



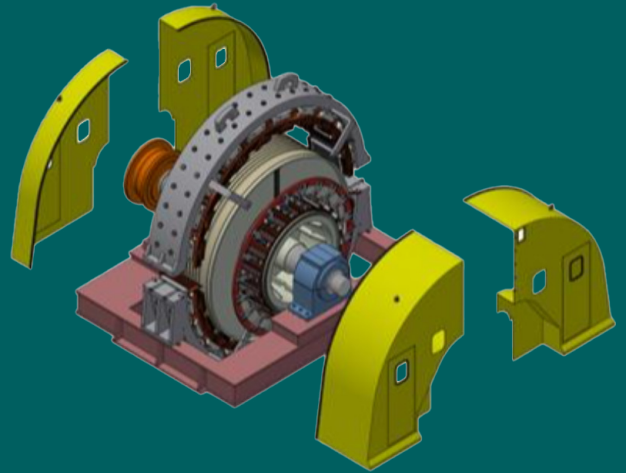
DC MOTORS

DC motor technology has been used for more than a century all over the world. GE Vernova Power Conversion has supplied hundreds of large DC machines that have been operating with great performance for decades. However, as these units age, their reliability and performance might deteriorate.

As DC motor experts, Power Conversion is best suited to overhaul your asset and renew its lifespan. Over the last few years, improvements have been developed to allow an increase in robustness and reliability for DC motors, without impacting DC motor operation or maintenance practices. These upgrades have been widely and successfully applied throughout the industry.

UPGRADE OR REPLACE YOUR DC MOTOR

Upgrading or replacing the main components of your motor, or the complete unit, can provide significant benefits to your associated process, increasing long term reliability and availability for your assets and minimizing production downtime. We can engineer these replacements and upgrades to minimize impact to the existing infrastructure.



HOW DOES THE REPLACEMENT PROGRAM WORKS

Power Conversion has established a centre of excellence for DC motors in Campinas (Brazil) where it is possible to manufacture motors for new designs, replace existing Power Conversion's legacy (GE, Alstom, GEC Alstom) product line and other manufacturers motors all over the world, and supply spares and major components for motors in operation, while maintaining interchangeability.

This service will be provided to you through our regional rotating machines teams, seamlessly and close to your operation sites. See below a list of typical upgrades applied:

Assembly	Typical Options	Key Benefits
Armature	Banded Stack with Modern insulation using class H materials	Better level of insulation and improved commutation
Main Poles	Robust Insulation with V.P.I impregnation	Keep satisfactory insulation levels avoiding drops due to environment and operation
Interpoles	Class H Insulation materials	Extended life
Frame	Retain the footprints	Avoid unnecessary retrofit costs
Bearing	Sleeve	Increase reliability

CAMPINAS SERVICE STRUCTURE

Manufacturing and repair facility in campinas

- Dedicated structure for DC motors
- Rotor & stator re-winding
- Overhaul & spare parts
- Evaluation of uprating opportunities
- Customization and re-powering
- Electrical and mechanical tests

Global field service capabilities

- Dispatchable from Campinas or other global Power Conversion site or partner, based on need
- Commissioning, installation & general assembly
- Electrical tests & re-winding
- Partial repairs for operation recovery
- Cleaning and overhaul
- Accessories & vibration analysis
- Special machining on site

After Sales Service Contracts

GE Vernova offers a wide range of after-sales service contracts. This is backed by a world-wide network of experts. Some of the key benefits might be:

- Single point of contact when opted for, as part of contract
- 24X7 support, onsite or remote
- Rapid mobilization of engineers and routine maintenance visits
- Spares and obsolescence management



Main Application:

- Mills (rougher, finishing and coiler)
- Industry
- Mining

For the product line selection please inform to Power Conversion the desire rated power, top/base speed, voltage and application.

Power Conversion Global Presence

