

WEG Africa

Ecoindustry - ANGOLA



Capabilities: products and Solutions

Driving efficiency and sustainability



Miguel Camalando
Regional Sales Manager- Southern Africa
Mobile +27 83 690 3453
MCamalando@weg.net

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Southern Africa Region

Angola



Botswana



Madagascar



Malawi



Mauritius



Mozambique



Namibia



Zimbabwe





**Werner
Ricardo Voigt**

★ 1930 + 2016



**Eggon
João da Silva**

★ 1929 + 2015



**Geraldo
Werninghaus**

★ 1932 + 1999

Eletromotores Jaraguá
was founded on
September 16, 1961

W

E

G



BM&FBOVESPA
A Nova Bolsa



**NOVO
MERCADO**
BOVESPA BRASIL

Índice de
Sustentabilidade
Empresarial

ISE

USD 29.7 billion *

* March 2023

Consolidated as a complete industrial
electric systems supplier.

WEG AROUND THE WORLD



North America
3 041

Europe and Middle East
1 251

Australasia
3 270

Africa
720

Brazil
20 261

South America
727

Worldwide
>39 000
Employees

MANUFACTURING PLANTS AND BRANCHES

Sales to over
135 countries

Distributors in
85 countries

Subsidiaries in
29 countries

34 Factories in
11 Countries



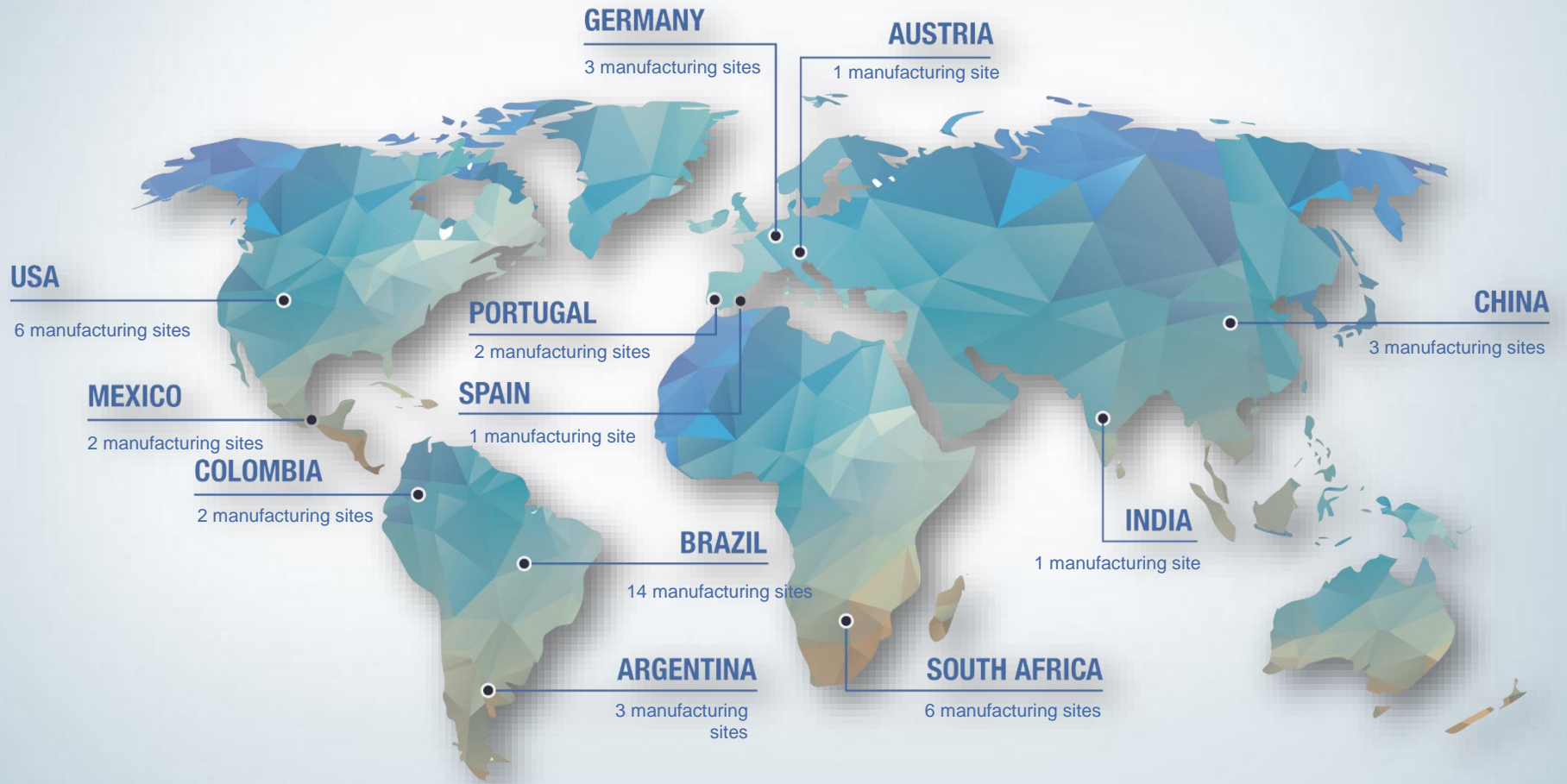
2 734
ENGINEERS AT WEG

1 520 in Brazil 1 214 Worldwide

Management	727
