

# We just Added Oil

Oil-injected screw compressors



Engineering the Future – since 1758.

**MAN Diesel & Turbo**



# A Product Family Goes from Good to Great

## Introducing our new oil-injected screw compressors

Our product range has always set a milestone in terms of technical sophistication and technological depth. We are however convinced that there is room for improvement and most of the time, the first steps towards improvement are triggered by our customers. So we are continually listening to you. What we learned is that: your demand for compression solutions continues to rise, your technology requirements are more diverse and complex than ever. You require a compressor product family that addresses a wide variety of applications and operating conditions.

It's now available.

Drawing from our extensive know-how, expertise and 60 years of experience with oil-free screw compressors we adjusted our product portfolio for you – our new series of oil-injected screw compressors are now available.

We now comprehensively meet the entire range of specialized requirements in the field of screw compressors for process gas applications.

Thank you for taking this step from good to great together with us.

# There Is No Substitute for Experience

Turbo machinery for all markets, all applications,  
all challenges



## Our expertise

The product range of the Strategic Business Unit Turbomachinery (formerly MAN Turbo Group) comprises a broad range of compressors, gas- and steam turbines as well as expanders. It covers most industrial applications – from single casing compressors up to large multi-casing trains including various types of turbine drives. Full-train competence has always been our goal. Frequently we are asked to create large, unique train solutions of a scale never seen before – these are the challenges that drive our spirit of innovation.

To carry on with this philosophy, we developed and added to the existing oil-free screw compressors a new product family of oil-injected compressors, setting the standards of tomorrow's compression solutions.

Based on tradition and six decades of experience of designing and manufacturing oil-free screw compressors, focused on R&D, ensuring that our solutions are cost effective, proven and reliable over their entire life cycle, MAN Diesel & Turbo continues to meet the market's high expectations and rigorous demands.

## Service without limits

MAN PrimeServ effectively helps to meet and exceed the high expectations of our customers. Many of our process gas screw compressors have been in continuous successful operation for many decades.

The screw compressor service teams provide state of the art solutions and services 24 hours, 7 days a week on a 365 days a year basis. The MAN PrimeServ global after-sales service network reaches customers around the globe, quickly and effectively.

# Yes, It Does, Can and Will

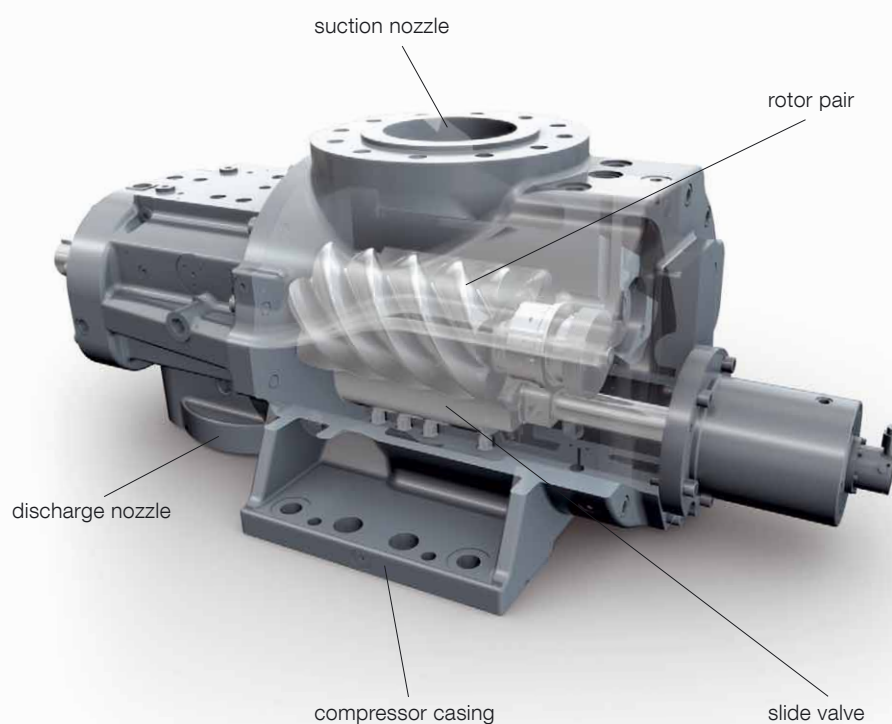
## Compression that means business

### Main characteristics

In the beginning, the new series consists of three different frame sizes utilizing a modular system. Additional frame sizes and advanced technical features are planned. Cast vertical split casings and single piece forged rotors are standard underpinning an array of innovative technology. Depending on the type of gas to be compressed, different materials can be used for rotors and the casing. Sleeve bearings are installed to carry the radial and thrust loads. An inbuilt sliding piston allows an economic control of the compressor flow between 20 and 100%. Naturally we comply to the latest API 619 requirements.

