

# WIND POWER

Industry

Wind Power is a green technology that will potentially change the World's future energy requirements.

TaeguTec is working at the forefront of this industry supporting wind turbine manufacturers to make a greener future for us all.

# Wind Power INDUSTRY



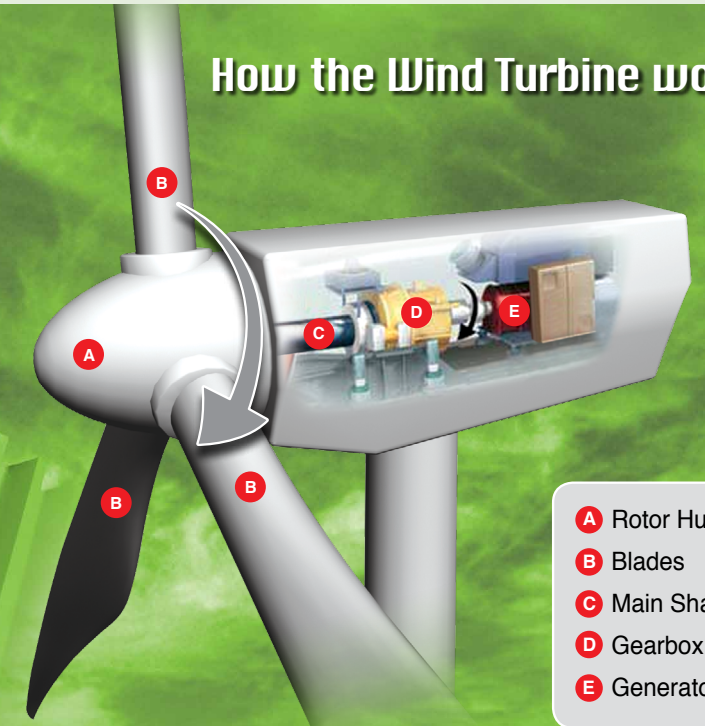
## Green Metalworking Solutions for the Wind Power Industry

TaeguTec contributes to the supply of green energy through its vast experience and specialized technology that enables wind turbine producers to efficiently and productively manufacture machined components for wind turbines.

Providing optimized machining solutions and cutting tools to the world's leading turbine manufacturers, TaeguTec is involved in producing the main parts of wind power generation and equipment. TaeguTec delivers remarkable cutting tools and production solutions that are utilized in the manufacture of Tower Flanges, Main Shafts, Bearing Housings and Hubs as well as all the peripheral components.

TaeguTec provides total tooling solutions for heavy turning, milling and drilling to improve productivity and cut the cost of production with its machining specialists that will fulfil your machining demands.

