



# Atlas Copco Gas and Process Division

2026 Industrial Process EmeRging Technologies (IPER)

February 2026

# Agenda

- › This is the Atlas Copco Group
- › Overview – Gas and Process Division
- › Gas and Process Markets
- › Gas and Process Products
- › Energy Transition Applications
- › Use Cases & Success Stories

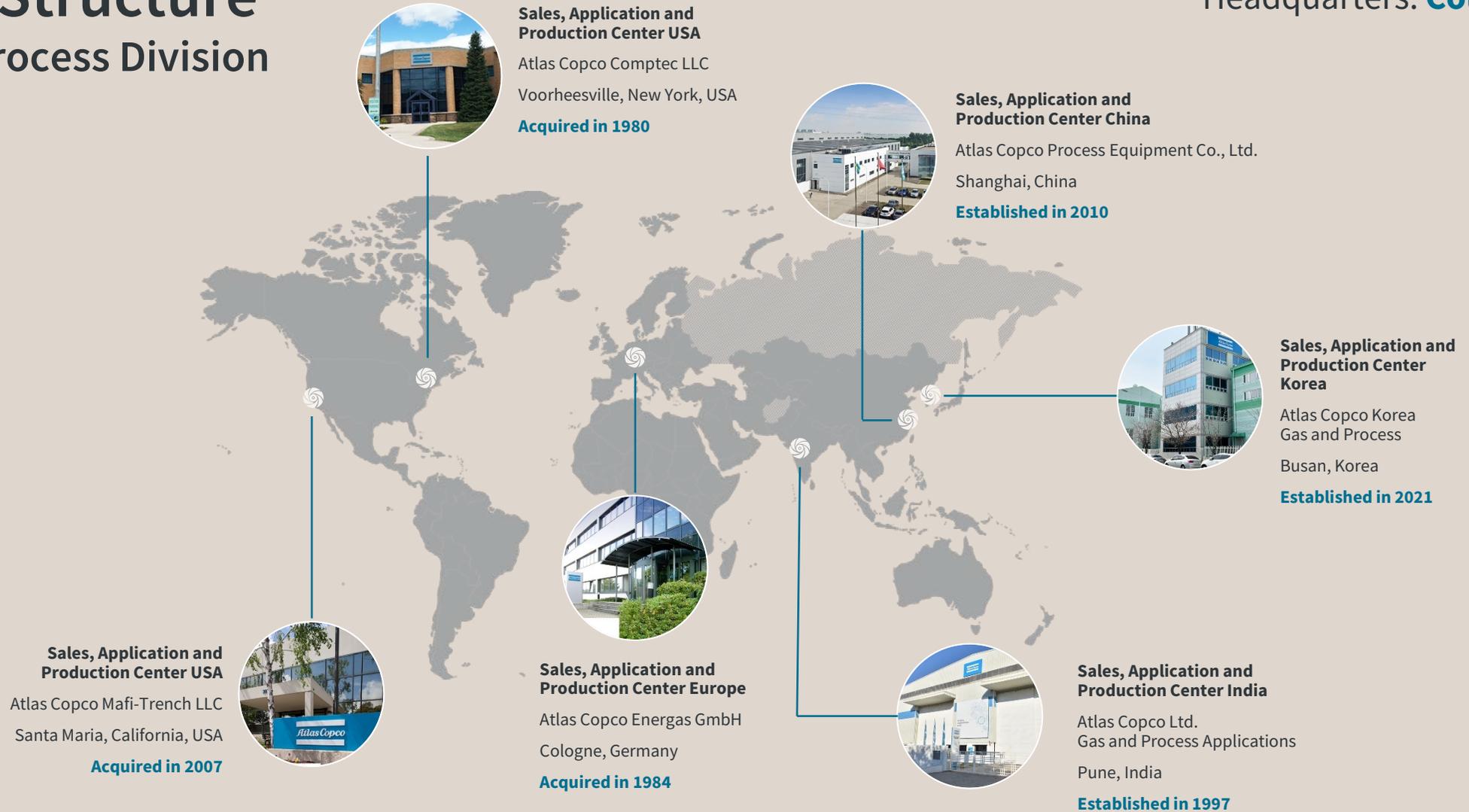
# Organization



# Global Structure

## Gas and Process Division

Headquarters: **Cologne**



# Atlas Copco Gas and Process | Markets



Industrial Gases



Gas Processing



LNG



Olefins/Polyolefins



Chemicals/Petrochemicals



New Energy



CCUS



Hydrogen



Fuel Gas Booster



Renewable Hydrocarbons



Marine



Refinery

# Atlas Copco Gas and Process | Products



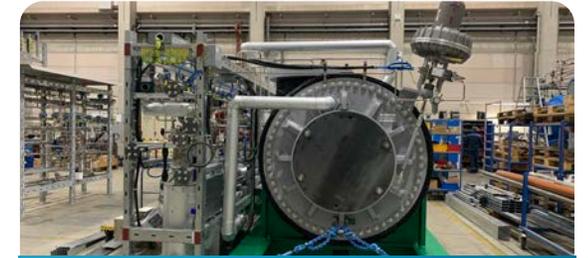
Industrial Gases



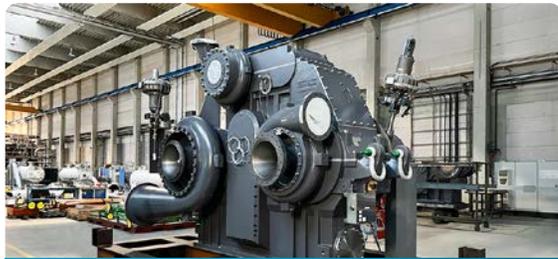
Gas Processing



LNG