Technical / Manufacturing	1 115
Sales	747
Other areas	145



MANUFACTURING SITES



GLOBAL PRODUCT CERTIFICATION



 Certification Excellence	 SOUTH AFRICA	 EUROPEAN COMMUNITY
 ARGENTINA	 AUSTRALIA	 BRAZIL
 BRAZIL	 Agência Nacional do Petróleo	
 CANADA	 COLUMBIA	 CHINA
 CHINA	 CHINA	
 CB SCHEME INTERNATIONAL	 FRANCE	 FRANCE
 GERMANY	 GERMANY	 ITALY
 JAPAN	 MEXICO	 MEXICO
 MEXICO	 NIGERIA	 NIGERIA
 NORWAY	 RUSSIA	 RUSSIA
 RUSSIA	 USA	 USA
 SOUTH KOREA	 UNITED KINGDOM	

WEG Products
comply with dozens
of Certifications and
Regulatory Bodies
Worldwide



WEG IN SUB-SAHARAN AFRICA



720+
EMPLOYEES



Engineers 20+
Technicians 20+
Manufacturing 500+
Expatriates 7 (from WEG)



45 Servicing Over
Countries in
Sub-Saharan Africa

MANUFACTURING PLANTS
BRANCHES AND DISTRIBUTORS

8 Branches and
6 Manufacturing Facilities
across South Africa

Over 70 000
VSDs & Soft Starters
Installed in
Southern Africa



Largest **Electric Motor** and
Variable Speed Drive
Stockist and Supplier
in Africa

In excess of 42 000 Units



13 National and 30 Sub-Saharan
African Accredited Distributors



WEG's_Scope of Supply



SEGMENTS SERVICED



From a simple motor for application in the rural area to solutions that meet several segments of the industry