## How the Wind Turbine works

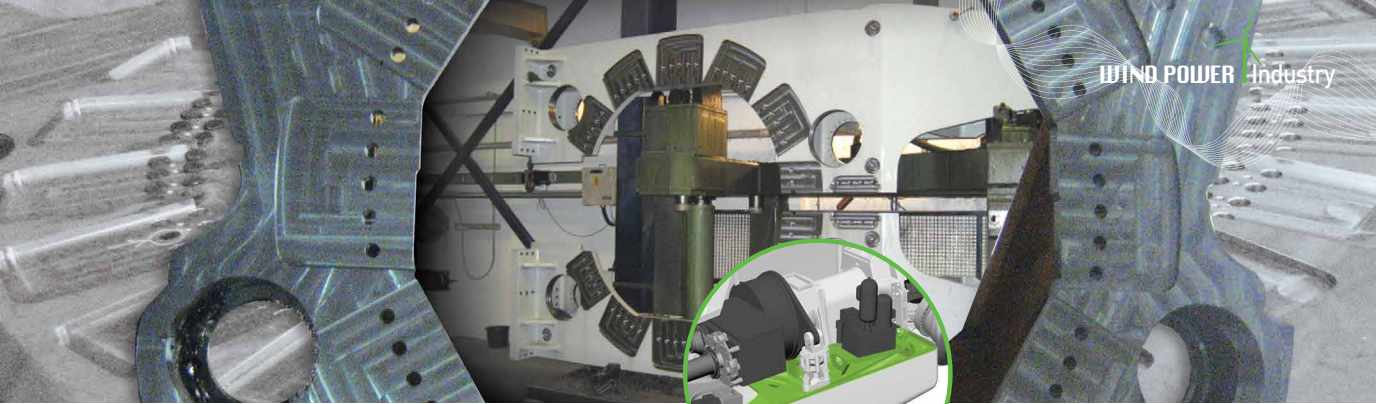


- A** Rotor Hub
- B** Blades
- C** Main Shaft
- D** Gearbox
- E** Generator

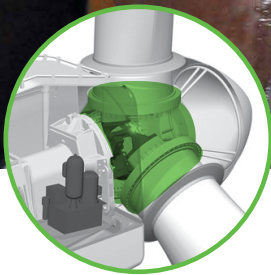


## Main Parts





# Hub



The hub serves as a base for the rotor blades and extenders, as well as a means of housing the control systems for the pitch drive. It rotates freely and attaches to the nacelle using a shaft and bearing assembly. It is cast in a special type of strong iron alloy.

## Highly Productive Milling Solutions

Economical rough milling with 12 or 14 cutting edges - HNHX 10 & XNHU 09  
 Rough milling solution with big depth of cut - SCKN 21/27  
 High productive finishing solution with 8 cutting edges - SNEX 12



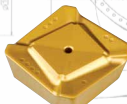
HNHX 10



XNHU 09



SNEX 12



SCKN 21/27



HEXA2MILL



CHASE2HEPTA



CHASE2QUAD



LIONMILL

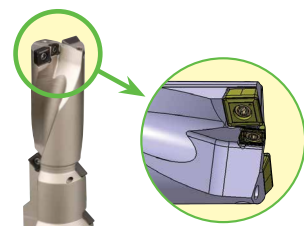
## Tailor-made Cutters

TaeguTec manufactures tailor made cutters that can deliver higher productivity and efficiency considering machine power & work piece shape



## High Feed Drilling Solutions

Double Productivity with Combination Drill



T-DRILL

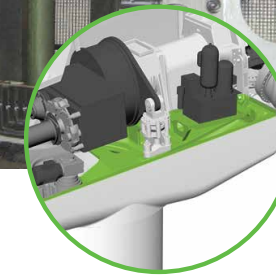
SPMG DG



DRILL-RUSH

TCD

# Main Frame



The main frame serves as the point of attachment for various components, such as the main shaft, transmission, generator, and nacelle. It usually contains a yaw bearing assembly. It is made from steel or strong cast iron must be strong enough to support the entire turbine drive train, but not too heavy.

## Milling Solutions



HEXA2MILL



CHASE2HEPTA



CHASEMILL



Special cutter



CHASE2QUAD



LIONMILL



MILL-RUSH



MILL-RUSH

## Drilling Solutions



SOMT

TOPDRILL

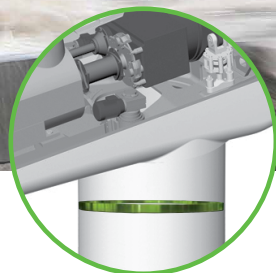


SPMG

T-DRILL

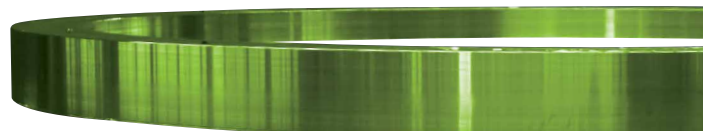
# Tower Flange

A tower for a wind mill comprises a number of tapered cylindrical sections which are subdivided in two or more elongated shell segments. Tower flanges are used for combining two shell segments by tightening together through bolts. Forged and rolled tower flanges are cost effective and better mechanical properties than steel plates.



## Heavy Turning Solutions

TaeguTec has developed suitable inserts with breakers and special coatings for each individual workpiece cutting condition that can reduce cutting force and extend tool life and realize the stable working & cutting conditions.



