

# BLOWERS & COMPRESSORS FOR VAPOR COMPRESSION: THE PILLER VAPOLINE

## THE EXPERT AT YOUR SIDE

The PILLER VapoLine product portfolio is specifically developed and designed for Mechanical Vapor Recompression (MVR) applications. With MVR, we focus on providing energy recovery by compressing low temperature vapor to a higher pressure and temperature, so it can be re-used as a heating source.

## THE PILLER VAPOLINE

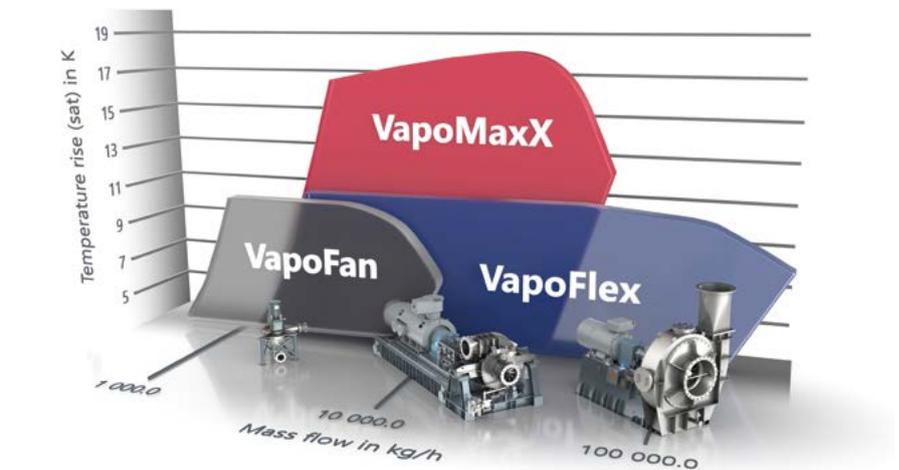
We specialize in customized solutions, starting with the VapoFlex, our key product line. Our range of performance has grown considerably with the VapoFan covering lower mass flows and the VapoMaxX, extending our singlestage performance capability using compressor technology.

### VapoFan: for low mass flows

With the VapoFan, PILLER stands apart from the competition with a modular, compact unit for MVR applications in the range of 200 to 5,000 kg/h. Where positive displacement compressors have often been used, the VapoFan is an excellent alternative, with better longterm durability, higher efficiency, and larger operating range.



VapoFan



Performance ranges at 100 deg C inlet temperature

### VapoFlex: Engineered-to-Order

Excellent performance, maximum efficiency, and dependability measured in decades are the hallmarks of our VapoFlex product line.

With broad capabilities we provide a wide variety of options. No two VapoFlex are alike. Our Engineered-to-Order (ETO) approach results in completely new designed, unique solutions. We design impellers, housings, materials, and bearings to accommodate the desired volume flow, pressure, and temperature rise.



VapoFlex

### VapoMaxX: smart compressor design

The VapoMaxX lives up to the „Made by PILLER“ reputation for durability and quality, but it also offers significantly improved single-stage performance that competes with turbo compressors:

- efficiency of up to 86.5 percent
- reaching up to 20 K temperature rise
- pressures of up to 20 bar(g)

With the VapoMaxX we are merging the advantages of PILLER High-Performance Blowers with advanced compressor technology.



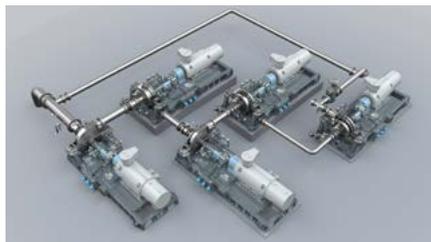
VapoMaxX



Engineering excellence: PILLER is your long-term partner

### POWERFUL MULTI-STAGE SYSTEMS

All VapoLine products generate outstanding single-stage performance, but also can be combined to powerful multi-stage systems achieving higher temperature lifts, especially in vapor compression heat pump systems for waste heat recovery.



Power in numbers: Multi-stage vapor compression system

By offering the critical components of waste heat recovery processes, we are helping the industry to realize economic and environmental benefits. PILLER also offers system engineering services, including the conceptual design as well as support in the Pre-FEED phase.

All Blowers & Compressors run your vapor applications without any compromises.

### DESIGNED TO THE LAST DETAIL

Our in-house R&D is dedicated to continuous, cutting edge product development, such as the self-invented squeeze oil damper bearing systems. Consequently, our products are of exceptional quality standard and smart design.

With the VapoLine, consisting of the VapoFan, VapoFlex, and VapoMaxX, PILLER offers a broad portfolio for MVR processes.

#### PILLER VapoLine at a glance

- wide range of technical solutions and applications
- customized to the process requirements
- flexible and cost-effective integration into existing plants
- long service life with low maintenance costs and minimum downtime
- efficiency up to 87.5 percent
- multi-stage systems achieve highest temperature lifts

### WE HANDLE THE CHALLENGES OF YOUR PROCESS

PILLER was the first company to introduce centrifugal blowers for Mechanical Vapor Recompression in the 1980s. To find the perfect match for your process conditions, we will engage you with expert knowledge, competence, and experience.

### PROVEN TECHNICAL EXPERTISE

Our technical know-how comes from decades of experience. From machine to service, troubleshooting, and realtime monitoring, you can turn to PILLER for comprehensive support and longterm performance.



PILLER's falling-film evaporator in Taicang, China

All developments are tested in our own MVR plant in China. It is used for quality assurance, endurance tests, and working product demonstrations.

### SETTING THE INDUSTRY STANDARD

Energy efficiency and rising energy costs are becoming increasingly important. Optimizing equipment selection is critical part of process planning: At PILLER, we ensure innovation and top product quality for MVR processes, manufacturing high-quality blowers and compressors with maximum efficiency and durability, resulting in cost savings and lower life cycle costs.

Visit our website to find worldwide sales & service contacts

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