Olefins/Polyolefins



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New Energy



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Hydrogen



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Renewable Hydrocarbons



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# Enabling our customers to drive the Energy Transition



# Solutions for protecting global climate and human health

Technologies are required to support **New, Emerging** and **Sustainable Energy Sources**

Increased amount of **CO<sub>2</sub> & sCO<sub>2</sub>, H<sub>2</sub>, Renewable and Energy Storage** related projects

Expanders / Compressors in  
H<sub>2</sub> Liquefaction and BOG



Expanders / Compressors  
in CCUS and sCO<sub>2</sub>



Steam Compressors  
/ MVR & Heat Pumps



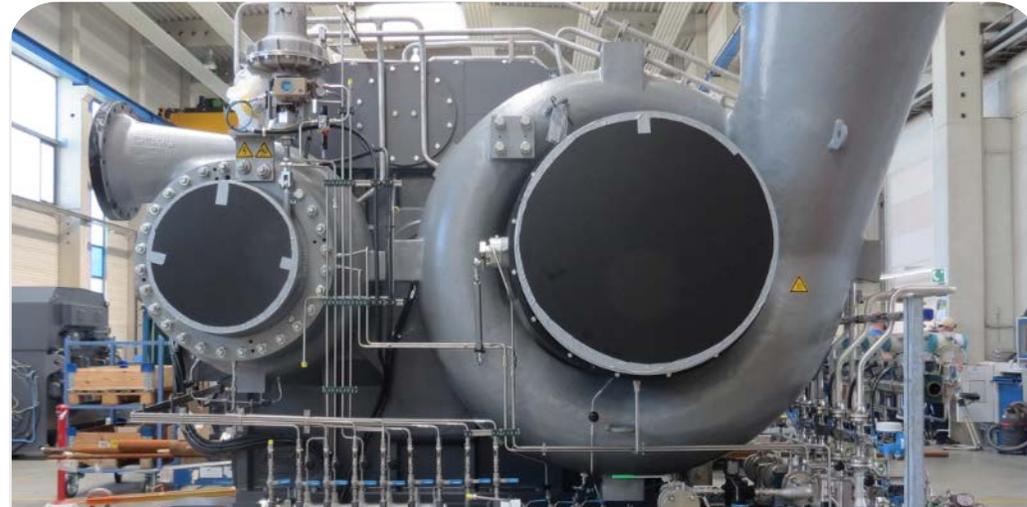
Expanders / Compressors in  
ORC / WH2P / LDES