WATER SECTOR



- Clear Water.
- Waste Water.
- Desal plants

1 - Intake/Lifting Station

3 - Primary Treatment

5 - Sludge Treatment

2 - Pretreatment

4 - Secondary Treatment

Tertiary Treatment

6 - Filtering

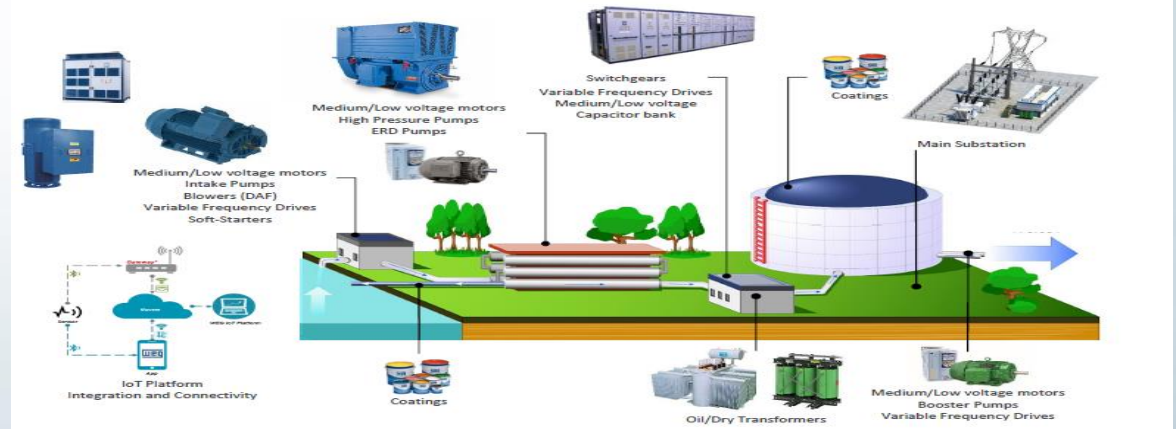
7 - Disinfection



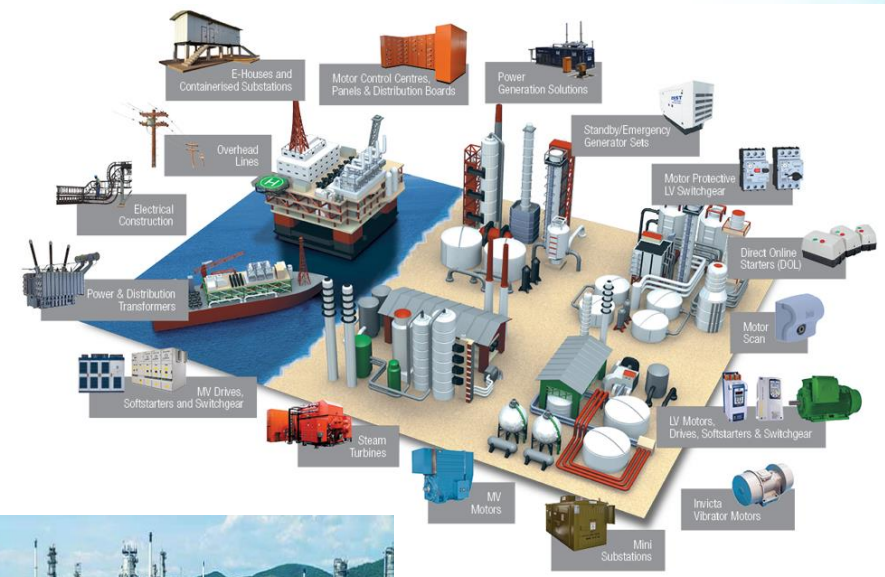
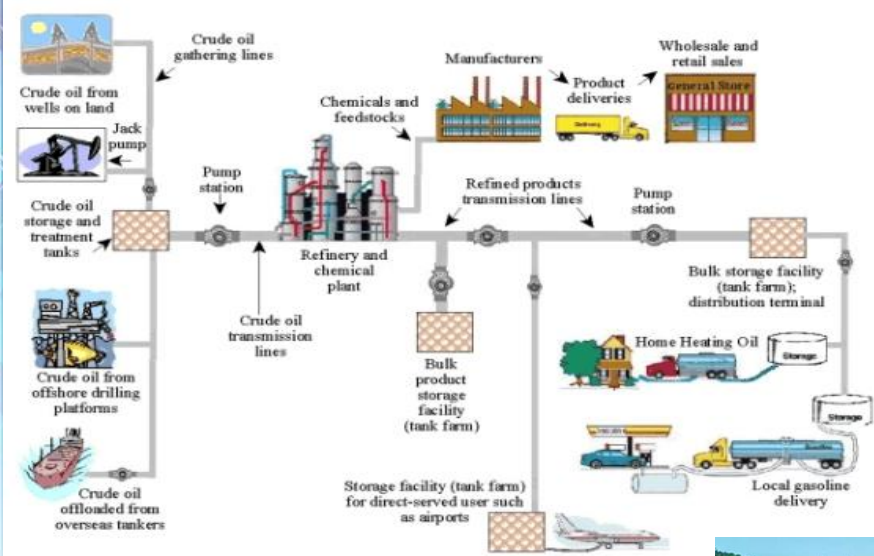
WEG Products present in a Desalination Plant Typical WEG products and systems Solution



