

# The future of **hydrogen compression**

VRW 536 M

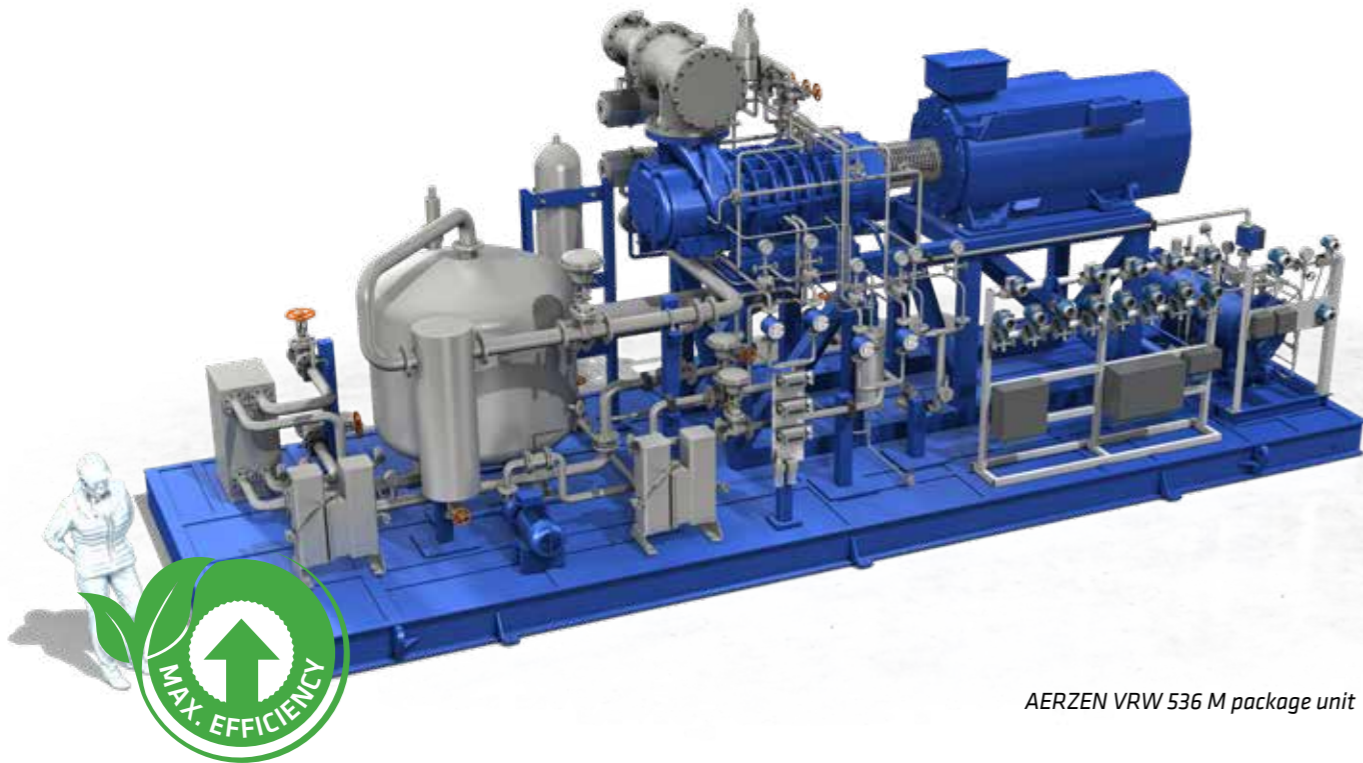
The oil-free, water-flooded screw compressor



