

Partner of the Wind Power Industry



is a reliable partner for the wind energy industry. We are certified according to

DIN EN ISO 9001 and work as development partner and supplier for this industry for many years.

Comprehensive know-how has been collected in

- development and design,
- moulding of hand formed and machine formed castings,
- machining of castings according to the necessary tolerances,
- heat treatment and painting,
- quality assurance with dye penetrant inspection, ultrasonic and X-ray testing.

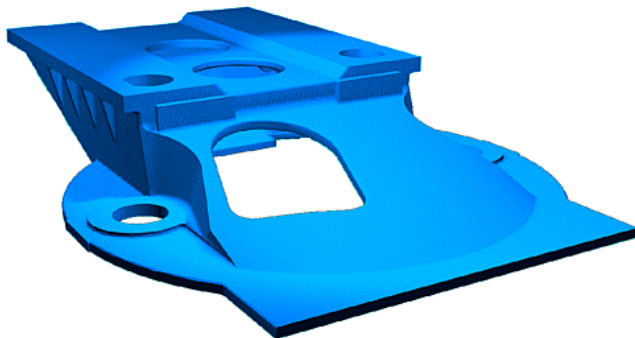


Fig. 1: Machine support

Material: EN-GJS-400-18-LT (Grade 370/17);
Weight: 4,900 kg;
Dimensions: 3,400 x 2,400 x 555 mm
Delivery type: machined ready to mount

:huh is a competent partner for manufacturers of wind power plants ! In our development department computer-aided design and finite element calculation of machine supports, rotor hubs and other parts inclusive strength proofs for the certification are professionally performed.

The machine support and rotor hub depicted in figures 1 and 2 have been

designed at :huh for power plants of the 1MW-class.

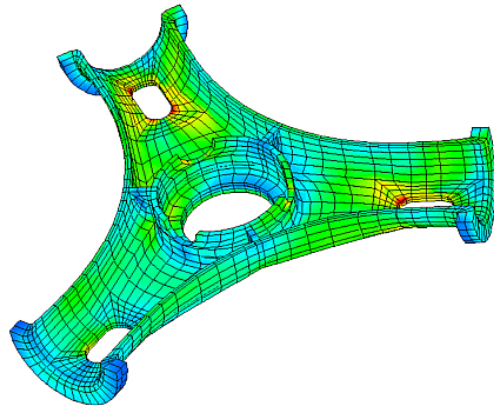


Fig. 2: Rotor hub (FEA-calculation)

Material: EN-GJS-400-18 (Grade 370/17);
Weight: 1800 kg;
Dimensions: \varnothing 2,500 x 650 mm
Delivery type: machined ready to mount

At :huh the development is performed on state of the art 3D-CAD-systems. Out of this data we generate volume models for the computation of the tensions with finite elements method (FEM). On basis of these tensions the strength check is conducted based on the FKM guideline or according to rules and regulations of certification bodies.

Also the computation models for the cast process simulation (Fig. 3), which already guarantees a process-safe manufacturing for the first sample, are derived from the CAD data. The volume models are further used for creating the CNC-machining programs.

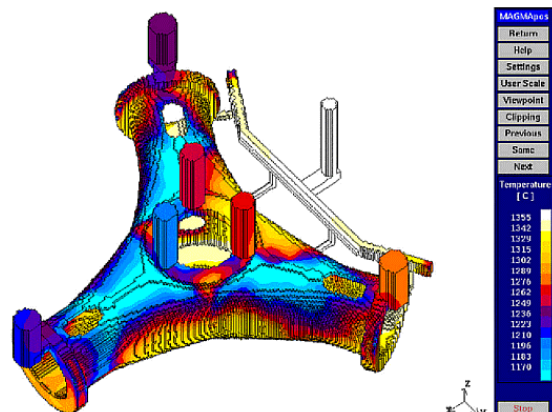


Fig. 3: Rotor hub (Cast process simulation)

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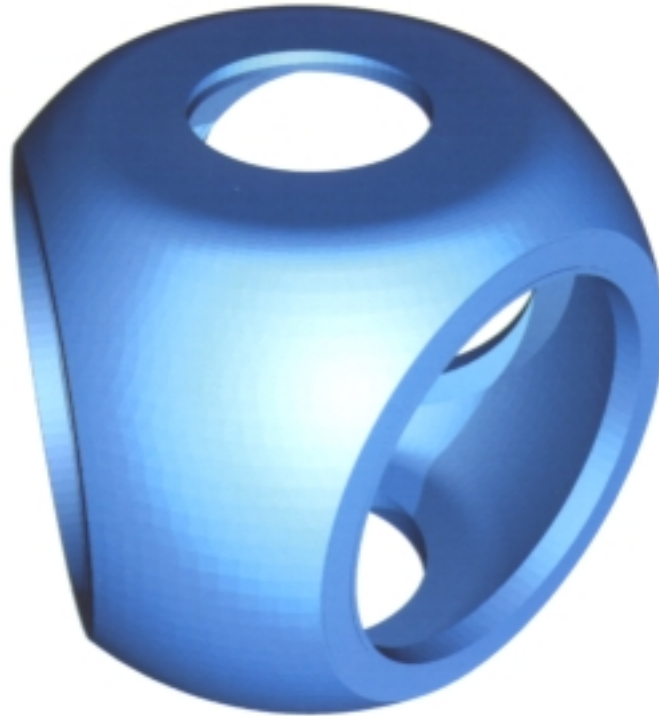


Fig. 4: Rotor hub of a 1,000 kW – wind power plant

Material: EN-GJS-400-18-LT (Grade 370/17); Ball-Ø 2,100 mm; Weight: 4,500 kg

huh offers and carries out a reduction of the cost-driving tolerances of the raw casting for minimization of the machining operation costs.

As a result of the combination of foundry and machining plant under *one roof* processes are simplified and shorter. The supply of pattern, casting and machining to the requested date does not have to be coordinated at great expenditure using *several* suppliers.

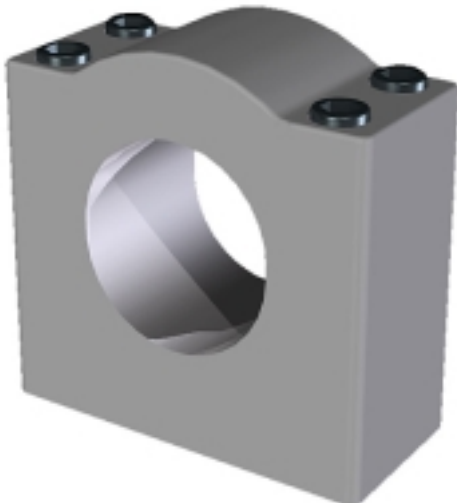


Fig. 5: Housing for bushings

consisting of two shell halves,
jointly finished ready to mount

Material: EN-GJS-400-18-LT (Grade 370/17);
Weight: 272 kg

The customer receives the casted, painted, machined and tested component ready to be installed out of *one hand*. In German we call this:



For this quality stands the Logo of the AGQ (german working group quality casting) !