

A large, light blue industrial compressor unit is the central focus, situated in a modern industrial facility with a high ceiling and visible ductwork. The unit features a control panel with a small screen and a large, open compartment revealing internal components. To the left, another similar unit is partially visible. The scene is dimly lit, with a blue color cast, and a white line graphic is overlaid on the left side.

How about optimizing  
your compressor's  
performance and  
achieving greater  
energy savings?

**WEG shows you how.**

---



# Did you know you can save up to 40% in energy consumption by using WEG Variable Speed Drives in your compressors?

With more than 25 years of expertise in compressor solutions, WEG offers a complete product line and advanced features designed to ensure operational reliability and precise control in industrial applications. WEG VSDs automatically adapt to compressor load variations, delivering higher efficiency and significant energy savings.

# Discover more reasons to choose WEG products

In addition to being one of the largest electric motor manufacturers in the world, WEG is also among the largest and most complete global end-to-end solution providers for the industry— with a comprehensive portfolio covering automation, power generation and distribution, digital systems, electrification, and much more.

## Everything your compressor needs:



Optimize performance



Achieve energy efficiency



Ensure reliability



Control speed and pressure with precision

## TURNKEY SOLUTIONS FOR

Automation and energy distribution

Sustainable energies

Electric mobility

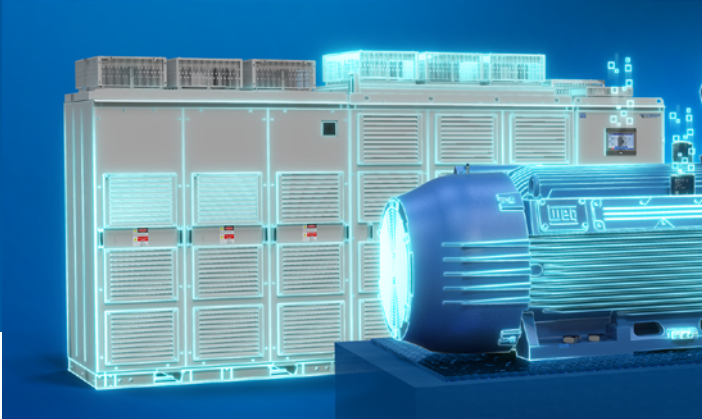
Digital systems

Industrial paints and varnishes

## In-house Research and Development

With in-house research, development and testing laboratories, WEG provides customized solutions with efficiency and reliability, meeting the specific needs of each customer.

Among many other needs, including compressor applications.



# The numbers that support our solutions

+ 60 years of experience  
in Brazil and  
around the world

Products  
present on 5  
continents

+ 47,000 employees  
spread across all  
continents

+ 4,700  
engineers

+ 1.1 billion drives and  
electromechanical  
components ever  
manufactured

12,100 hectares of  
reforestation, 55%  
of which is made  
up of renewable  
resources  
and 45% of  
untouched native  
forest

70,000  
motors produced  
a day

**weg**

## A trusted name all over the planet



66 manufacturing sites  
in 18 countries



Commercial operations and  
technical support in 42 countries



Distributors in more  
than 120 countries

## Wherever you are we are with you



Efficient and responsive technical  
support, available in over 113 countries  
around the world



Maximize the lifespan of your equipment  
by close and personalized local support  
when you need it

## A sustainable choice for your equipment

68.7% of revenue from  
sustainable products



Leading global rating agency  
for corporate Sustainability  
Management



Leading global classification  
agency for Decarbonization  
Management



SUSTAINALYTICS

Measures company  
ESG risks

Find out more details in our Sustainability Report

**weg**

# Global presence



66 MANUFACTURING SITES  
in 18 countries



+47,000  
Employees worldwide

Distributors/  
Agents in  
120  
countries

Sales to over  
135  
countries



COMMERCIAL OPERATIONS  
in 42 countries

- |           |          |           |             |              |                      |
|-----------|----------|-----------|-------------|--------------|----------------------|
| Algeria   | Chile    | France    | Kazakhstan  | Poland       | Sweden               |
| Argentina | China    | Germany   | Malaysia    | Portugal     | Switzerland          |
| Australia | Colombia | Ghana     | Mexico      | Russia       | Thailand             |
| Austria   | Denmark  | India     | Netherlands | Saudi Arabia | Türkiye              |
| Belgium   | Ecuador  | Indonesia | New Zealand | Singapore    | United Arab Emirates |
| Brazil    | Egypt    | Italy     | Norway      | South Africa | UK                   |
| Canada    | Finland  | Japan     | Peru        | Spain        | USA                  |

