



NATURAL GAS

VG Series

adcomp[®]
ADVANCED GAS COMPRESSORS

Dry gases applications



VG110

SUCTION PRESSURE:
0.025 < 8 bar(g) | 0,4 < 116 psi(g)

OPERATING PRESSURE:
3.0 < 25 bar(g) | 44 < 363 psi(g)

FREE GAS DELIVERY:
0 < 6000 Nm³/h | 0 < 3738 SCFM

ADSORBED POWER:
2.2 < 700 kW | 3 < 970 hp

HOW IT WORKS

The function of the gas feed compressor is to elevate the pressure of the incoming gas as well as improving the gas quality. As per Adicomp common process, the dry gas is sucked in by an inlet filter and then passes through a suction control valve. During the gas compression process, the oil is injected inside the rotary screw chamber to perform three main functions: lubrication, sealing and heat absorption. The gas goes through the minimum pressure/non-return valve into an air or water cooler after cooler.

A mechanical by-pass valve is used to recirculate the gas in excess into suction to reduce the capacity from the value achieved at minimum speed of the electric motor, down to 0%. Sometimes it is necessary to install a pneumatic or electric controlled by-pass valve to have a more accurate control. When the system stops, the gas is depressurized by feeding the gas into a specific expansion buffer or bleeding it out into the atmosphere. A sophisticated control system in the Adicomp series manage the operating pressure upstream or downstream

MAIN APPLICATIONS

Welcome to Adicomp VG series where engineered gas compressors design meets top-notch efficiency. This series of gas compressors is crafted to meet various applications. Designed onto an easy to handle skid or enclosure composed of an oil-injected rotary gas screw block, directly coupled to an electric motor through a flexible or magnetic coupling controlled by an inverter.

Available with or without gas treatment system, this series has been designed for the following main applications :

- MICROTURBINES FEEDING
- TURBINES FEEDING
- BOILER FEEDING
- GAS GRID INJECTION
- GAS ENGINE FEEDING

the unit, and automatically adjusts compressor speed to modulate output according to the availability or demand of biogas. Providing adequate conditions maintenance intervals are extended at 8000 operating hours.



The strength of the rotary screw technology

The best for continuous and heavy-duty operation, it's easy to maintain; with very little moving and contacting parts, wear and tear are minimized. In addition to the very high energy efficiency achievable while VSD controlled, the rotary screw technology offers many other advantages, including ability to provide a steady flow, handle temperature extremes and variations in demand, reduced noise and no need of special foundations.



Plug & Play

All Adicomp compressors are designed and made to maximize and facilitate the installation. No special operations are required, except for the installation on site, electricity and gas supply. Everything is already wired, connected, tested and, thanks to the commissioning service, you can fine-tune the set-up of the package on site.



Air or water cooled

All Adicomp compressors can be either air cooled or water cooled.

ONE OF THE 10000 SYSTEMS INSTALLED

VG55 Natural gas compressor

- POWER INSTALLED: 75 kW | 100 Hp
- INLET PRESSURE: 17 mbar(g) | 2,5 psi(g)
- WORKING PRESSURE: Up to 14,7 bar(g) | 213 psi(g)
- FLOW RATE: 0<279 Nm³/h | 0<174 SCFM
- AMBIENT TEMPERATURE: -10/+40 °C | +14/+104 °F
- LOCATION: GERMANY



Heat recovery

Up to 75% of the heat generated by the screw compressor can be recovered and used to feed with hot water various utilities and thereby reduce overall energy costs. How? Thanks to the heat recovery through dedicated heat exchangers between hot oil /warm water and/or the hot compressed gas/warm water.



Energy savings, flow control

At Adicomp, we keep an eye on energy savings. Our compressors are designed to reduce their power consumption as much as possible by always adapting the capacity to the end user needs. Adicomp compressors are fully controlled by VSD, by-pass valve and/or slide valve.



Full control over operation

Thanks to the use of a state-of-art PLC programming you can control the operation of all parts of the compression package, thereby ensuring a perfect use, even remotely.



Experience counts

In over 25 years we provided 10000 systems worldwide, facing extremely different applications that allowed us to acquire a high level of know-how acknowledged by the market.