# Traditional Industries leveraging Future of Energy

A clear shift in the energy transition

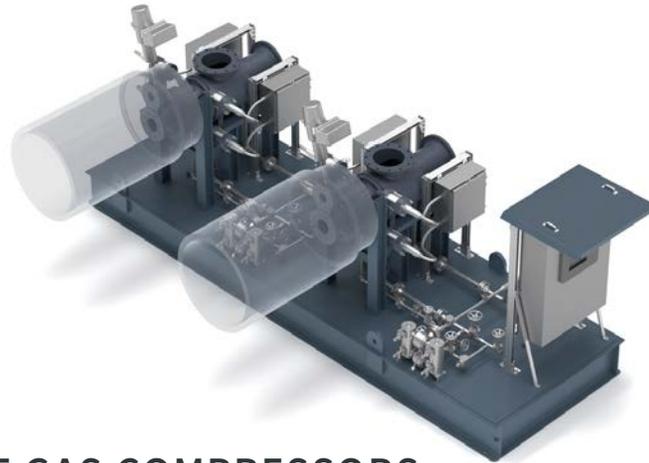
- > CCUS
- > Heat Pumps
- > Energy Storage



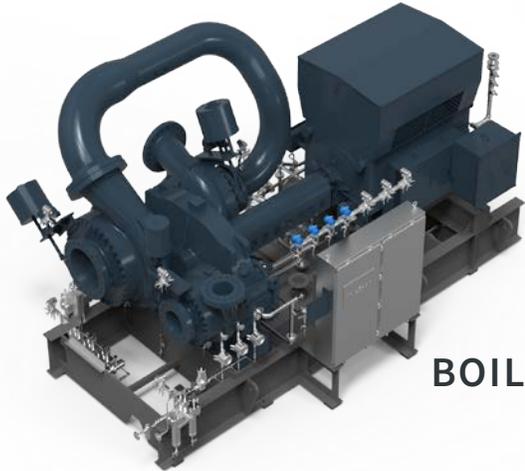
# Traditional Industries leveraging Future of Energy