- <https://youtu.be/VHa1P2OIVRQ?t=57>
- <https://youtu.be/VHa1P2OIVRQ>
- https://youtu.be/_FoRV8ruNHg



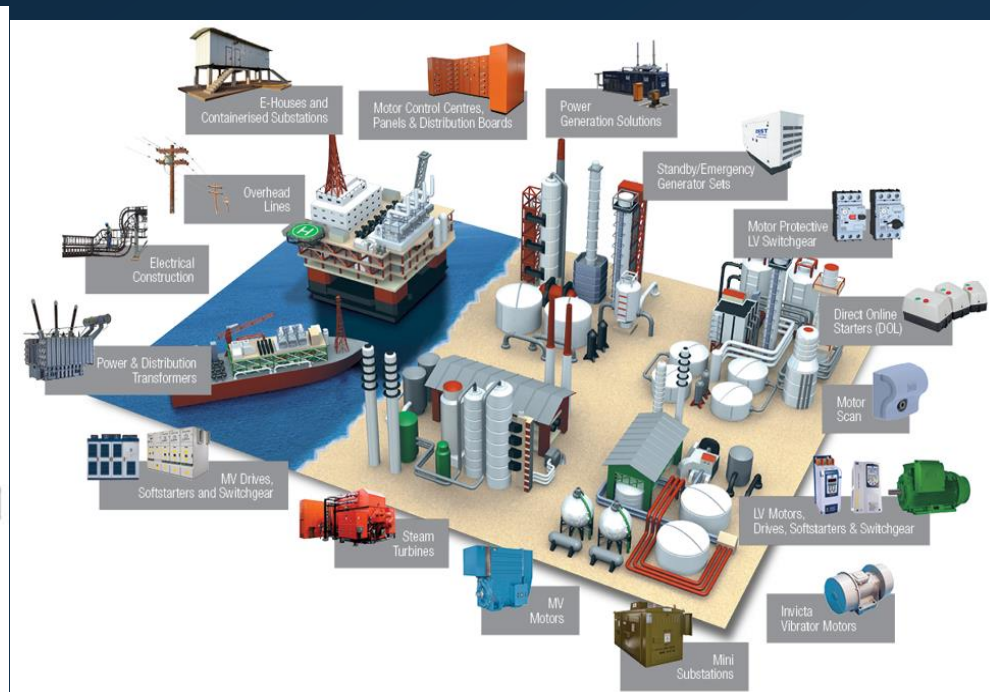
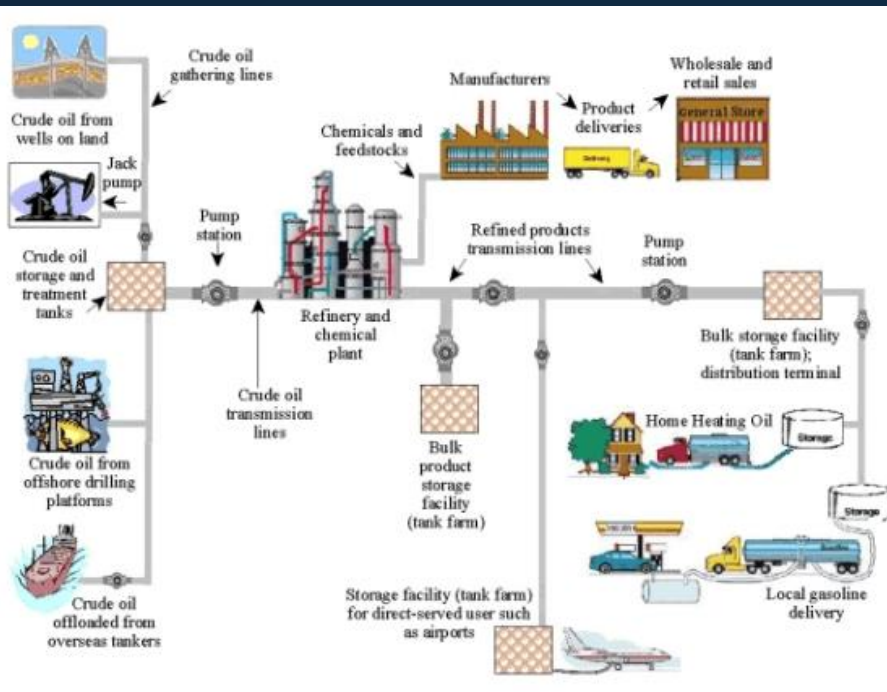
Industries Oil & Gas



