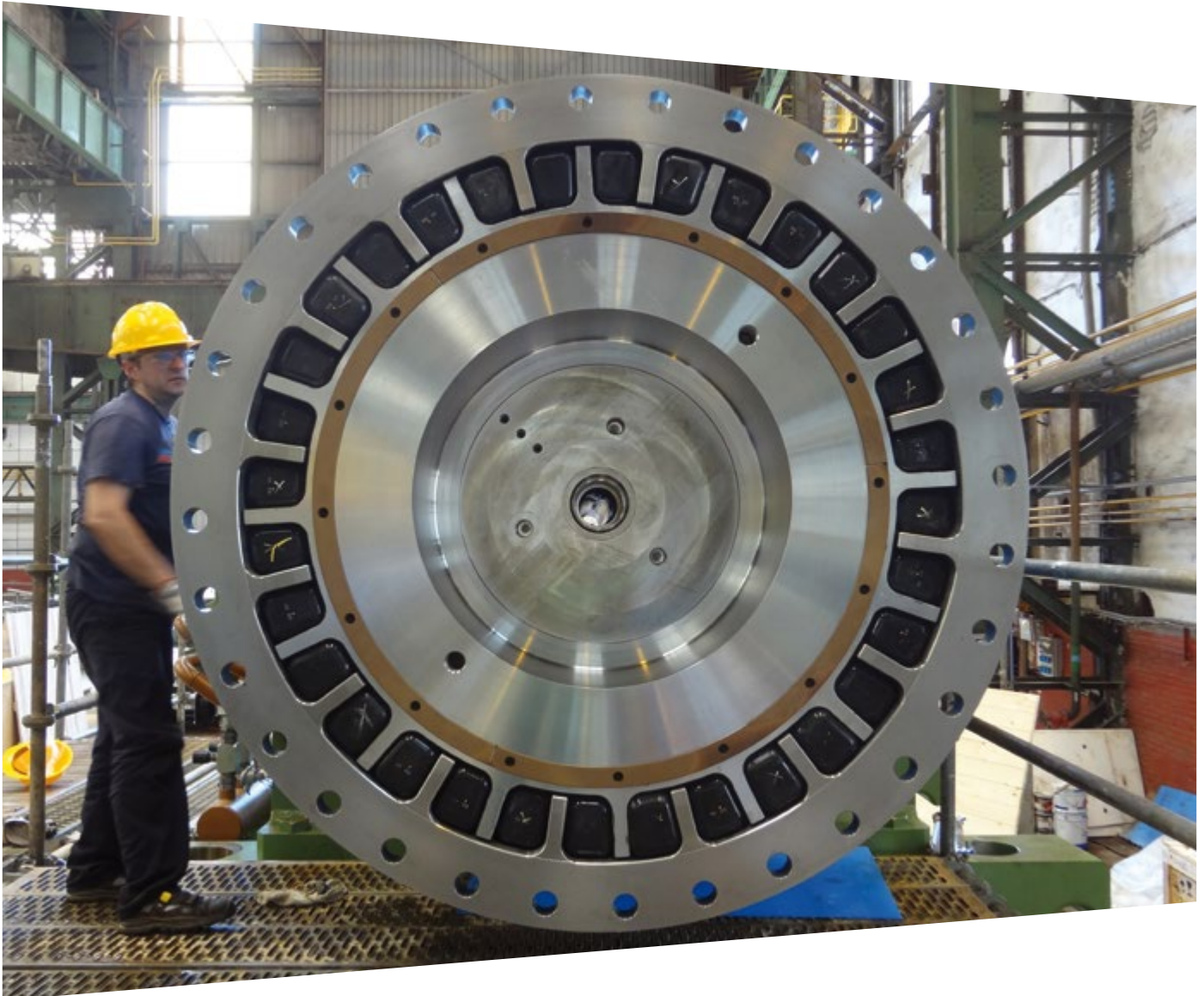


# Jaure News

GENERAL INDUSTRY • WIND • MARINE • METALS & HEAVY DUTY

September  
2014

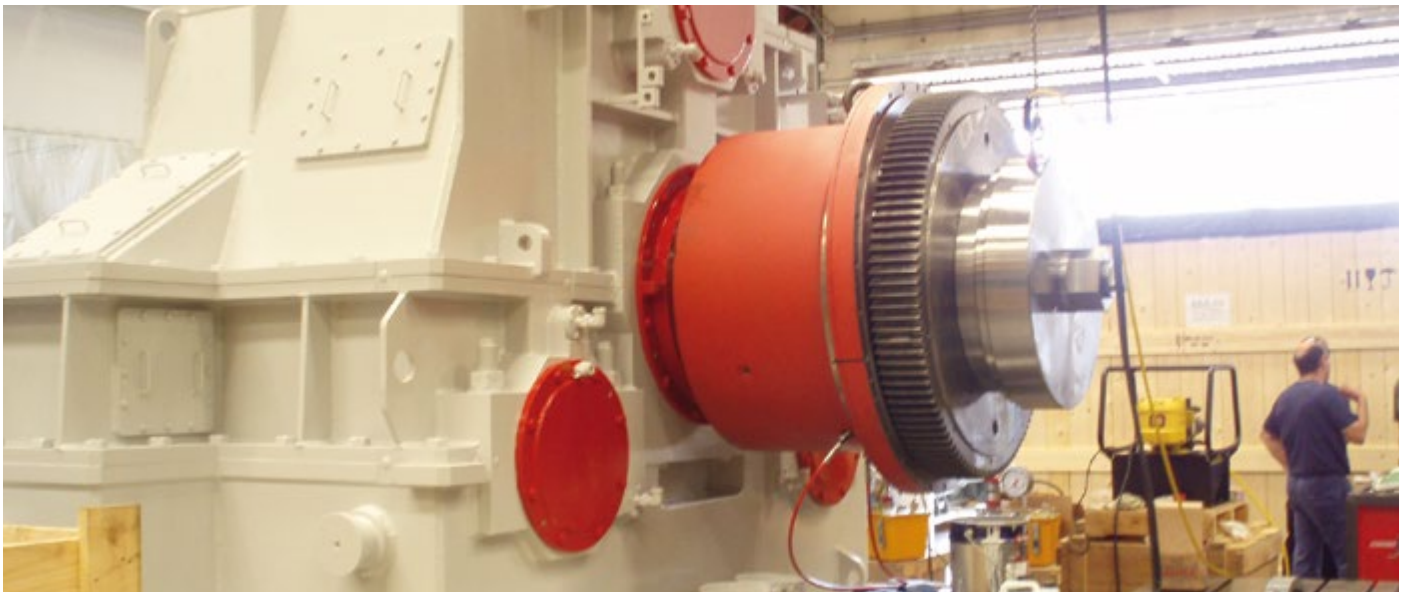


## Summary

- 01 **Jaure Hydraulic Shaft Couplings:** Types JHC & JHC-HF (High Friction type) **NEW**
- 02 **Jaure Composite Shafts with Fire Protection:** Type JCFS-FP **NEW**
- 03 **Jaure Super Nut:** Type JS Nut **NEW**
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# Jaure Hydraulic Shaft Couplings: Types JHC & JHC-HF

High Friction type **NEW**



Jaure MTGX-HD-TI-1000 / JHC-700 on wind test bench



Jaure Ixilflex 1096-8 with JHC-F-230



Jaure JHC-F-320 in combination with Lamidisc 1300-6 for Water Jet Drive



In house testing JHC-HF-F-100