**AERZEN**  
EXPECT PERFORMANCE

## VRW 536 M - screw compressor

Water-flooded, reliable and highly efficient



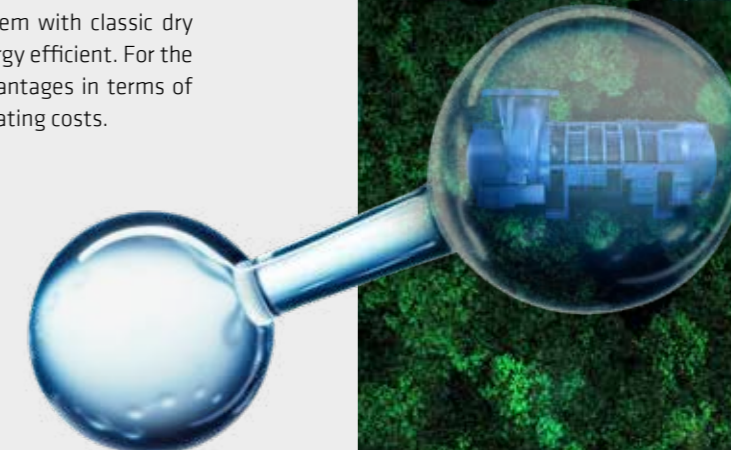
AERZEN VRW 536 M package unit

## The right compressors are the key to success

Bringing large H<sub>2</sub> volume flows to intermediate and final pressures with just a few compressor stages, without having to set up huge reciprocating compressor systems for this purpose - precisely here is where the new VRW 536 M oil-free screw compressor from AERZEN comes in.

Compression is based on the principle of oil-flooded screw compressors - with a small but subtle difference: the oil was replaced by water. The water serves both for cooling the gas and for gap sealing and enables compression to higher differential pressures with high efficiency.

This stage can replace a two-stage system with classic dry screw compressors and is even more energy efficient. For the customer, this results in significant advantages in terms of footprint as well as investment and operating costs.



## Your advantages

Our promise

- ✓ 100% oil-free compression
- ✓ Maximum efficiency and increased differential pressure in one stage
- ✓ Minimisation of footprint
- ✓ Reduced investment and operating costs
- ✓ Pre-drying of the wet H<sub>2</sub>-gas is not required
- ✓ Ideal as a pre-compressor (booster) for downstream compressor types
- ✓ Also suitable for other critical gas applications (e.g. contaminated gases)

## Performance data

### AERZEN VRW 536 M

<b>Volume flow:</b>	6,000 m <sup>3</sup> /h *
<b>Intake pressure:</b>	1.0 - 1.3 bar a
<b>Maximum discharge pressure:</b>	10 bar a

\* Maximum volume flow depends on pressure difference



For more information on the oil-free screw compressor VRW 536 M please refer to our website [www.aerzen.com](http://www.aerzen.com)

## Technical properties

### The new H<sub>2</sub>-Compressor concept

- i Water-flooded. For cooling the gas and for gap sealing (efficiency increase)
- i Stainless steel design for maximum service life (corrosion resistance)
- i Water-purged mechanical seals at the conveying chamber for 100% oil-free compression
- i Oil-lubricated roller bearing for maximum speed range
- i Speed control for adaptation to fluctuating process conditions
- i Gear-synchronised rotors (no contact between the rotors)
- i Designed for three-year revision cycle (MTBO)
- i Direct driven or with step-up gearbox

## Scope of supply (Standard)

- Customer-specific package
- Complete control (optional)
- Acoustic hood (optional)

Extensive modifications and individual accessories for numerous application areas and operating conditions, available on request.

## **AERZEN.** Compression is the key to our success

The Aerzener Maschinenfabrik GmbH was founded in 1864. In 1868, we built Europe's first positive displacement blower. The first turbo blowers followed in 1911, the first screw compressors in 1943, and in 2010 the world's first rotary lobe compressor package. Innovations "made by AERZEN" keep driving forward the development of compressor technology. Today, AERZEN is among the world's longest established and most significant manufacturers of positive displacement blowers, rotary lobe compressors, screw compressors and turbo blowers. And among the undisputed market leaders in many areas of application.

In more than 50 subsidiaries around the world, more than 2,600 experienced employees are working hard on shaping the future of compression technology. Their technical competence, our international network of experts and the continual feedback from our customers are the basis of our success. AERZEN products and services set standards. In particular, with regard to reliability, stability of value and efficiency. Challenge us.



## **LET'S TALK**

**Find your local contact**

[www.aerzen.com/worldwide](http://www.aerzen.com/worldwide)

Aerzener Maschinenfabrik GmbH  
Reherweg 28 - 31855 Aerzen / Germany  
Phone: +49 5154 81 0 - Fax: +49 5154 81 9191  
[info@aerzen.com](mailto:info@aerzen.com) - [www.aerzen.com](http://www.aerzen.com)



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