AFFILIATED COMPANIES

## WEG Group

**WEG** AUTRIAL

**cemp**  
WEG Group

**E-M**  
WEG Group

**AKH**  
WEG Group

**WEG** CESTARI  
REDUCTIONS

**Balteau**  
Grupo WEG

**marathon**  
WEG Group

**VOLTRON**  
WEG Group

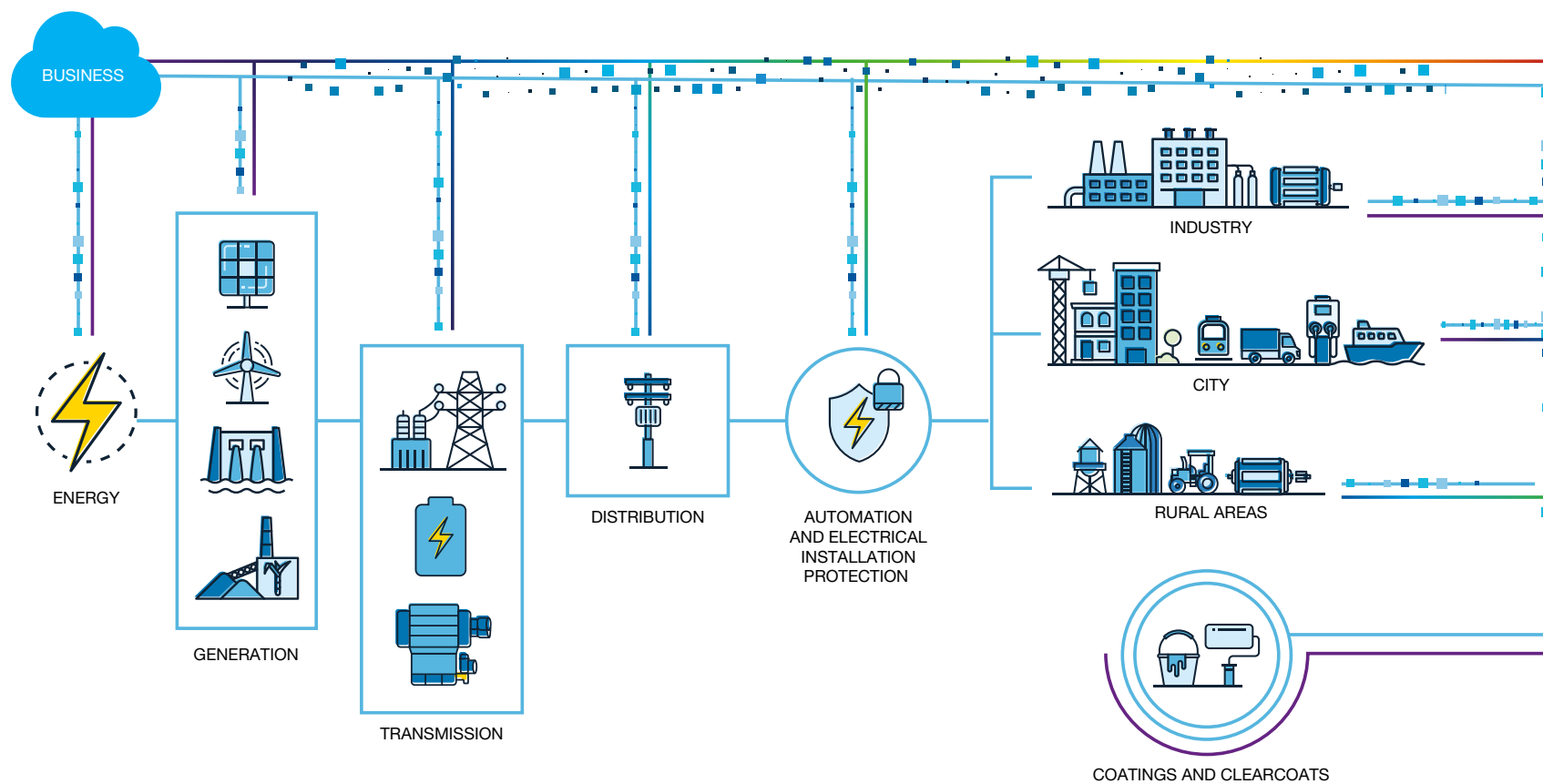
**WEG** PPI-Multitask  
Industry 4.0

**rotor**  
WEG Group

**Volt**  
WEG Group

## End-to-end solutions

The global solution in electrical machines, automation and digitalization for industry, infrastructure, electric mobility and energy systems.



# WEG solutions – advanced technology for air and gas compressors

MORE CONTROL, FEWER SHUTDOWNS



## High-efficiency solutions for your compressor

WEG motors combined with VSDs deliver maximum efficiency, reduced system wear, low noise levels, and precise pressure control.