Jaure integrated back in the 60s to its product portfolio the oil injection method for shaft connections. Thousand of couplings are running since then in various applications such as marine drives, wind turbines or heavy duty steel mills.

The Jaure JHC was developed at a later stage. It uses the same principle of the oil injection method, with the advantage that it is equipped with a built-in device for an easier installation and removal of the hub on the shaft.

How does it work? By overlapping a hub with a tapered bore over a sleeve with a tapered outer surface and by forcing interference through them, a high radial force is created.

Hundreds of JHC couplings have been delivered since then either on its own or in combination with Jaure flexible couplings.

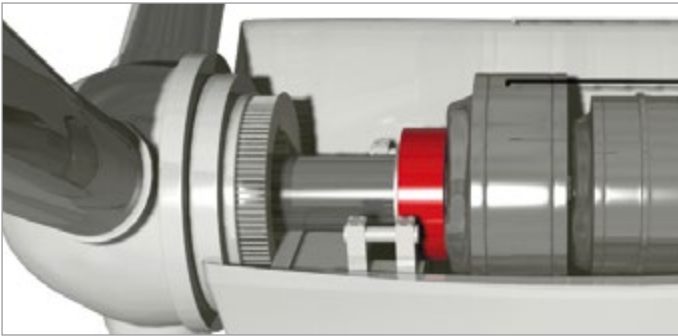
Two versions of the JHC are available on demand: Shaft to Flange connection or Shaft to Shaft connection.



