

BLOWERS & COMPRESSORS FOR MECHANICAL VAPOR RECOMPRESSION: 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

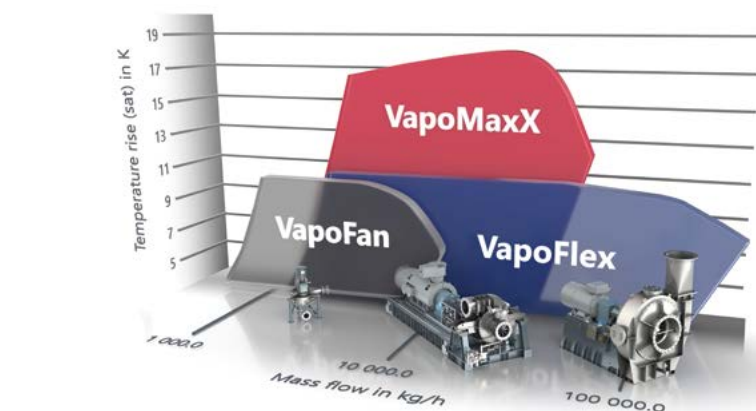
We are specialized in customized solutions with our key product VapoFlex. Our range of performance has grown considerably with the VapoFan covering lower mass flows and the VapoMaxX, extending our singlestage performance capability using compressor technology.

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 9,000 kg/h with a temperature rise of 11 K per stage. 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.

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, components, and bearings to accommodate the desired mass flows of up to 250,000 kg/h with a temperature rise of 11 K per stage.



VapoFlex

VapoMaxX: Smart compressor technology

Our newest product in the category of steam and vapor compressors lives up to „Made by PILLER“ reputation and stands for durability and quality, but it also offers a new range of performance that competes with turbo compressors. Pressures of up to 20 bar (g) and tip speeds of 440 m/s open new areas of application, resulting in temperature rises around 20 K per stage.

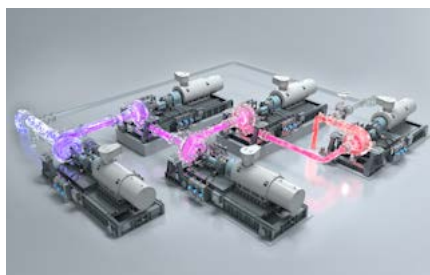
With the VapoMaxX we are merging the advantages of PILLER High-Performance Blowers with advanced compressor technology.



VapoMaxX

SERIAL CONNECTION OF BLOWERS AND COMPRESSORS

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



Power in numbers: Serial connect system for Vapor Recompression

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.

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 supports you to secure the optimum MVR vapor compressor solution for your process.

PILLER VapoLine at a glance

- Wide range of technical solutions and applications
- Customized to your process requirements
- Efficiency up to 87 %
- Compact and modular design
- Flexible and cost-effective integration into existing plants
- Long lifetime with low maintenance costs
- Serial connection of blowers and compressors achieves highest temperature lifts

WE HANDLE THE CHALLENGES OF YOUR PROCESS

Today, PILLER is the technology and market leader in the field of steam compression, using blowers and compressors. We develop the perfect solution for your process requirements to ensure that our blowers and compressor meet your specific needs. To find the perfect match for your process conditions, we will always engage you with full service from engineering over project management to design and manufacturing.

PROVEN TECHNICAL EXPERTISE

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

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



PILLER's falling-film evaporator in our own MVR plant

SETTING THE INDUSTRY STANDARD

The combination of limited energy sources with increasing prices and the goal to reduce greenhouse gas emissions are pushing the industry to find more efficient solutions for its energy demand. Optimizing equipment selection is critical part of process planning: At PILLER, we ensure innovation and superior quality for MVR processes, manufacturing blowers and compressors with maximum efficiency and durability, resulting in cost savings and lower lifecycle costs.

All our activities are guided by our vision "ALWAYS ADVANCING". We act in the awareness of constantly developing our VapoLine for the best performance in all fields.

Visit our website to find worldwide sales & service contacts

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