## Small to Large-scale Liquid Hydrogen Production

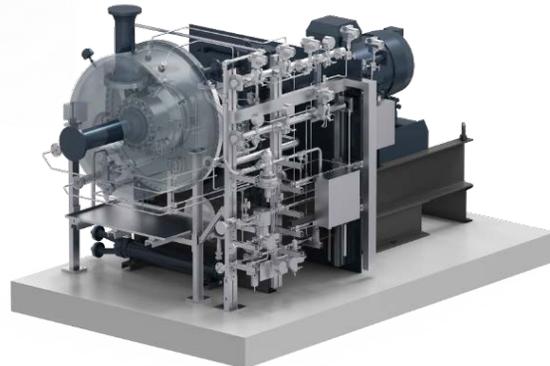
N2 AND H2 TURBOEXPANDERS



REFRIGERATION COMPRESSORS



BOIL-OFF GAS COMPRESSORS



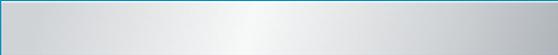
HYDRAULIC COMPRESSOR\*



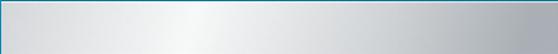
CROSSHEAD PISTON COMPRESSORS\*



\* non-GAP equipment



*Atlas Copco*



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# PRODUCTS

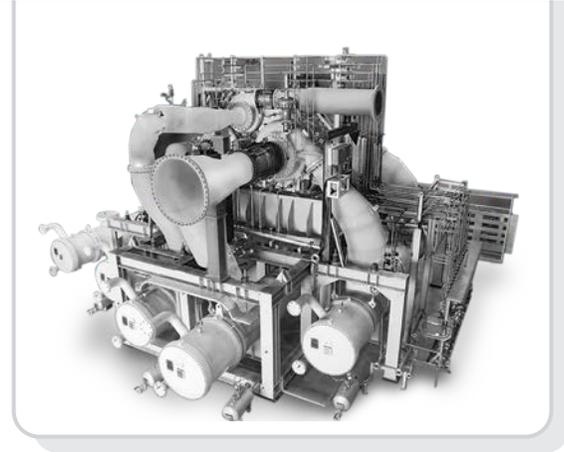
Atlas Copco Gas and Process



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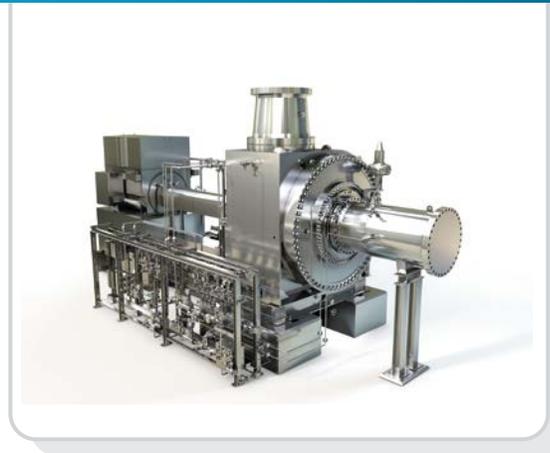
# Product overview | Centrifugal and Screw Compressors

## Integrally-geared centrifugal turbocompressor



1 to 8 stages	Up to 37 MW
Up to 205 bar (a)	All gases

## Non-geared centrifugal compressor for polyolefins



Single stage	Up to 12 MW
Up to 43 bar (a)	