OIL AND GAS SOLUTIONS



Electrical Solutions for O&G Plants



[WEG Solutions for the offshore Industry.mp4](#)

WE ARE ONE, WE ARE WEG

Public Sector solutions



Electrical Solutions for Public Sector



WE ARE ONE, WE ARE WEG

[Global Water Segment \(youtube.com\)](https://www.youtube.com/watch?v=...)

Mining Sector



Mining Sector:

- ✓ Servicing the mining sector for more than 40 years
- ✓ An in-depth understanding of the harsh conditions in the sector
- ✓ From single product to individual customized solutions
- ✓ Products are engineered to facilitate a safe and reliable mine and plant

Industrial Sector



Power Systems Solutions

Electrical Infrastructure Solutions



- Outdoor & Indoor Substation Design & Construction
- Outdoor & Indoor Substation Expansions
- Outdoor & Indoor Substation Refurbishments
- Overhead Lines



Power Generation Solutions



- Diesel Power Generation
- Gas Power Generation
- Steam Power Generation
- Renewable Energy Generation
- Hydro Power Generation



Power Generation Solutions



RENEWABLES – SOLAR ENERGY

- Products (inverters, batteries, PV panels)
- Electrical Balance of Plant
 - Transformers
 - MV Switchgear
 - String boxes / Combiner boxes
 - Grid-tied HV Substation
 - Electrical Installation



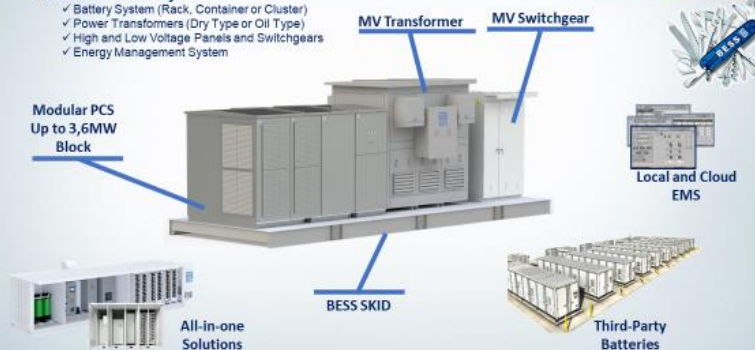
Battery Energy Storage System

One-stop shop for BESS



Power Converter Systems

- ✓ Battery System (Rack, Container or Cluster)
- ✓ Power Transformers (Dry Type or Oil Type)
- ✓ High and Low Voltage Panels and Switchgears
- ✓ Energy Management System



DRIVES, SOFTSTARTERS AND SWITCHGEAR

MOTOR STARTING AND PROTECTION



- Control Relays
- Contactors
- Contactors for Capacitor Switching
- Overload Relays
- Enclosed Starters
- Motor Protective Circuit Breakers



ELECTRICAL CIRCUIT PROTECTION

- Smart Relay
- Electronic Relays
- Air Circuit Breaker
- Molded Case Circuit Breakers
- Miniature Circuit Breakers
- Residual Current Devices
- Surge Protectors
- High-Speed Fuses
- Fuse-Switch Disconnectors
- Compact Switch Disconnectors