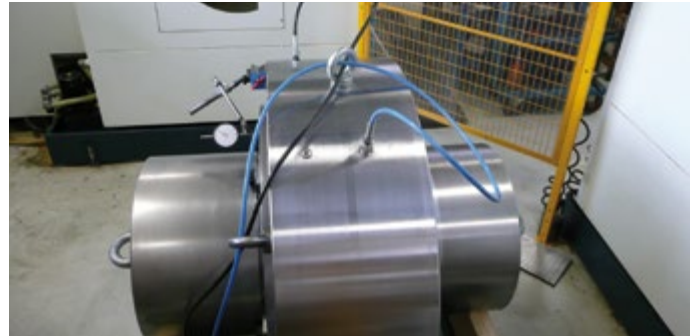
JHC-F shaft to flange connection



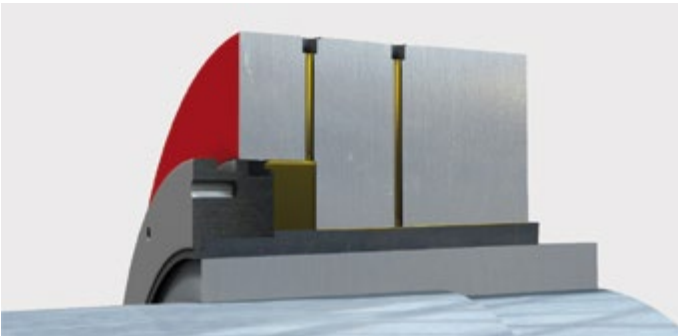
JHC-S shaft to shaft connection



Jaure JHC-750 on a 3Mw wind turbine LSS



100% hydraulically tested before shipment



Shaft to hollow shaft connection detail

As a result of our commitment to innovation and product development, we are glad to present our **NEW developed hydraulic shaft coupling JHC-HF, high friction type.**

This JHC-HF solution enhances the properties of the JHC design to a further level. By increasing friction between its main parts, the high friction JHC-HF can transmit the same torque with a reduced size.

## TYPICAL APPLICATIONS:

### Marine



### Wind



### Metals



### General Industry



Soon will come: Jaure JHC & JHC-HF Brochure

# Jaure Composite Shafts with Fire Protection:

Type JCFS-FP **NEW**



Jaure 23m drive solution  
(4000 kw @ 600 rpm)  
Maintenance FREE.  
Lamidisc 505-8 with  
JCFS-FP Composite  
Shafts.



Fatigue validation at Jaure before and after furnace testing.

The demand for light weight solutions pushed many years ago our R+D department to develop Jaure Carbon Fiber Shafts (JCFS) as an alternative to conventional steel drive shafts.

JCFS composite shafts were first introduced in high speed vessels. They are now making inroads in many other vessels such as dredgers, supply vessels, cruise ships, patrol boats, etc.

Jaure has recently launched the JCFS shafts with **FIRE PROTECTION (JCFS-FP)**. In order to meet the demand of certain vessels to have the time to evacuate the personnel in case of fire onboard the vessel.

The protection of the composite tubes against fire is optional on demand.

For sure JCFS-FP shafts also meet the requirements of Classification Societies and are delivered with the official certificates.



Composite drive shaft with fire protection



Combined bulkhead seal & bearing



Lamidisc 505-8, Drop Out style

# Jaure Super Nut: Type JS Nut NEW

The **Jaure Super Nut, JS Nut**, is a pretensioning device which has multiple pretensioning screws located on a common pitch circle diameter that are intended to create an axial thrust when applied with a small input torque.

Main benefit is the low tightening torque required for medium to heavy duty applications, allowing the use of only standard tools for installation and removal.

On top of it, installation time is reduced and it is safer to use for the service personnel.