Customized approach

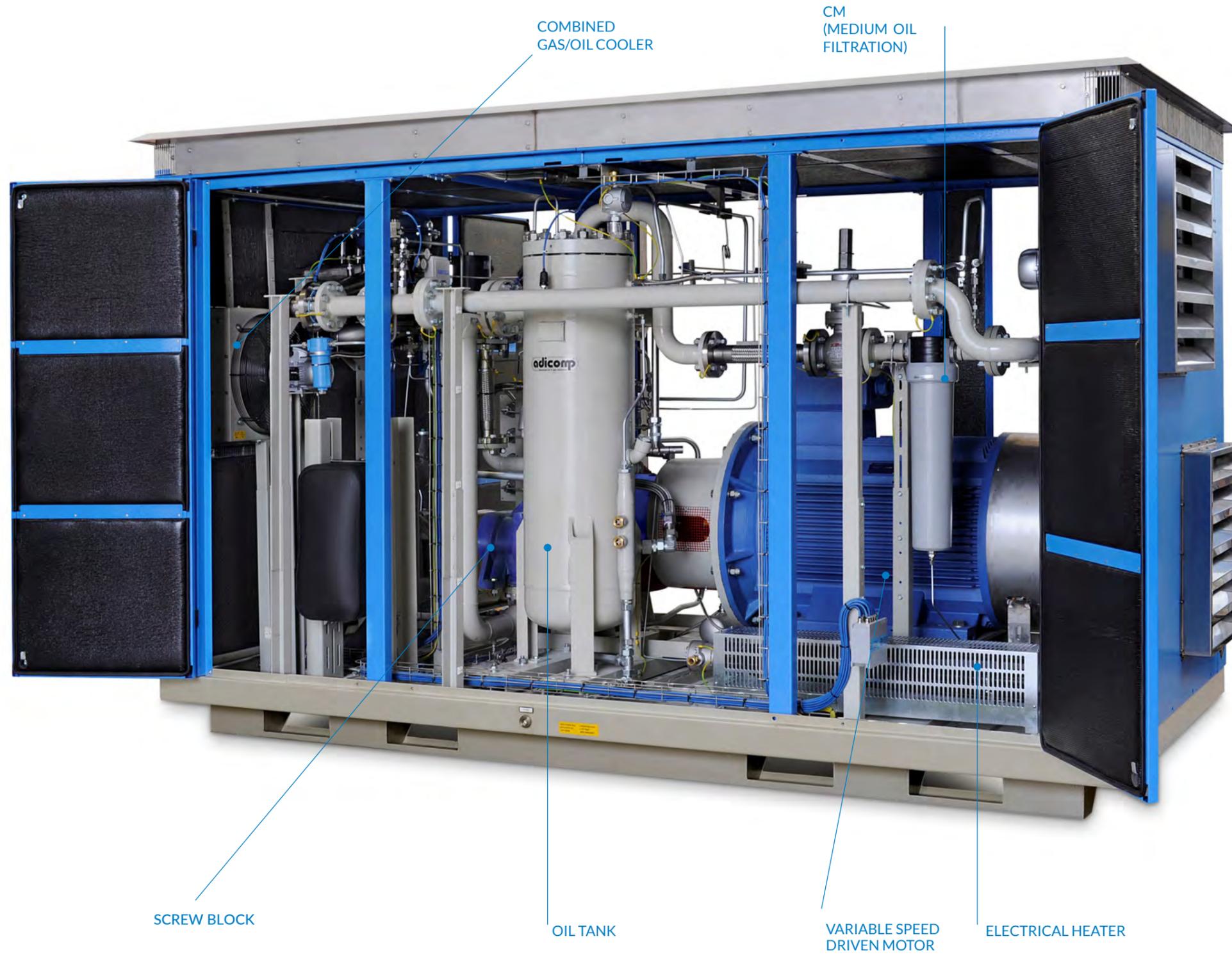
At Adicomp, products are manufactured to meet specific customer needs. Not vice versa. We listen to customer requirements and then transmit them to the engineering department to provide the best solutions. Flexible and reliable, always.



Gas quality

Adicomp's compressors, designed with its own integrated gas treatment system, always ensure the required gas quality.