### Customer benefits

With the new series an optimized solution for all process gas requirements is available, regardless of whether oil-free or oil-injected compression is required. Together with our comprehensive product portfolio of turbo compressors, MAN Diesel & Turbo now offers a solution for the majority of compressor applications.



# Technical Data

## Testing

The prototype compressor was thoroughly tested in Oberhausen on the turbo machinery test beds. The rigorous testing programs extended over several months, and covered many aspects, including performance and mechanical integrity.

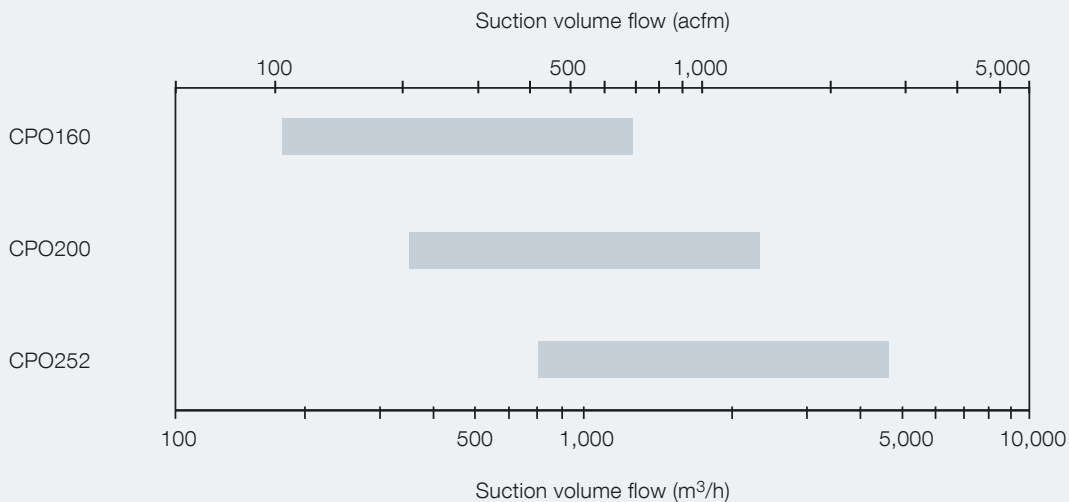
## Testing results

All tests were passed without flaw, and the test data confirmed that all design criteria were fully met. Based on these exhaustive tests in a diverse range of conditions, the new oil-injected screw compressor is now available on the market.

### Suction Volume Flow [based on 3,600 rpm compressor speed]

Type	m <sup>3</sup> /h	acfm
CPO160	1,180	695
CPO200	2,325	1,370
CPO252	4,700	2,765

### Suction Volume Flow



# Complete Trains – Fully Integrated Solutions

## More than just the sum of their parts

A complete train solution from MAN Diesel & Turbo is more than just the sum of its parts. The elements of components, testing, assembly and service seamlessly combine to achieve unsurpassed levels of performance, efficiency and reliability. Any compressor can be matched with a range of options – in a custom solution that fits individual needs.