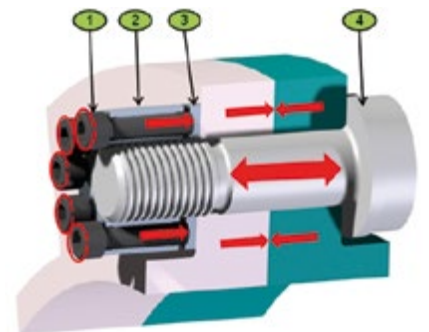
The JS Nut is available on its sole or in combination with **Jaure gear MT** or **disc pack Lamidisc** couplings. It can be also delivered on demand with the 3.2 certificate of Marine Classification Societies.

### Working Principle:

1. By tightening the pretensioning screws, a thrust force (axial force) is generated. This axial force is directed against a hardened washer (part number 03) with relatively little input torque, when the nut body (part number 02) is engaged with main bolt thread (part number 04).

2. Thus the equivalent axial force is generated resulting from tightening all pretensioning screws (part number 01) to the recommended tightening torque values.

The opposite reaction force of the main bolt head and equivalent axial force acting on washer creates a strong clamping force on the flanges resulting in creating an equally strong reaction force in the main bolt.



Soon will come: Jaure JS Nut standardization range

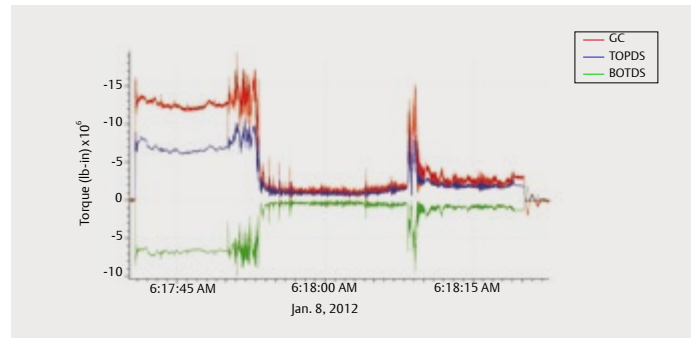
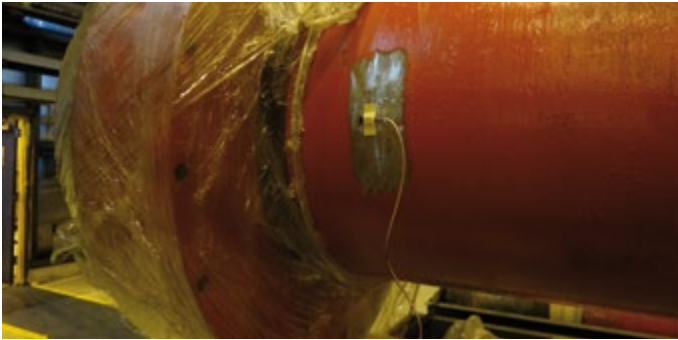
## Manufacturing Survey Arrangement MSA

Jaure has been successfully evaluated by the Det Norske Veritas (DNV) and has been awarded with the Manufacturing Survey Arrangement – MSA from DNV.

The MSA certificate is our commitment to continuously improve the service and response time to our customers and remain competitive in the market place.



# Torque monitoring & Service



Torque monitoring is a valuable tool for preventative maintenance and problem solving. It provides real-time data to the mill operators.

### Main purpose:

- Understanding the real loads under working conditions versus design loads.

- Definition of overload protection
- Definition of the most appropriate coupling solution.
- Effect of transient loads of coupling devices if needed.



Jaure Service Centers offer:

- Repair and refurbishment
- Expert failure analysis
- Field technical support

Our support services for commissioning or problem solving and analysis are available worldwide upon request.

## Job Vacancies

### Looking for sales engineers

We are looking for sales engineers in Central Europe, preferably in Germany.

For details please contact us at:

[www.jaure.com](http://www.jaure.com)



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APPLICATION CONSIDERATIONS

The proper selection and application of power transmission products and components, including the related area of product safety, is the responsibility of the customer. Operating and performance requirements and potential associated issues will vary appreciably depending upon the use and application of such products and components. The scope of the technical and application information included in this publication is necessarily limited. Unusual operating environments and conditions, lubrication requirements, loading supports, and other factors can materially affect the application and operating results of the products and components and the customer should carefully review its requirements. Any technical advice or review furnished by Regal-Beloit America, Inc. and its affiliates with respect to the use of products and components is given in good faith and without charge, and Regal assumes no obligation or liability for the advice given, or results obtained, all such advice and review being given and accepted at customer's risk.

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