Product overview



Available Options

- (S) SILENCED
- (WP)-(WS) WEATHERPROOF
- (EV) EXPANSION VESSEL
- (BV) BLEED VALVE
- (GOH) WATER COOLED
- (OW) GAS OUTLET REFRIGERATING COOLING SYSTEM
- (CM)-(CF) MEDIUM AND FINE FILTRATION
- (GH) RE-HEATING GAS SYSTEM
- (HR) HEAT RECOVERY
- (BY1) MECHANICAL BYPASS VALVE
- (BY2) PROPORTIONAL BYPASS VALVE
- (TC) CONTROLLED OUTLET GAS TEMPERATURE
- (LM) FILTERS PRESSURE INDICATOR
- (PL) PLC
- (MB) MODBUS, (PB) PROFIBUS & (PN) PROFINET REMOTE CONTROL SYSTEMS
- (CC) ACTIVE CARBON COLUMN

Possible configurations

OPEN FRAME
Indoor installation
+3°C/+40°C | +37.5°F/ +104°F



WEATHERPROOF
Outdoor installation
-30°C/+40°C | -22°F/ +104°F



CONTAINER 40FT
Outdoor installation
-40°C/+40°C | -40°F/+104°F



Designed for worldwide installation

VG series codes & standards

MODELS

VG2.2	VG9	VG30	VG90	VG250	VG500
VG3	VG11	VG37	VG110	VG315	VG550
VG4	VG15	VG45	VG132	VG355	VG600
VG5.5	VG18.5	VG55	VG160	VG400	VG650
VG7.5	VG22	VG75	VG200	VG450	VG700



EU

Hazardous area classification: ATEX zone II
 Pressure vessel code compliance: PED
 Electrical code compliance: ISO60079
 Certified manufacturing organization: ISO 9001:2015 -14001:2015 -45001:2018



USA

Hazardous Area Classification: Class 1, Div 2 as defined per NEC, NFPA70
 Pressure Vessel Code Compliance: ASME
 Electrical Code Compliance: UL/Control panels and assemblies
 Certified manufacturing organization: ISO 9001:2015 -14001:2015 -45001:2018
 UL 508A, Standard for Industrial Control Panels
 UL 698A, Standard for Industrial Control Panels Relating to Hazardous (Classified) Locations
 NFPA 70 National Electric Code
 ASME B31.3, Process Piping



CA

Hazardous Area Classification: Class 1, Div 2 as defined per NEC, NFPA70
 Pressure Vessel Code Compliance: ASME -CRN
 Electrical Code Compliance: UL/Control panels and assemblies
 Certified manufacturing organization: ISO 9001:2015 -14001:2015 -45001:2018
 UL 508A, Standard for Industrial Control Panels
 UL 698A, Standard for Industrial Control Panels Relating to Hazardous (Classified) Locations
 NFPA 70 National Electric Code
 ASME B31.3, Process Piping



BR

Hazardous area classification: ATEX zone II
 Pressure Vessel Code Compliance: ASME-NR13
 Electrical Code Compliance: ISO60079 - NR10 Control panels and assemblies
 Certified manufacturing organization: ISO 9001:2015 -14001:2015 -45001:2018
 ASME B31.3, Process Piping



IN

Hazardous Area Classification: Atex zone II (PESO)
 Pressure Vessel Code Compliance: ASME
 Electrical Code Compliance: ISO60079 Control panels and assemblies
 Certified manufacturing organization: ISO 9001:2015 -14001:2015 -45001:2018
 ASME B31.3, Process Piping

Global Presence & Customer Service



Headquartered in Italy, Adicomp provides products and services all over the world through an extensive network of local offices and plants. With more than 25 years of experience and almost 10.000 skids in operation worldwide, Adicomp has grown to be a truly global international company, with a direct presence in over 50 countries and customers in more than 110. The primary driver for that worldwide footprint has been the need and willingness to operate close to our customers.

SPARE PARTS



Adicomp's spare parts ensure high quality and efficiency, offering tailored solutions for maintenance and fleet management. We provide global delivery and handle logistics for optimal transport solutions.

WORLDWIDE SERVICE PARTNERS



Adicomp offers global on-site support with skilled engineers, ensuring fast, quality service and international certifications. They provide assistance from design to installation and after-sales, ensuring reliability and customer satisfaction.

