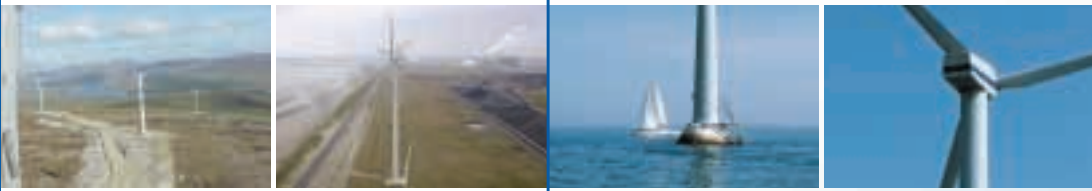


# powerful solutions for the wind industry





In a fast-growing industry as wind energy, it has been Hansen's ability to build on the years of experience in its core activities, i.e. manufacturing and assembly of gears and gear housings, and translate this experience into innovative solutions that have secured the company a position as a leading global supplier of wind turbine drive systems. Not surprisingly, Hansen wind turbine gear units enjoy the best reliability track record in the industry, for more than 20 years.

## COMPLETE AND POWERFUL SOLUTIONS FOR THE WIND INDUSTRY

*For centuries, people have used the power of wind for sailing ships, milling grain and pumping water. More recently, wind turbine technology has enabled us to harness wind to generate electricity. Today, wind power is the world's fastest growing energy source. The wind industry continues to expand and develops larger, highly reliable and efficient wind turbines.*

*Since the late 1970's, Hansen is a preferred supplier to leading wind turbine manufacturers. Worldwide, Hansen gear products enjoy a reputation of high quality and meet the discerning industrial requirements on low noise behaviour, durability and reliability. Today, close to 10.000 wind turbines up to 3 megawatt are equipped with a Hansen gear unit.*

# w i n d

### ■ A MAJOR PLAYER IN THE WIND INDUSTRY TODAY

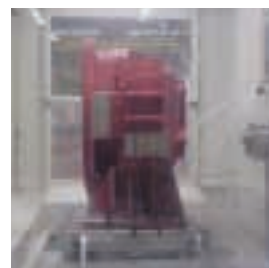
Hansen's customer base accounts for 50% of the global wind turbine sales today. Close long-term co-operation with selected major turbine manufacturers has resulted in custom-made drive solutions to ideally fit each turbine application.

90 Hansen engineers work closely together with leading universities and prominent research centres. A specialised engineering team for wind turbine drives has been involved in several prestigious projects for developing new prototypes for innovative products.

### ■ LONG-TERM COMMITMENT TO THE INDUSTRY

Hansen is continuously investing to be the best in its core activities of heat treatment, gear grinding and housing machining. These critical activities are all performed in-house, ensuring full control to deliver maximum quality.

To keep pace with today's demand, Hansen is investing heavily in new manufacturing facilities with state-of-the-art, specialised machinery for production, assembly and testing of large wind turbine drives.





## ■ FOCUSED ON THE NEEDS OF WIND TURBINE OWNERS

Minimum lifetime cost, combined with high availability and minimum down-time, is key to a short payback of investments in wind power.

Hansen wind turbine gear units are optimised for low weight and compact dimensions, without compromising performance, resulting in cost-effective designs.

Through its extensive design experience and by performing all critical manufacturing activities in-house, Hansen has achieved a superior reliability track record for more than 20 years now.



## WHY HANSEN?

- *All Hansen wind turbine gear units are designed in close co-operation with the customer, using modern 3D CAD technology to ensure efficient communication.*
- *Carburised and ground gearing of gears excels in strength, torque capacity, surface durability and low noise performance.*
- *Bearings and shafts are dimensioned to go the distance, ensuring required bearing life under specified loads.*
- *Continuous oil circulation through the bearings ensures a long, trouble-free working life for the gear unit.*
- *The internal construction of the gear unit housing allows for simple and complete oil drainage.*
- *Inspection and maintenance are made easy by a large inspection cover and the option to (partly) disassemble the gear unit inside the nacelle wherever feasible.*
- *Critical spare parts are available on short notice, allowing short repair times.*
- *Hansen's global service capability offering fast and efficient local support for inspection and repair in major wind energy markets.*

Hansen Transmissions commits to be a pioneering innovator. The production of high performance gear units stems from an interactive partnership with our clients, the end users and the actively engaged manpower of our global enterprise. Embracing design, manufacturing and customer services, Hansen Transmissions has grown into a world leader in its field. Today, we set standards for both product and working environment, inciting a knowing environment to seize all new and inspiring technologies.



Hansen Transmissions International nv  
Leonardo da Vincilaan 1  
2650 Edegem - Antwerp  
Belgium

[www.hansentransmissions.com](http://www.hansentransmissions.com)  
[info@hansentransmissions.com](mailto:info@hansentransmissions.com)

tel. +32 (0)3 450 12 11  
fax +32 (0)3 450 12 20

See our worldwide  
sales & service network at  
[www.hansentransmissions.com](http://www.hansentransmissions.com)

