

CERTIFICATE NUMBER 16-HS1559928-PDA DATE 06 Sep 2016

ABS TECHNICAL OFFICE Houston OED - Equipment

# CERTIFICATE OF

## **DESIGN ASSESSMENT**

This is to certify that a representative of this Bureau did, at the request of

## AMERIDRIVES INTERNATIONAL

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate.

Product: Gear Couplings, High Power

Model: 223484-041, 223485-041, 223486-041, 223487-041

This Product Design Assessment (PDA) Certificate 16-HS1559928-PDA, dated 06/Sep/2016 remains valid until 05/Sep/2021 or until the Rules or specifications used in the assessment are revised (whichever occurs first).

This PDA is intended for a product to be installed on an ABS classed vessel, MODU or facility which is in existence or under contract for construction on the date of the ABS Rules or specifications used to evaluate the Product.

Use of the Product on an ABS classed vessel, MODU or facility which is contracted after the validity date of the ABS Rules and specifications used to evaluate the Product, will require re-evaluation of the PDA.

Use of the Product for non ABS classed vessels, MODUs or facilities is to be to an agreement between the manufacturer and intended client.

AMERICAN BUREAU OF SHIPPING

Tim Kimble

Engineer/Consultant

AMERIDRIVES INTERNATIONAL

2000 CLOVIS BARKER ROAD

SAN MARCOS TX

United States 78666

Telephone: 512-353-4000

Fax: 512-353-4017

Email: damaris.melendez@ameridrives.com

Web: www.ameridrives.com

Tier: 3 - Type Approved, unit certification not required

Product:

Gear Couplings, High Power

Model:

223484-041, 223485-041, 223486-041, 223487-041

**Intended Service:** 

Offshore Application for Drawworks.

Description:

Special F204 Gear Coupling Assembly.

Rating:

P/N: 223484-041:

Coupling Rating: 340 HP per 100 RPM; Rated Speed (Maximum): 3200 RPM; Coupling to transmit: 11,000 FT-LBS;

Design Temperature: -20 °C to 55 °C (-4 °F to 131 °F).

P/N: 223485-041, P/N: 223486-041 & P/N: 223487-041:

Coupling Rating: 340 HP per 100 RPM; Rated Speed (Maximum): 3200 RPM;

Coupling to transmit: 14,000 FT-LBS @ 870 RPM; Design Temperature: -20 °C to 55 °C (-4 °F to 131 °F).

Service Restriction:

Unit Certification is required for this product.

The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product. Functional Test: In accordance with design parameters/design approval.

Charpy V-Notch (CVN) impact testing is required per 2012 CDS guide Section 6/5.1.

Notes/Drawing/Documentation:

Drawing No. MB-223484, Rev. B, Special F 204 Assembly AmeriGear Flexible Coupling; Drawing No. MB-223485, Rev. B, Special F 204 Assembly AmeriGear Flexible Coupling; Drawing No. MB-223486, Rev. B, Special F 204 Assembly AmeriGear Flexible Coupling; Drawing No. MB-223487, Rev. B, Special F 204 Assembly AmeriGear Flexible Coupling;

Document No. 6SP1-51, Rev. M, Material and Procedure Specifications for ANSI-4340 Commercial or Aircraft

**Quality Steel:** Manufacture's Affidavit of Compliance;

Terms of Validity:

This Product Design Assessment (PDA) Certificate 16-HS1559928-PDA, dated 06/Sep/2016 remains valid until 05/Sep/2021 or until the Rules or specifications used in the assessment are revised (whichever occurs first).

This PDA is intended for a product to be installed on an ABS classed vessel, MODU or facility which is in existence or under contract for construction on the date of the ABS Rules or specifications used to evaluate the Product.

Use of the Product on an ABS classed vessel, MODU or facility which is contracted after the validity date of the ABS Rules and specifications used to evaluate the Product, will require re-evaluation of the PDA.

Use of the Product for non ABS classed vessels, MODUs or facilities is to be to an agreement between the manufacturer and intended client.

#### AMERIDRIVES INTERNATIONAL

2000 CLOVIS BARKER ROAD

SAN MARCOS TX

United States 78666

Telephone: 512-353-4000

Fax: 512-353-4017

Email: damaris.melendez@ameridrives.com

Web: www.ameridrives.com

Tier: 3 - Type Approved, unit certification not required

### **STANDARDS**

**ABS Rules:** 

Rules for Conditions of Classification, Part 1 - 2016 Steel Vessels Rules 1-1-4/7.7, 1-1-A3, 1-1-A4; Rules for Conditions of Classification, Part 1 - 2016 Offshore Units and Structures 1-1-4/9.7, 1-1-A2, 1-1-A3; 2012 Guide for the Classification of Drilling Systems (Up-dated December 2015) Section 3/21.5, Section 4/Table 1, Section 6;

National:

AGMA9008-B00 (Sep 2000), AGMA9003-B08 (May 2008), AGMA9002-B04 (Jan 2014);

**International:** 

NA

**Government:** 

NA

**EUMED:** 

NA

**OTHERS:** 

NA