## Drilling Solutions

Double the holes,  
Double the productivity



SOMT



SPMG DG



TOPDRILL



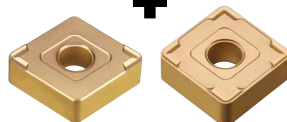
T-DRILL



SNMD/CNMD



19,25 HT    25 HD    19,25 HY    25 HZ



Bottom side for finishing

TOPDUTY

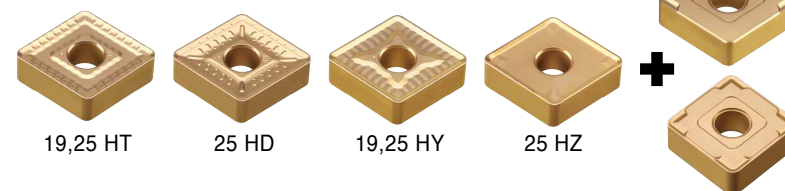
# Gear

Gears increase the low rotational speed of the rotor shaft in several stages to the high speed needed to drive the generator. It's placed between the main shaft and the generator.



## Heavy Turning TOPDUTY

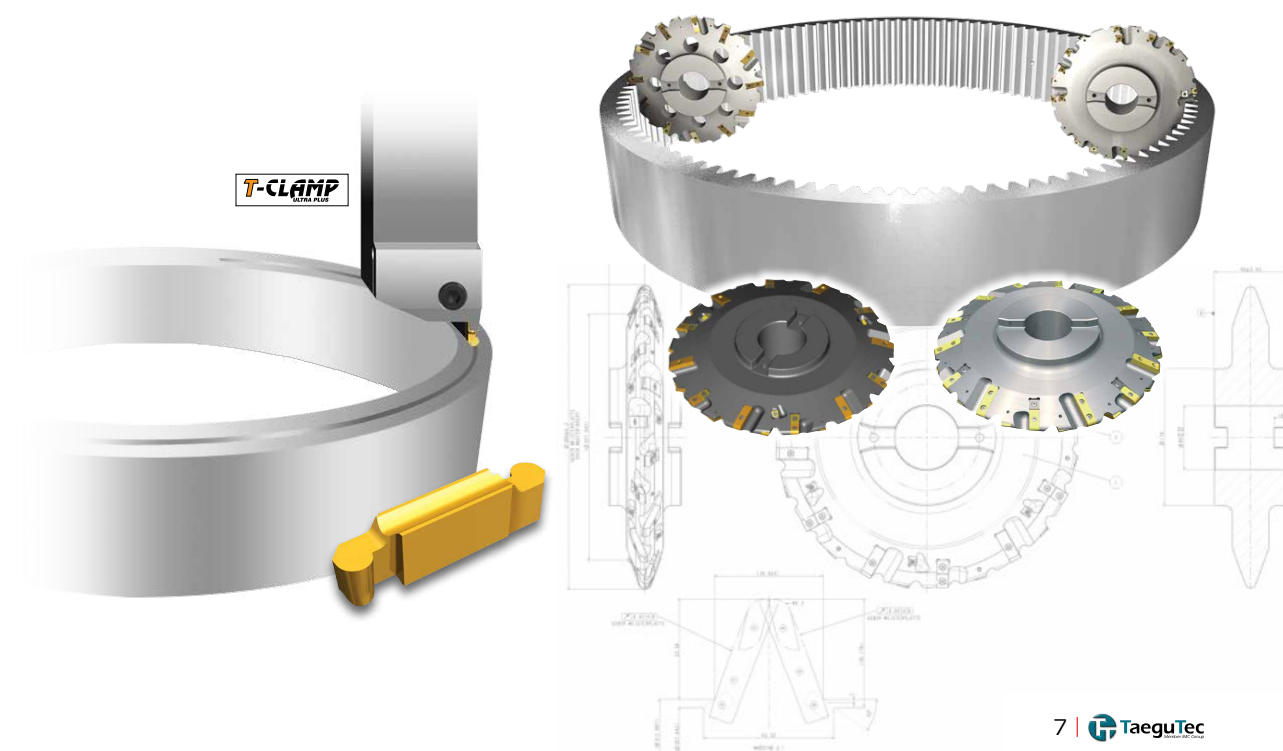
SNMD/CNMD



19,25 HT    25 HD    19,25 HY    25 HZ

Bottom side for finishing

## Gear Cutting, Grooving Solutions



# Main Shaft

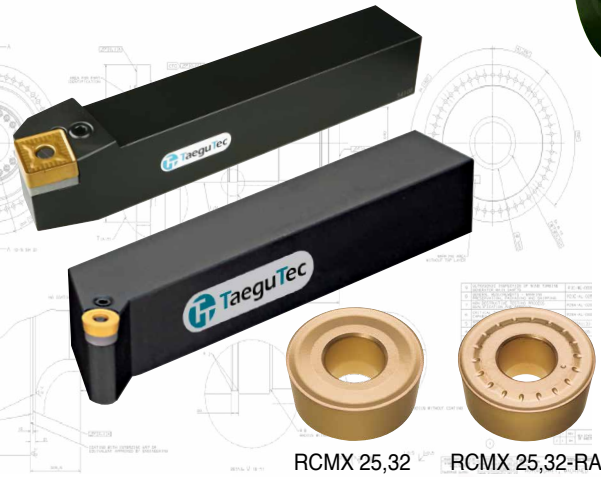
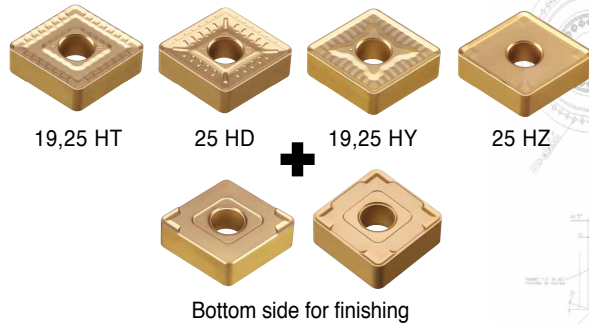
The main shaft of wind turbine transfers the rotational force of the rotor to the gearbox. It is usually forged from hardened and tempered steel.



