



**PART**  
SOLUTIONS

**POWERWIND GMBH**

**CASE STUDY**

**PowerWind**

# COST REDUCTION OF SUPPLIER PARTS WITH STRATEGIC PARTS MANAGEMENT PARTSOLUTIONS

For the production of wind energy converters the PowerWind GmbH relies on the Strategic Parts Management PARTSolutions by CADENAS.

## The right step into the future

In times of climatic changes, renewable energies will increasingly play an important role. The wind energy sector which is continuously growing, is profiting from this boom as well. More and more wind energy converters are built in Europe to use wind energy for producing eco-friendly electricity.



To produce wind energy converters, about 300 different standard- and supplier parts are necessary for each system platform. If you use strategically preferred supplier parts for plant building, the production costs for wind energy converters can be cut down considerably. To meet future requirements and effectively reduce production costs, the PowerWind GmbH has been using the Strategic Parts Management PARTSolutions by CADENAS since 2009. After the project was started at PowerWind, the software solution to manage, find, and reduce parts was ready for use within one week.

The PowerWind GmbH which was founded in 2007 develops and produces wind energy converters with rated outputs of 850 kW to 2500 kW and additionally offers services specifically related to these products. The head office is situated in Hamburg, while the ultramodern manufacturing facility is located in Bremerhaven. Up to date, PowerWind has already sold more than 160 wind turbines in Germany, Italy, Poland, Romania, Bulgaria, Azerbaijan, Great Britain and the US.

## PowerWind's initial situation

PowerWind's attention was drawn to CADENAS' PARTSolutions by a partner they have in common, the NET AG. It provides PowerWind with the CAD system Creo Elements/Pro. Before using CADENAS' PARTSolutions the engineering department at PowerWind was looking for matching parts and CAD models of wind energy converters online. After that, the parts were saved in an internal pool. In consequence many parts and components were filed twice and the number of duplicate copies continuously grew in the PDM system PRO.FILE.

## Integration into the existing system

The Strategic Parts Management CADENAS PARTSolutions has two interfaces to the PDM system PRO.FILE and the CAD system Creo Elements/Pro which are in use at PowerWind. PARTSolutions seamlessly integrates into the process chain of the PowerWind GmbH. Several departments of PowerWind profit from the software solution. For instance the engineering-, purchase-, and standardization department.



## Benefits of CADENAS' PARTsolutions for PowerWind

- Due to the interfaces to other administrative systems PARTsolutions grants all employees at PowerWind access to complete and current component information. Duplicate copies are effectively avoided, since CAD models are no longer downloaded twice. "With PARTsolutions we were able to reduce the number of standard parts, necessary for building two system platforms, from 661 to 287 parts", says Thomas Korzeniewski, Head of Research & Development at PowerWind GmbH. This reduction of 57% was achieved by a large number of reduction criteria and by deleting duplicate copies.
- The Strategic Parts Management System PARTsolutions offers PowerWind simple access to CADENAS' 500 manufacturer catalogs with millions of 3D CAD models available in the native Creo Elements/Pro format. The manufacturer of wind energy converters has access to numerous company standards, assembly units and standard and supplier parts. This accelerates the designing process significantly, since the effort to search for the right part is reduced drastically.
- CADENAS provides PowerWind with PARTsolutions a unique system to label strategically preferred manufacturer catalogs. The labeling clearly highlights which component catalogs should be preferred for a certain project or product, since special conditions had been arranged with the respective manufacturers. At the same time the labeling helps to reduce process costs by up to 10% which could be the time-consuming creation of a new components or selection of suppliers in the purchase and engineering department.
- CADENAS' software solution allows the integration of Creo Elements/Pro repetitive parts which were specifically designed, into PARTsolutions. All departments of PowerWind which use PARTsolutions can now automatically find these parts.

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# 57%

*of the necessary standard parts were saved when building two system platforms.*

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# 5-10%

*reduction of process costs in the engineering and purchase department*

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## OUTLOOK: IMPLEMENTATION OF THE GEOMETRIC SIMILARITY SEARCH

PowerWind expects that in the next few years increasingly more suppliers of part catalogs will make their 3D CAD models available to the library of CADENAS and thus enhance the selection of preferred manufacturers.

Moreover the implementation of an additional PARTsolutions feature is planned: the Geometric Similarity Search. It enables PowerWinds' engineering to look for geometrically similar CAD components of different manufacturers and makes it even easier to find the ideal component.

With the Strategic Parts Management PARTsolutions, PowerWind is well-prepared for future challenges. Due to an efficient development and production, the company is able to realize the full potential of the continuously growing renewable energy market. Thus they are making an important contribution to realize a good and sustainable living in Europe and around the globe.

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### PowerWind



#### PowerWind GmbH

PowerWind GmbH is a German OEM of wind turbines (850 kW, 900 kW and 2500 kW) and service provider, focusing on product-specific services. The dynamic company which is continuously growing, was founded in 2007 and is financed by the international investor Warburg Pincus.

PowerWind GmbH has two locations in Germany, one in Hamburg, one in Bremerhaven. The manufacturing facility in Bremerhaven offers 5,000 m<sup>2</sup> of space and its two production lines are among the most modern in the world.

#### CADENAS GmbH

CADENAS is a leading software developer in the areas of Strategic Parts Management and parts reduction (PARTsolutions), as well as electronic product catalogs (eCATALOGsolutions).

With its customized software solutions, the company acts as a link between the component manufacturers with their products and the purchasers. With its 300 employees at 14 international subsidiaries, the name CADENAS (Hispanic: process chains) has been standing for success, creativity, support and process optimization for 19 years.

For further information about the company, please visit our website: [www.cadenas.de](http://www.cadenas.de).