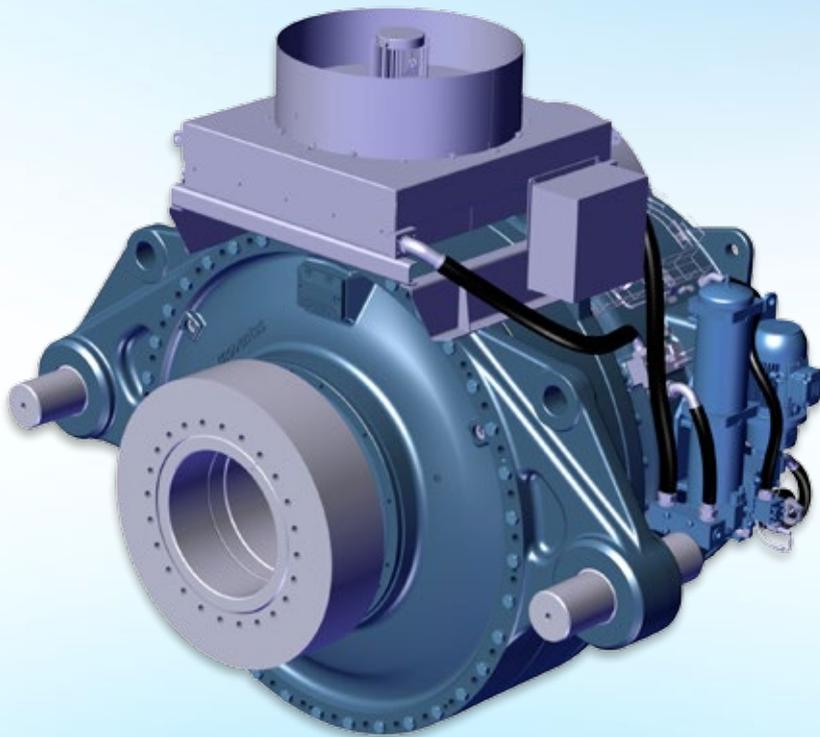


NOW ALSO AVAILABLE FOR THE MM82!

PLH-1900.1 GEARBOX

for Senvion MM82 & MM92 wind turbines



Moventas PLH-1900.1 is a result of years of evolution featuring

- wear-free case carburized ring gear
- optimized casted components
- integrated 2-row planet gear bearings, and optimized gearbox parameters ensuring trouble-free concept that guarantees the high level of annual energy production.

Moventas gearbox always undergoes a full load test according to turbine manufacturer specifications. PLH 1900.1 is certified for all variants of MM82 & MM92 wind turbines.

Moventas Wind Turbine Gear | PLH-1900.1 MM82 & MM92



PLH 1900.1 general advantages to secure the designed life cycle

- Integrated 2-row planet bearings
- Latest and highest available material specification for gears and pinions
- State of the art manufacturing, testing and quality processes used for 100% of manufactured components and gear units
- Latest available bearing technology on rolling bearings

PLH 1900.1 available now also for **MM82**

- TÜV Rheinland certification
- Improved safety factors
- Higher input torque rating used in design parameters leading to improved safety factors
- Improved WEC resistant bearing concepts
- Excellent track record from MM92 series

Turbine	Generator (Hz)	Ratio	Input speed n1 (1/min)	Output speed n2 (1/min)	Operation power P (kW)	Weight (kg)	Oil	Oil capacity (l)
MM82	50	104,55	17,1	1787,8	2165	23 000	WG 320	440
MM92	50	119,06	15	1785,1	2165	23 000	WG 320	440
MM92	60	95,63	15	1434,6	2165	23 000	WG 320	440

MOVENTAS WIND TURBINE GEAR TECHNOLOGY

The high level of reliability in Moventas gear units are achieved through careful studies of varying operating conditions. Understanding the gearbox behaviour under both static and dynamic loading conditions enable reliable technical solutions. Tooth contact in all loading conditions are thoroughly analysed and the dynamic behaviour of the meshes predicted - these factors are of great importance in achieving reliability, as well as is understanding extreme loads.

The technical calculations of gear units are based on conservative calculations and safety factors. The dimensioning of the bearings are made in close cooperation with the bearing supplier. Thus in-depth knowledge of the behaviour of wind turbine gears is achieved by co-operation with key component suppliers, Moventas field measurements and prototype tests in modern RTD test facilities.

