# Jaure News

GENERAL INDUSTRY • WIND • MARINE • METALS & HEAVY DUTY

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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 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.



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

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 IHC 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.



In house testing JHC-HF-F-100



JHC-F shaft to flange connection



JHC-S shaft to shaft connection



Jaure JHC-750 on a 3Mw wind turbine LSS



Shaft to hollow shaft connection detail

#### **TYPICAL APPLICATIONS:**





100% hydraulically tested before shipment

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 IHC-HF can transmit the same torque with a reduced size.





#### Soon will come: Jaure JHC & JHC-HF Brochure

### Jaure Composite Shafts with Fire Protection: Type JCFS-FP NEW



aure 23m drive solution (4000 kw @ 600 rpm) Lamidisc 505-8 with



Jaure before and after furnace testing.





Composite drive shaft with fire protection

# Fatigue validation at

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.

Lamidisc 505-8, Drop Out style

## Jaure Super Nut: Type JS Nut

The Jaure Super Nut, JS Nut, is a

pretensioning device which has

located on a common pitch circle

diameter that are intended to create

an axial thrust when applied with a

Main benefit is the low tightening torque required for medium to heavy

duty applications, allowing the use

On top of it, installation time is

of only standard tools for installation

reduced and it is safer to use for the

The IS Nut is available on its sole or

in combination with Jaure gear MT

or disc pack Lamidisc couplings.

with the 3.2 certificate of Marine

Classification Societies.

It can be also delivered on demand

multiple pretensioning screws

small input torque.

and removal.

service personnel.

### 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.



## 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

#### 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 succesfully 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.





- 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.





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APPLICATION CONSIDERATIONS

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. For a copy of our Standard Terms and Conditions of Sale, Disclaimers of Warranty, Limitation of Liability and Remedy, please contact Customer Service at 1-800-626-2120. These terms and conditions of sale, disclaimers and limitations of liability apply to any person who may buy, acquire or use a Regal Beloit America Inc. product referred to herein, including any person who buys from a licensed distributor of these branded products.

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