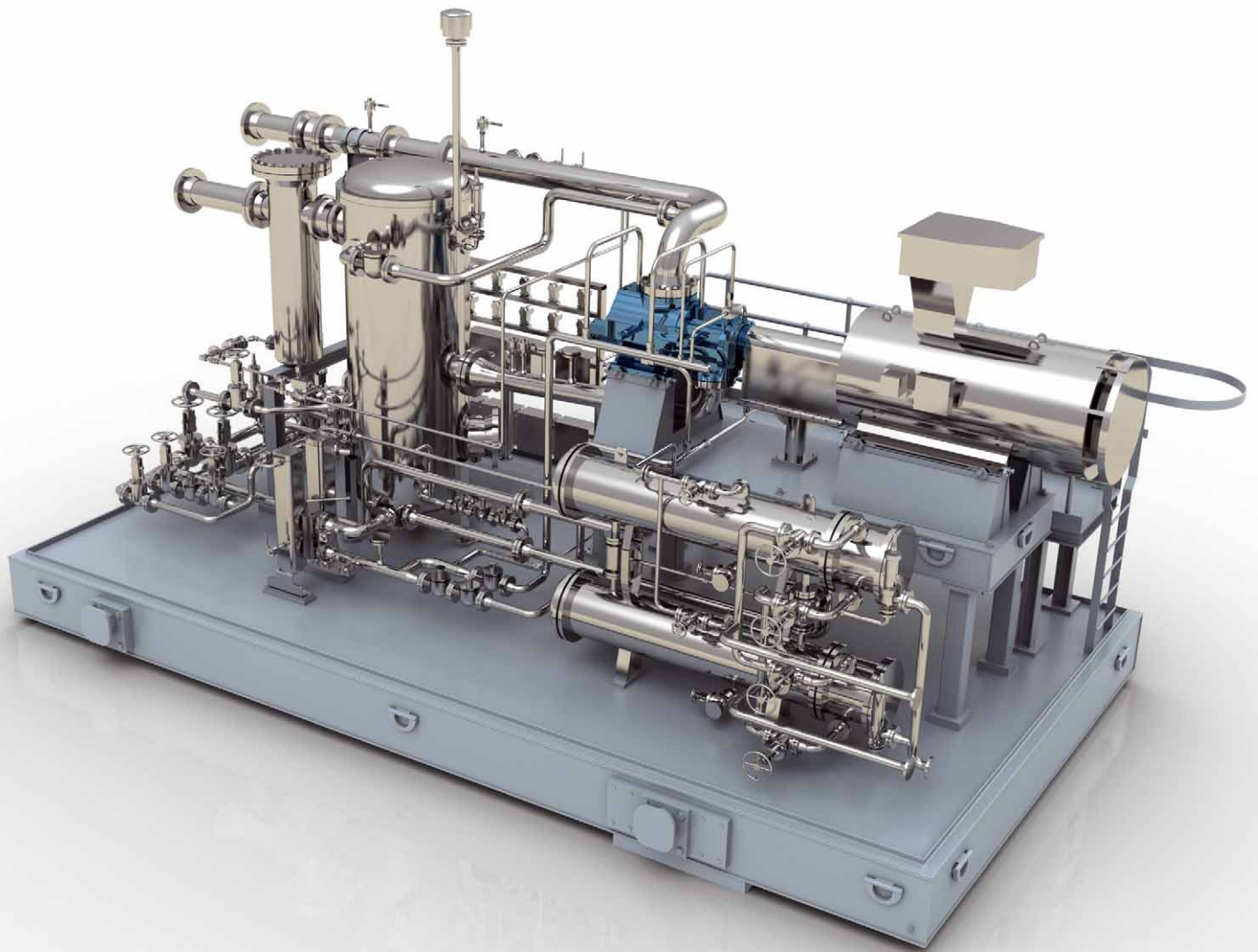
### **The package concept**

Each process gas screw compressor unit is based on a standardized design and adapted to meet the requirements of the specific application. State of the art CAx programs for design, engineering and manufacturing ensure that all customer requirements are considered and met in the most efficient and customized way.

### **Modular design concept**

The modular design concept of the MAN Diesel & Turbo process gas screw compressor program ensures that a model is available for every combination of flow and pressure within the design envelope. This also includes a combination of an oil-free low pressure stage with an oil-injected high pressure stage in a double stage compressor unit.

Furthermore, the modular design system utilizes standardized parts and a well proven design, making an accurate prediction of compressor performance possible.



### Package measures and weight

	Length (m)/(ft)	Width (m)/(ft)	Height (m)/(ft)	Weight (kg)/(lbs)
CPO160	7.0/23.0	3.5/11.5	3.8/12.5	23,000/50,700
CPO200	8.0/26.0	3.5/11.5	4.0/13.0	26,000/57,300
CPO252	9.0/29.5	3.5/11.5	4.3/14.0	30,000/66,100

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