a motorized fan unit. The acoustic material lining the walls is flame-retardant.







## Easy to install Plug and Play

All blower packages are supplied fully assembled on a palletized base provided with a ground connection. The silencer base is connected to the base by a braided strap. The standard "Pressure" version packages have a pressure gauge connected to the discharge and an inlet filter restriction indicator.

#### **Reduced sizing**

SilentFlow packages can be installed side by side without loss of access for maintenance or ventilation purposes. The reduced footprint gives the benefit for installations where space is a premium.

#### Transmission

Silent Flow packages are fitted with a Belt Pulley transmission. Our belt tensioning system allows automatic adjustment of the motor position. That mechanism permits the installation of motors of various designs and masses (iron and light alloy enclosures, NEMA standards, IEEE 841, etc).



### **Easy maintenance**

#### Access to accessories

For easier maintenance, the various components of the group are easily accessible.

#### **Oil Change**

The latest methods of draining oil from the gearbox and bearing housing have been incorporated. The system consists of two check valves with internal pistons and safety caps.

#### **Blowers**

Blowers without maintenance for 40 000 hours (except oil each year or every two years if you use HIBON LUBE).

### Options

- Temperature gauge at discharge
- Temperature switch at discharge
- Thermostat inside the enclosure
- Pressure switch at discharge
- Pressure differential switch at inlet

## Safety

The SilentFlow Blower Package can operate with the acoustic doors open as a drive guard is always included. Acoustic doors locked by a key.

#### Package components

#### **Discharge Assembly**

Comprising of a pipe fitted with a factory-calibrated safety relief valve isolated pressure gauge, check valve and a flexible connector.



#### **Check valve**

Made of aluminium and "santoprene", this valve is totally corrosion-proof. The full bore minimizes pressure losses.

#### Starting valve / Unloading valve (optional)

The pressure relief valve is made of cast iron / steel and is pre-calibrated at the factory.







## Range

Size Designation	0		1		2		3
	SF 0_2	SF 0_3	SF 1_5	SF 1_8	SF 2_12	SF 2_18	SF 3_26
Flow max (m <sup>3</sup> /h)	450	650	1 000	1 480	2 500	3 000	4 200
Pressure max (mbar)	1050	1000	1 000	1 050	1 000	1 050	1 000
Vacuum max. (mbar)	500	500	500	500	500	500	500
Blower	NX 2	NX 3	NX 5	NX 8	NX 12	NX 18	NX 26
Length (mm) (with connexion)	1 200 (1 810)	1 200 (1 810)	1 240 (1 472)	1 240 (1 472)	1 560 (1 780)	1 560 (1 780)	1850 (2 305)
Width (mm)	1 000	1 000	1 400	1 400	1 660	1 660	2 000
Height (mm)	1 210	1 210	1 390	1 390	1 410	1 410	1 890

## **Examples of Package arrangements**

- Pressure package without acoustic enclosure



- Pressure package with acoustic enclosure





- ATEX package with acoustic enclosure







Ertek Yapı ve Makina Endüstri Ekipmanları San. ve Tic. Ltd. Şti. Halkapınar Mah. Pamuk Plaza İş Merkezi 1082 Sokak No: 3 M 35170 Yenişehir Konak / İZMİR Tel: (0232) 469 43 53 Faks: (0232) 457 46 51 • www.ertek.com • info@ertek.com