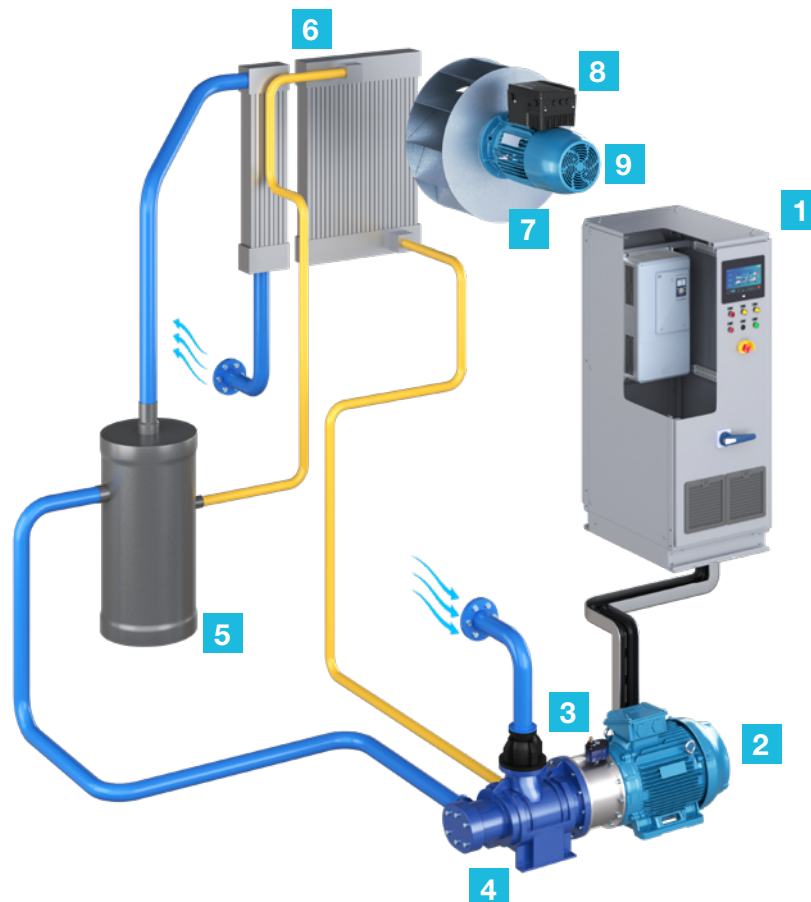
## Energy savings

VSDs automatically adjust motor speed according to air demand, ensuring significant energy savings.



## Advanced communication and connectivity

WEG VSDs seamlessly integrate with major industrial communication networks such as Modbus TCP, Ethernet/IP, Modbus-RTU, PROFINET, Bluetooth® and more.



## Continuous uptime

WEG's intelligent thermal management and advanced features deliver continuous, uninterrupted operation.



## Built-in SoftPLC functions

With integrated PLC features, WEG VSDs offer flexibility and cost reduction by eliminating the need for external PLCs, while enabling smart coordination between compressor and fan motors for enhanced energy efficiency.

