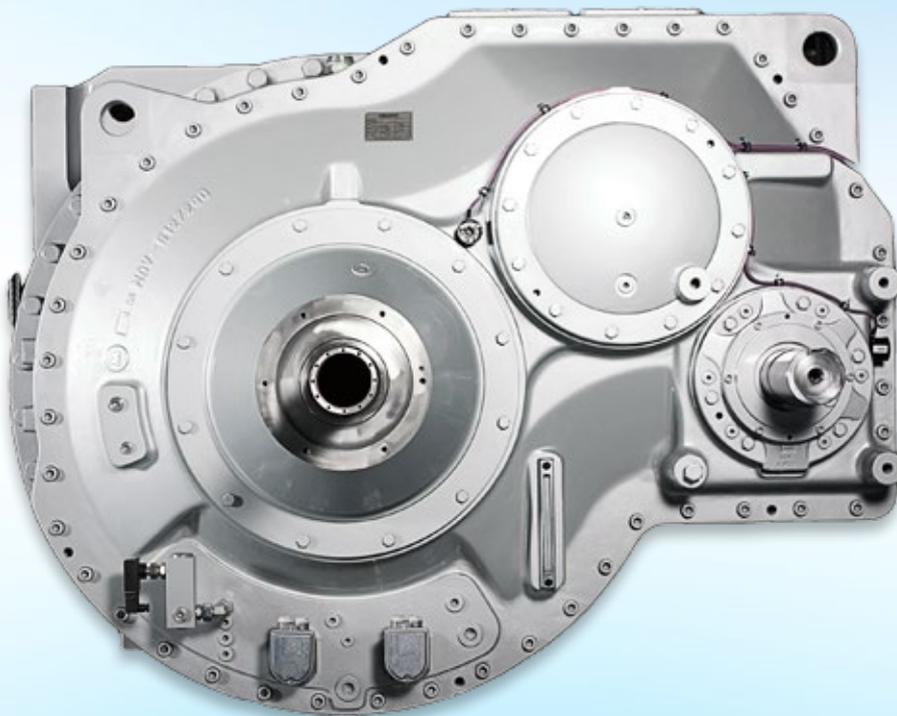


SINCE 2003 OVER 1,000 DELIVERED GEAR UNITS WITH EXCELLENT TRACK RECORD

PLH-1400.2 GEARBOX

for V80/V90/V100 & G8X/G90
Wind Turbines



Moventas PLH-1400.2 gearbox is a result of years of evolution featuring:

- Wear-free case carburized ring wheel
- Optimized casted components
- Integrated 2-row planet wheel bearings
- Helical gears
- Optimized gearbox parameters

All this ensures that you will purchase a trouble-free gear unit that guarantees a high level of annual energy production.

Always full load tested in test rigs!

Moventas Wind Turbine Gear | PLH-1400.2 V80/V90/V100/G8X/G90



FACTORY ACCESSORIES

PLH-1400.2 gear unit is designed to meet even the tightest demands and it can be delivered as an easy “plug&play” system. The scope of delivery can be tailored with factory-installed accessories: Brake system, Shrink disc, CMaS and operational spare parts such as an offline filter.

The Moventas PLH-1400.2 gear unit can be equipped with Moventas’ Condition Management System, CMaS. The system has been designed as a smart, compact and value-adding package that



1. monitors a range of performance parameters
2. stores and analyzes this data
3. reports it over the Internet to a remote, secure server using the standard TCP/IP protocol (Ethernet and/or GPRS)

MOVENTAS WIND TURBINE GEAR TECHNOLOGY

After careful studies about the behavior of the gearbox under varying operating conditions, we have combined the best of our technical solutions to make our gearboxes reliable. The testing has been done under both static and dynamic loading conditions as well as under extreme loads. Tooth contact in all loading conditions has been thoroughly analyzed and the dynamic behavior of the meshes predicted – these factors are of great importance in achieving the rate of dependability we are proud to maintain.

Moventas’ field measurements and prototype tests are always executed in modern RTD test facilities. The in-depth knowledge about the behavior of our wind turbine gears is achieved by collaborating with our key component suppliers: for example, the dimensioning of the bearings is made in close co-operation with the bearing supplier. The technical calculations of our gear units are always based on conservative calculations and safety factors.

Turbine	Generator (Hz)	Ratio	Input speed n1 (1/min)	Output speed n2 (1/min)	Operation power P (kW)	Weight (kg)	Oil	Oil capacity (l)
V80	60	111,160	16,9	1880	1980	15 800	VG320	285
V80	50	92,448	18,1	1680	2200	15 800	VG320	285
V80	50	100,618	16,7	1680	2200	15 800	VG320	285
V90	50	113,028	14,9	1680	2200	15 800	VG320	285
V100	60	92,448	14,5	1340	2200	15 800	VG320	285
V90/V100	50	104,087	14,85	1546	2200	15 800	VG320	285
G8X	50	100,618	16,7	1680	2200	15 800	VG320	285
G90	50	100,618	16,7	1680	2200	15 800	VG320	285