

## PILLER VAPOFAN – THE LOW FLOW MVR BLOWER

Piller Blowers & Compressors, the leader in Mechanical Vapor Recompression (MVR) presents the PILLER VapoFan, a product of our VapoLine.

The VapoFan is a complete system consisting of a vertically arranged blower with support structure, a high speed motor and a Variable Frequency Drive (VFD) with machinery monitoring instruments mounted in a standalone control cabinet. Special components and materials are perfectly matched for mass flows from 200 to 9,000 kg/h with a temperature rise of 11 K in single-stage applications.

### **KEY-FEATURES OF THE PILLER VAPOFAN**

### **Blower specifications**

Performance: up to 11 K temperature rise single stage

- Casing material: Duplex
- Impeller materials:

Welded: Super Duplex

Milled: 17-4PH or Titanium grade 5 for high mass flow units Shaft seal (4 rings): water/vapor buffer or vacuum suction

#### The Drive Train

The drive train is a perfectly matched system of the synchronous high speed motor and the VFD cabinet.

### - PILLER High Speed Motor

- 37 and 55 kW, motor speed up to 13,500 rpm
- 90 kW, motor speed up to 11,000 rpm
- 160 kW, motor speed up to 13,500 rpm
- Hybrid ceramic bearing L10h = 40,000 h
- Automatic regreasing

### - VFD Cabinet

- HF filter, commutator, sine filter
- Power supply: 400 V/50 Hz, 480 V/60 Hz
- Control voltage: 24 VDC
- Temperature, speed and vibration monitoring
- Cabinet: (LxWxH) 1.0 x 0.66 x 2.2 m
- Weight: approx. 360 kg

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# VapoFan 2.0 – Development of the next generation

Significantly increased operating pressure at higher design temperature including a new mechanical concept for maintenance on drive train

### Our VapoFan at a glance:

- Efficiency of up to 86 percent
- Designed for applications with mass flows from 200 – 9,000 kg/h
- Serial connection of our VapoFans achieves highest temperature lifts
- New capabilities of energy and cost savings
- Radial blower design ensures reliable and smooth operation
- Fast implementation
- Minor maintenance requirements

### OUR NEW DEVELOPMENT FOR OUR VAPOFAN: THE PILLER VAPOSTATION

- New design, significantly compact and modular for a better maintenance possibility
- Sub-construction out of material stainless steel or painted carbon steel
- Interconnection pipes including expansion joints are in scope of supply



PILLER VapoStation



### **VAPOFAN IN SINGLE-STAGE AND DOUBLE-STAGE DESIGN**

### VapoFan single-stage design

Dimensions and weights

Weights: approx. 400 kg - 700 kg
Height: approx. 1.60 m - 2.30 m
Width: approx. 1.50 m x 1.00 m



VapoFan single-stage design

### VapoFan 2-stage Design

Dimensions and weights

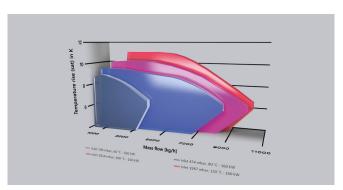
- Weights: approx. 800 kg-1,400 kg

Height: approx. 2.60 mWidth: approx. 1.50 m

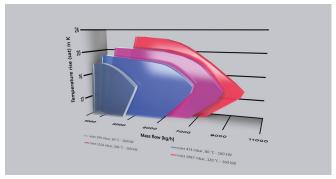


VapoFan double-stage design

### PERFORMANCE SUMMARY OF OUR VAPOFAN PRODUCT RANGE



VapoFan single-stage design



VapoFan double-stage design

### **EXPLORE OUR BROAD SPECTRUM OF DIVERSE POSSIBILITIES**



Contact PILLER to find out more about customized solutions for integrating the PILLER VapoFan into your process.

PILLER VapoStation

Visit our website to find worldwide sales & service contacts

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