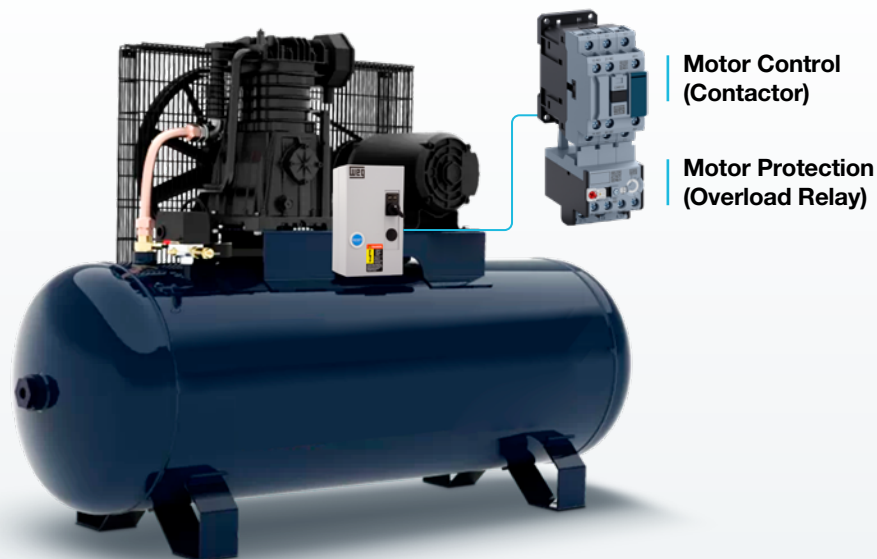
Screw-type compressors are designed for demanding industrial environments, delivering outstanding efficiency, durability, and consistent performance under continuous operation. Ideal for applications that require a reliable and steady air supply, they ensure maximum uptime and reduced maintenance needs.

As a trusted technology partner for compressor manufacturers, WEG offers a complete portfolio of high-efficiency motors, soft starters, and variable speed drives, engineered to optimize performance, enhance energy savings, and extend equipment lifetime.

1. Control cabinet with WEG VSD
2. WEG motor
3. WEGscan100
4. Screw compressor
5. Fluid separator tank
6. Compressed fluid and oil cooler system
7. Fan
8. WEG decentralized VSD
9. WEG Motor

# Wide range of solutions for every compressor type

PROTECTION, OPERATION, AND CONTROL



Piston-type compressors are renowned for their robustness and versatility, making them ideal for industrial applications that require high-pressure compressed fluid and intermittent operation. As a solutions provider for compressor manufacturers, we offer a comprehensive line of products, including high-efficiency motors, enclosed starters and variable speed drives, ensuring superior performance and reliability.

This combination maximizes energy efficiency, enhances durability, and simplifies maintenance, ensuring that compressors operate optimally to meet the specific demands of the application.

## Enclosed Starters

Cost-effective solution for compressor control and protection when motor speed variation is not required. Offering a robust design, available in plastic and metallic housing versions, up to IP66/UL Type 4X.

Three-phase and single-phase direct online starters up to 45 kW (60 HP).



## Variable Speed Drives

Efficient. Safe. Connected.

- Power from 0,18 to 2.000 kW
- Energy-saving and SoftPLC functions built-in
- Advanced control for all motor types
- Seamless connectivity: Modbus, EtherNet/IP, PROFINET, EtherCAT, MQTT, Bluetooth®
- Tropicalized and rugged for harsh environments



High-performance VSDs designed to maximize compressor efficiency and robustness.

# We know how to work under pressure

WEG leverages decades of experience to deliver innovative solutions across a wide range of compressor applications. We provide the market with a comprehensive portfolio of products and tailored solutions designed to maximize performance and efficiency in compression systems. From air and gas compressors to specialized industrial solutions, including screw and piston models, WEG ensures optimized performance, reliability, and enhanced sustainability.

## Space-saving design and precise temperature monitoring

WEG variable frequency drives feature a compact design that optimizes space and ensures easy integration, combined with precise temperature monitoring for greater reliability and protection of the compression system. Performance and efficiency in a single solution.