Fixed / Semi Withdrawable MCCs



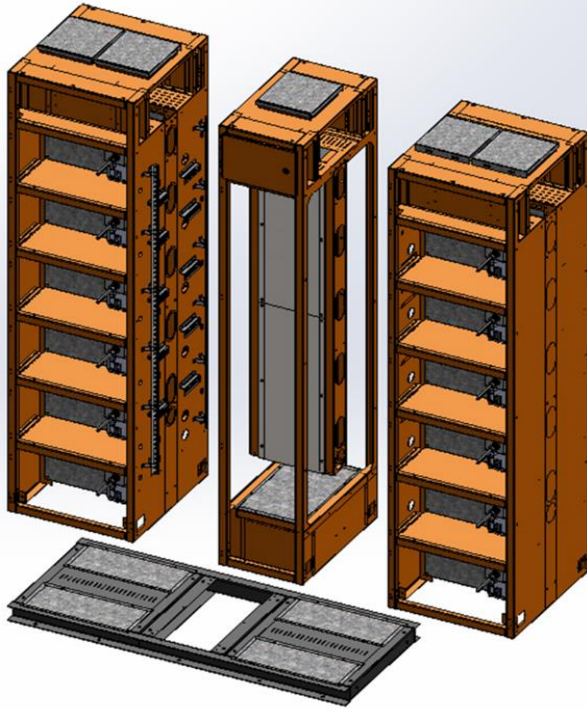
SWITCHGEAR



DRIVES & AUTOMATION



IEC / SANS TYPE TESTS - LOW VOLTAGE ELECTRICAL SYSTEMS



WEG LV Range of Fixed Pattern Panels Comply to the Latest of IEC 61439 requirements up to 50kA @ 525V+10%

WEG ROTATING EQUIPMENT

ROTATING EQUIPMENT

- Electric Motors
- Geared Motors
- Generators



WEG ROTATING EQUIPMENT

- MOTORS
- GEARED MOTORS
- GENERATORS



WEG AUTOMATION EQUIPMENT

- VARIABLE SPEED DRIVES
- SOFT STARTERS
- SWITCHGEAR



Motor Efficiency Classes (IEC)



IEC 60034-30-1:2014

Efficiency classes for LV motors 2 - 8 Pole and up to 1 000kW

IE1	IE2	IE3	IE4	IE5
Standard Efficiency	High Efficiency	Premium Efficiency	Super Premium Efficiency	Ultra Premium Efficiency



Typical 110kW, 4P Motor, Efficiencies above
All classes available from WEG!

GLOBAL PRODUCT CERTIFICATION



WEG Products
comply with dozens
of Certifications and
Regulatory Bodies
Worldwide



MOTOR SCOPE

MOTOR SCOPE



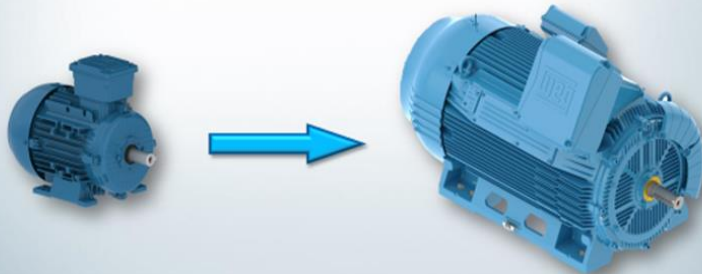
0.18kW to 1000kW

2 Pole to 12 pole

220V to 11000V

Single Phase & Three phase

Asynchronous & Synchronous



Motors: Main Product Range



General Purpose Applications



W11 Aluminium



W22 - IE1 & IE3



W21 Single Phase



W20



W40 (ODP)