## Heavy Rough & Finish Turning Solutions

SNMD/CNMD

TOPDUTY

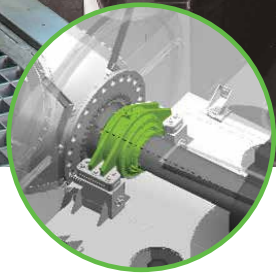


## Drilling Solutions



# Bearing Housing

The main bearings are mounted within the bearing housings, which are bolted to the main frame. A bearing housing is a core component of a wind turbine, which is why its safe and reliable operation requires precision machining. It is made from cast steel or Spheroidal Graphite Iron (SG Iron).



## Milling Solutions

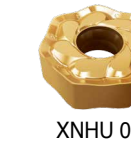


HEXA 2 MILL

LIONMILL

CHASE 2 HEPTA

CHASE 2 MILL



HNHX 10

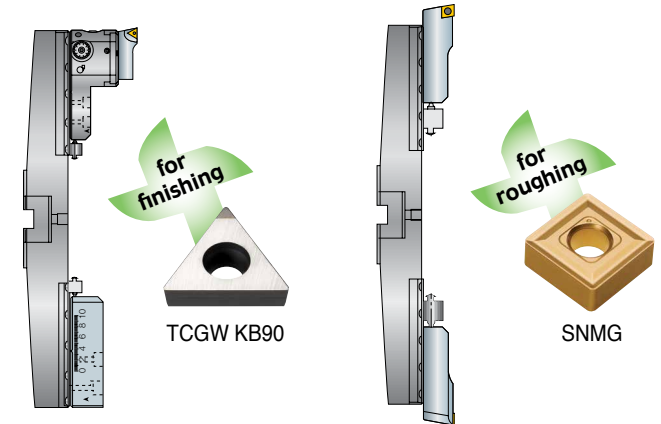
SCKN 27

XNHU 09

ANHX 1607ANR

## Boring Solutions

MPT





Moment Plate



Pin Boss



Cylinder Eye



Coupling Plate



Hydraulic Holder



Blade



Hydraulic Block

# Additional Wind Power Components



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