## Oil-free screw compressor for gases



0 - 40 bar (a)	75 - 10 000 Nm <sup>3</sup> /h
Up to 1 MW	

**Oil-free gas screw:** up to 28 bar (a),  
up to 6 000 Nm<sup>3</sup>/h, up to 1 MW

# Product overview | Expanders and Compressors

## Integrally-geared centrifugal turboexpander



1 to 4 stages	Up to 25 MW
Up to 70 bar (a)	All gases

## Integrally-geared centrifugal compander



1 to 6 stages	10 MW / 6 MW
Up to 25 bar (a)	All gases

## Expander-Compressor with mag or oil bearings



Single shaft	Cooling power
Up to 120 bar (a)	All gases

# Technological experience | Componder

Componder in H<sub>2</sub>O<sub>2</sub>



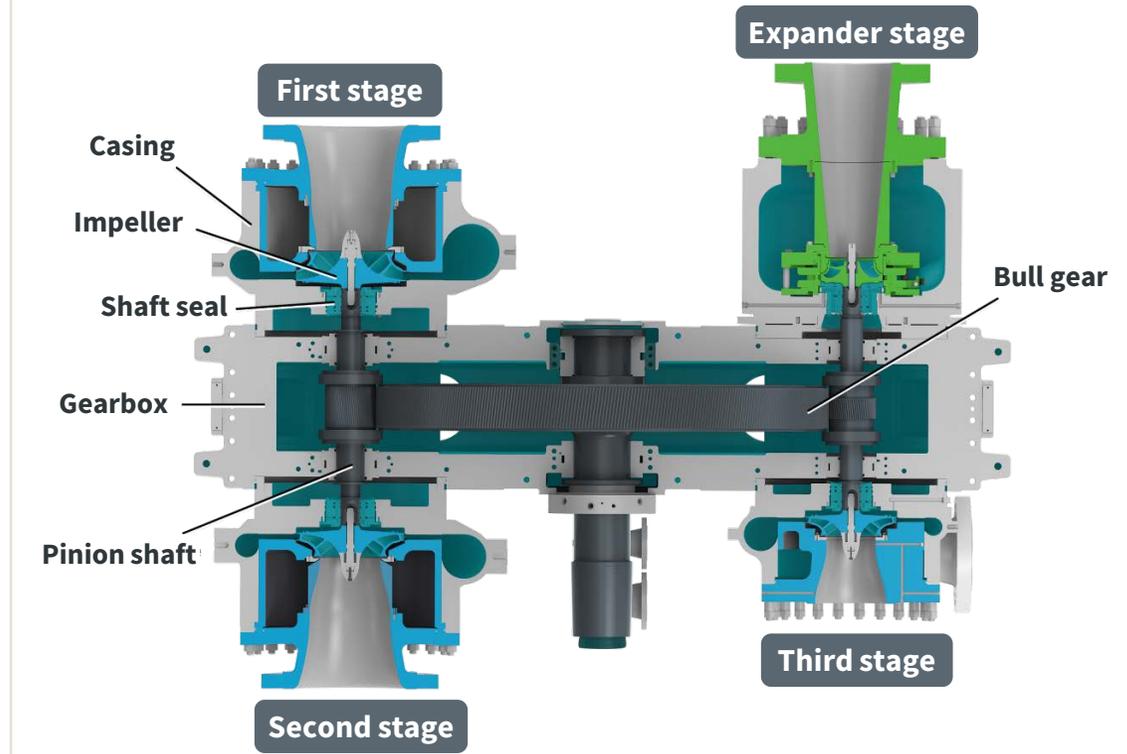
Componder in Phenol



Componder in Flue Gas



## Componder concept – Working principle



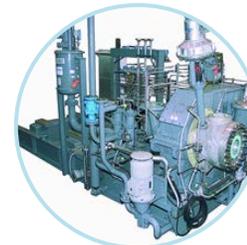
Componder in Nitric Acid



Componder in HPPO



Componder in LNG



# USE CASES & SUCCESS STORIES

Atlas Copco Gas and Process



Atlas Copco

# Project - Compressor-driven Industrial Heat Pump (Evonik)



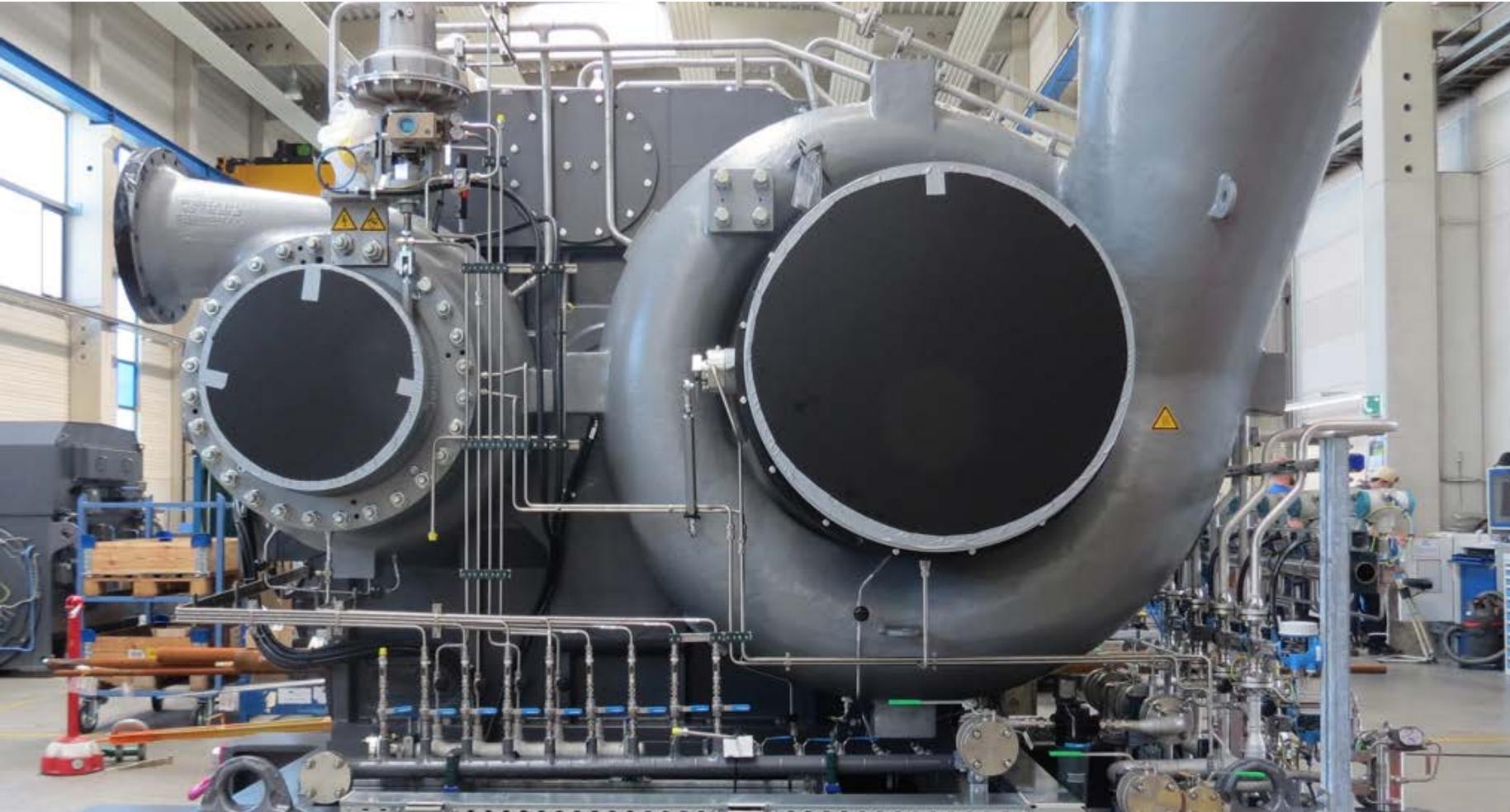
The core of the heat pump is the Atlas Copco GT063R3D1/040R1D1 four-stage radial turbo compressor.