W50



HGF

Large Motor Scope



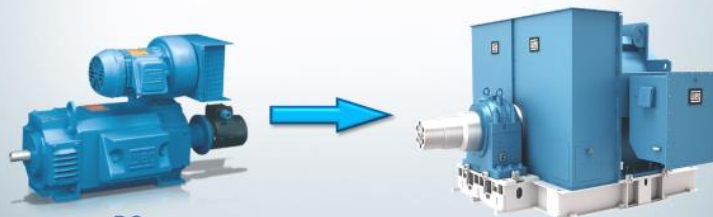
110kW to 200,000kW

2 Pole to 40 Pole

110V to 15,000V

Alternating and Direct Current

Asynchronous and Synchronous



DC

WEG ENERGY



HGF 500 - 630



DC



M Line



W50



S Line



Synchronous Alternators



Water Jacket



ST20 Turbo Generators



ST40 Turbo Generators



Hydro Generators

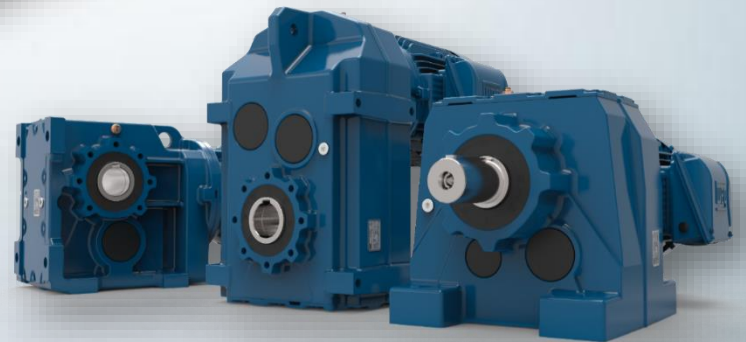
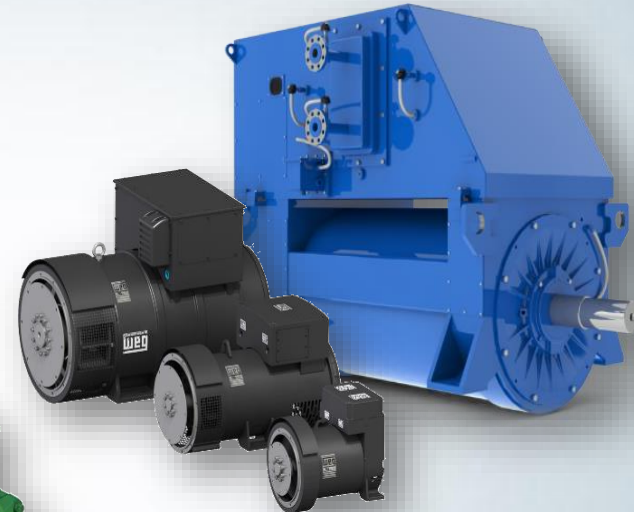
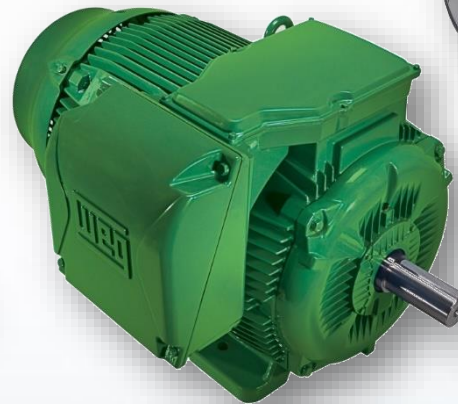