### And also:



Compact design



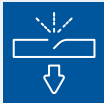
Variable speed solutions with smooth operation



High overall system efficiency



Reduces mechanical stress on the compressor



Minimized wear



Low noise levels



Electronic boards suitable for harsh environments



Easy installation



Long-lasting, low-maintenance design



Superior pressure control



# Complete solutions for the most demanding compressor application

IT'S ALL ABOUT FLEXIBILITY



## Self-standing VSD panels

Reliable and efficient solutions tailored to your needs.

WEG VSD panels are offered in standard and customized configurations, ensuring the most suitable solution for each application. Designed for both indoor and outdoor use, the panels feature IP42 or IP54 protection and can be supplied with either self-ventilated or forced-ventilation systems.

Providing complete solutions including drives, motors and PLCs, coordinated with all circuit protection, WEG is a global reference in the segment.

### High-performance variable speed drive

Optimized efficiency and full motor control.

### Customized command & signaling

Designed for your application.

### Extra control components

Whatever is needed, we make it fit.

For enhanced performance, optional **passive harmonic filters** and **output reactors** support safe and reliable operation, even over long cable distances.

# Variable speed technology for more efficient and sustainable operations.

## IDEAL FOR:

Stationary air  
compressors

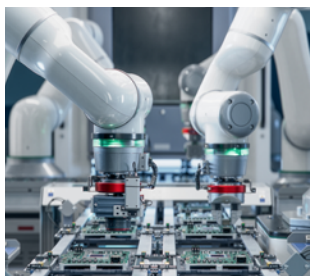
Cooling  
compressors

Vacuum  
compressors

Hermetic cooling  
compressors

Gas  
Compressors

## Segments



Manufacturing



HVAC



Pharmaceutical



Food & Beverage



Textile



Oil & Gas

## Why choose WEG?

For WEG, providing solutions that deliver reliability to our customers also means caring for the environment and addressing sustainability in a comprehensive way. With this in mind, we offer a wide portfolio of products that bring energy efficiency and advanced process technology to our clients. Our strong relationships with business partners, combined with our global manufacturing footprint, demonstrate our flexibility and ability to customize solutions for every type of application. We have a global presence with local operations to meet your needs in a unique way. In addition, we also provide strong after-sales support through a worldwide technical assistance network, ensuring the best service wherever you are.

As one of the world's leading automation companies, WEG approaches every stage of development with a focus on end-user satisfaction. Compressors are a key application where the company demonstrates proven expertise. Our Variable Speed Drives feature advanced capabilities designed to perfectly match any compressor, including the most demanding applications. One great example is the Intelligent Thermal Management, a unique function which monitors the internal temperature of the drive and adjusts the IGBT switching frequency to reduce losses, ensuring equipment availability under the most demanding temperature and overload conditions.



**Adalberto Jose Rossa**  
LV Drives R&D Manager, WEG

## CASE

# Reliable compressed air solutions with WEG Variable Speed Drives.



## Advanced VSD application for air compressors from 200 kW to 400 kW



The company trusted WEG to supply a complete package solution, including Variable Speed Drives (VSDs) and motors, for a compressed air installation operating with compressors ranging from 200 kW to 400 kW. The project required a customized solution to ensure reliability, efficiency, and adaptability to specific application demands.

One of the main challenges of this application was the unconventional mounting position. The VSDs were installed horizontally at a 90° angle with flange-type mounting, a configuration that required proven robustness and engineering know-how.

To further optimize performance, WEG's softPLC functionality — available as standard in WEG drives — was used to implement the control logic required to coordinate the speed of auxiliary fans according to the compressor speed. This eliminated the need for an external PLC, simplifying the system and reducing costs.

WEG's experience in the compressor segment and its commitment to delivering reliable, efficient, and flexible solutions played a decisive role in the success of this project. By adapting technology to the specific needs of the application, WEG provided a system that not only improved operational efficiency but also offered the flexibility to meet the customer's unique requirements.

This project highlights WEG's capability to go beyond standard solutions, ensuring that every customer receives a tailored approach aligned with their operational goals.





 +55 47 3276.4000

 automacao@weg.net

 Jaraguá do Sul - SC - Brasil

[www.weg.net](http://www.weg.net)