Modular design

Scope includes all necessary components and equipment for the heat pump, as well as the control system, motors, and instrumentation.

Up to 150°C using the natural refrigerant pentane (R601 and R601a).

# Project – SMART – Methanol Vapor Compressor



Prototype plant to produce biodiesel precursors using 100% renewable energies

Energy savings through patented process: 75%

3-stage 3-sectional methanol vapor compressor with injection cooling

New high-performance granules and heat-resistant binder for thermal insulation coating

# Project – Nederland, Texas, USA – Main Air Compressor



Production of liquid oxygen and nitrogen used in various application

Capacity: ~250000 Nm<sup>3</sup>/h  
Total capacity ~ 500.000 Nm<sup>3</sup>/h

Outdoor installation  
Size [L x B x H]: 18,5 x 18,5 x 11 m

Driving power: 33,6 MW

Compressor weight incl. driver:  
approx. 320 tons

# Project – Botlek Product



CO2 Compressor is part of the Portos Pipeline Project in Order to achieve a CO2 neutral Rotterdam Port until 2030

6 stage 3 Sectional CO2 Compressor

Drive: Asynchron Motor

Packaged Unit with integrated Oil and seal Gas System in a very limited Area

High differences in molecular weight in the different operating conditions

# Project – Godorf Compaander – BIO LNG



Collecting Biogas from different Sources in North Rhine Westphalia

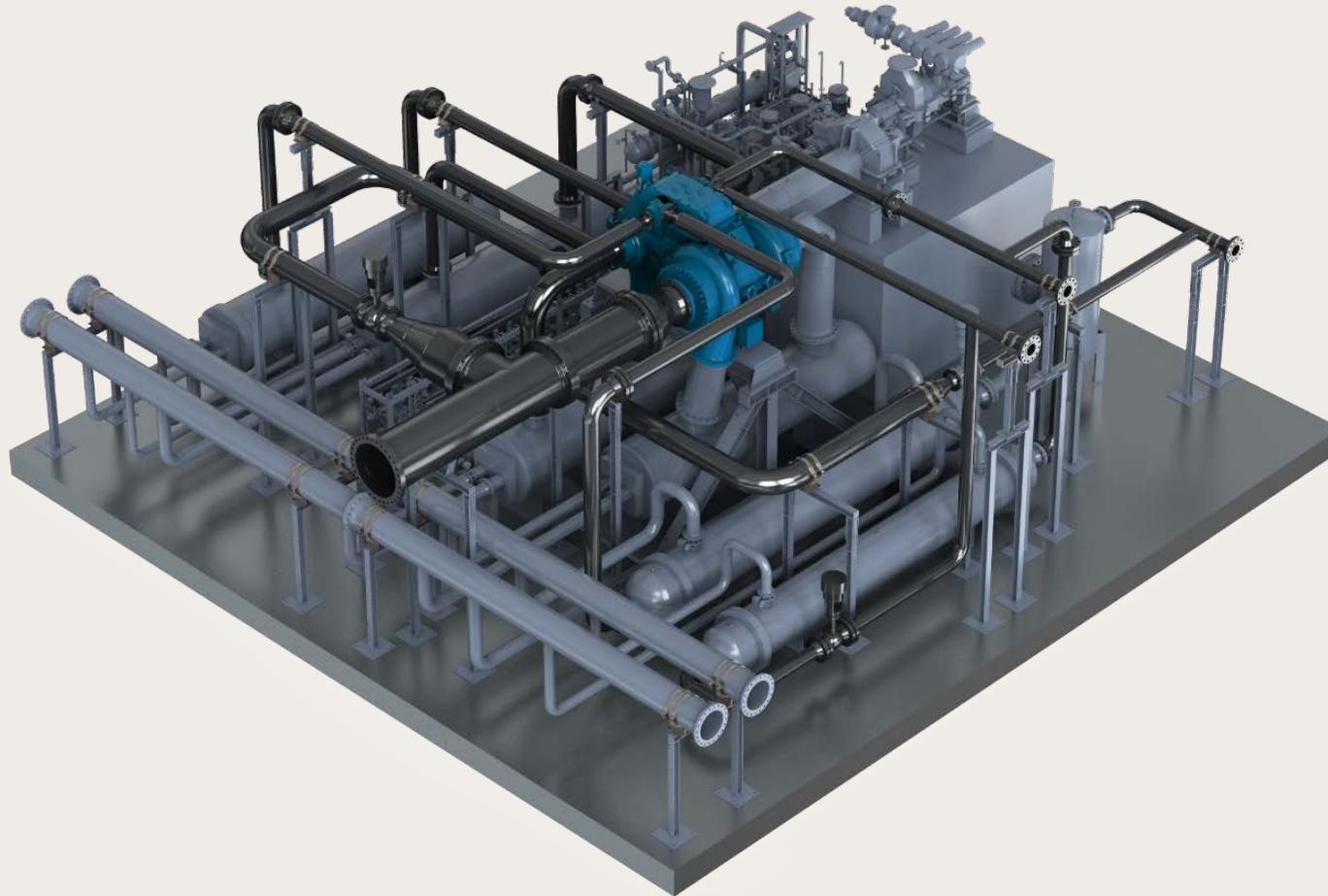
Liquification of Biogas to LNG  
“Liquified Natural Gas”

Providing LNG as fuel for trucks

The compressor is used as for cooling  
“big fridge” function

3 compressor stages combined with  
2 expander stages – “Compaander”

# Project – Marquis CO<sub>2</sub>



Production Site: Hennepin, Illinois (USA)

CCUS - CO<sub>2</sub>-negative Bioethanol / Fuel Production

Mass flow 76 000 kg/h CO<sub>2</sub>

Inlet pressure 1 bara

Inlet temperature 26°C

Outlet pressure 97,5 bara

Outlet temperature 80°C

Coupling power 7600 kW  
(steam turbine)



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