Wind Turbine

ROTATING EQUIPMENT



- Electric Motors
- Geared Motors
- Generators



MOTOR SCOPE



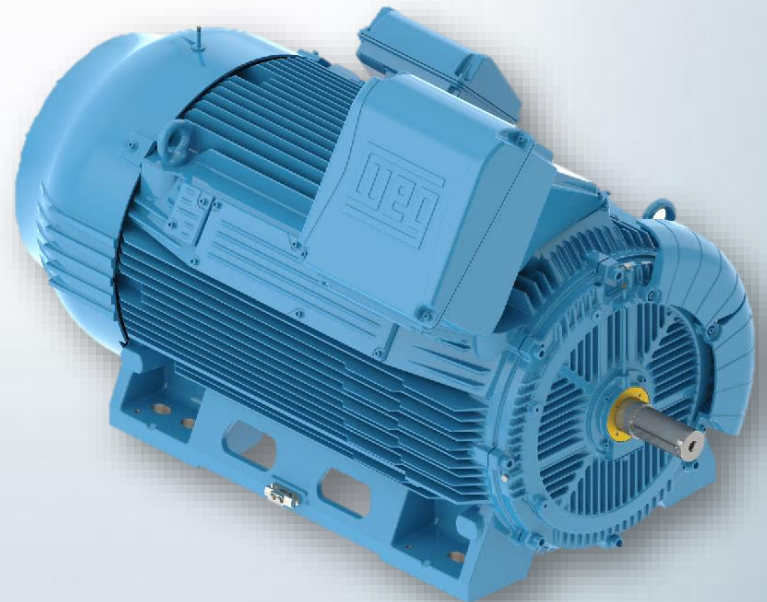
0.18kW to 1000kW

2 Pole to 12 pole

220V to 11000V

Single Phase & Three phase

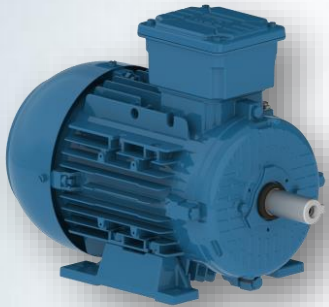
Asynchronous & Synchronous



Motors: Main Product Range



General Purpose Applications



W11 Aluminium



W22 – IE1 & IE3



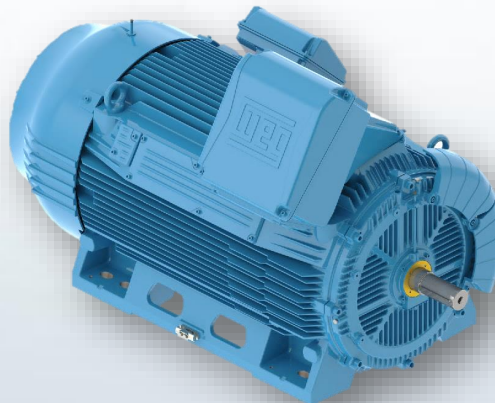
W21 Single Phase



W20



W40 (ODP)



W50



HGF

Motor Efficiency Classes (IEC)



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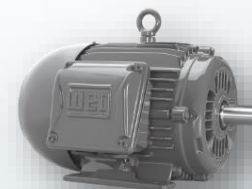
72.1%



79.8%



82.5%



85.6%



88.2%

Typical 110kW, 4P Motor, Efficiencies above

All classes available from WEG!

WEG TRANSFORMERS AFRICA MANUFACTURING SCOPE



South African Manufacturing Operations

- Custom Designed Oil Filled Transformers
 - Distribution 500 kVA to 3 150 kVA
 - Power 3 150 kVA to 45 MVA up to 132 kV
 - Windings: Copper or Aluminium
- MINI-SUBSTATIONS
 - Enclosure Type A, B and C
 - Up to and including 1 600 kVA 33 kV
 - (specials up to 33 kV for the African market)

- Power Trafos 45 MVA to 500 MVA up to 550 kV
- ## GLOBAL MANUFACTURING OPERATIONS

- Custom Designed Oil Filled Transformers



ELECTRICAL RETICULATION AND CONSTRUCTION



ELECTRICAL

- MV & LV cable reticulation systems
- MCCs, cable and racking layouts
- Building services including lighting, power distribution, earthing and lightning protection
- Power Factor Correction
- Energy management systems
- PV installations, DC to MV

CONTROL AND INSTRUMENTATION

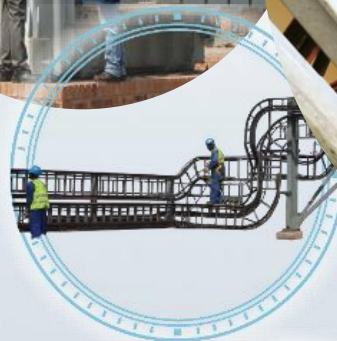
- Process instrumentation
- Plant automation and control with PLC/SCADA systems
- Custom control stations, control desks and PLC panels

OVERHEAD LINES 11kV – 275kV

- Wood, steel and concrete poles
- Lattice Structures
- Survey and profiling
- Foundation designs
- Structure designs/selection
- Complete installation

SUBSTATIONS 11kV – 275kV

- Designing
- Civil works
- Steel and electrical Works
- Automation
- Commissioning and hand over
- Mobile substations





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THANK YOU
Questions?

