



## *Confirmation of Product Type Approval*

Please refer to the "Service Restrictions" shown below to determine if Unit Certification is required for this product. This certificate reflects the information on the product in the ABS Records as of the date and time the certificate is printed.

Pursuant to the Rules of the American Bureau of Shipping (ABS), the manufacturer of the below listed product held a valid Manufacturing Assessment (MA) with expiration date of 14/MAY/2018. The continued validity of the Manufacturing Assessment is dependent on completion of satisfactory audits as required by the ABS Rules.

And; a Product Design Assessment (PDA) valid until 27/APR/2019 subject to continued compliance with the Rules or standards used in the evaluation of the product.

The above entitle the product to be called Product Type Approved.

The Product Design Assessment is valid for products intended for use on ABS classed vessels, MODUs or facilities which are in existence or under contract for construction on the date of the ABS Rules used to evaluate the Product.

ABS makes no representations regarding Type Approval of the Product for use on vessels, MODUs or facilities built after the date of the ABS Rules used for this evaluation.

Due to wide variety of specifications used in the products ABS has evaluated for Type Approval, it is part of our contract that; whether the standard is an ABS Rule or a non-ABS Rule, the Client has full responsibility for continued compliance with the standard.

### Product Name: Hydraulic Steering Gear Cylinder

Model Name(s): 7040, 7050, 7065, 7067, 7080, 7087, 7090, 7093, 7094, 7094D, 7096, 7096D, 7095, 7095D, 7098, 7100, & 7085; Full Power Follow Up: 7085-S & 7147

**Presented to:**

Kobelt Manufacturing Co. Ltd.  
8238-129th Street  
Surrey  
Canada

|                              |  |
|------------------------------|--|
| <b>Intended Service:</b>     | Marine & Offshore Steering Cylinders   |
| <b>Description:</b>          | Hydraulically actuated steering cylinders  |
| <b>Tier:</b>                 | 5  |
| <b>Ratings:</b>              | Model / Bore Diameter (Inches) / Stroke Min-Max (Inches) / Rated M.A.W.P (bar (psi)): 7085 / 3.5 / 10-20 / 69(1000) 7085S / 3.5 / 10-20 / 69(1000) 7147 / 2 / 7.5-12 / 69(1000) 7080 / 3 / 7.5-16 / 105(1300) 7087 / 3.5 / 12-28 / 138(2000) 7040 / 1.5 / 7.5-10 / 105(1500) 7050 / 2 / 7.5-12 / 105(1500) 7065 / 2.5 / 10-16 / 105(1500) 7067 / 2.5 / 10-20 / 138(2000) 7090 / 4.5 / 16-30 / 138(2000) 7093 / 4 / 12-24 / 105(1500) 7095 / 5 / 12-24 / 105(1500) 7095D / 5 / 16-30 / 138(2000) 7094 / 4 / 12-30 / 138(2000) 7094D / 4 / 12-30 / 138(2000) 7096 / 6 / 16-36 / 138(2000) 7096D / 6 / 16-36 / 138(2000) 7098 / 8 / 36-60 / 138(2000) 7100 / 10 / 36-60 / 138(1650) |
| <b>Service Restrictions:</b> | Unit Certification is required for this product as per 4-3-4/19 of the Rules.  |
| <b>Comments:</b>             | The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product i) Each Cylinder is to be affixed with a permanent Nameplate or marking bearing the Manufacturer's Name or Trademark and the   |

Maximum Allowable Working Pressure and Temperature in accordance with SVR 4-6-7/3.5.5. ii) Material Testing is required as per 4-3-4/3. iii) Each unit is to be hydrostatically tested to 1.5 times the maximum allowable working pressure as per 4-3-4/19 of the Rules.

**Notes / Documentation:**

Supporting Data: Dwg No. C-7030, Rev. (-); Outboard Steering Cylinder Dwg No. D-7032, Rev. (A); Outboard Cylinder Front Mount Dwg No. D-7040, Rev. (B); 7040 Steering Cylinder Dwg No. D-7050, Rev. (C); 7050 Steering Cylinder Dwg No. D-7065B, Rev. (B); 7065 Cylinder (balanced) Dwg No. D-7065U, Rev. (A), 7065 Cylinder (unbalanced) Dwg No. C-7067U, Rev. (C); 7067 Cylinder (unbalanced) Dwg No. D-7080, Rev. (A); 7080 Steering Cylinder Dwg No. D-7085U, Rev. (-); 7085 Cylinder (unbalanced) Dwg No. D-7085B, Rev. (-); 7085 Cylinder (balanced) Dwg No. D-7085SU, Rev. (F); 7085 Servo Cylinder (unbalanced) Dwg No. D-7085SB, Rev. (F); 7085 Servo Cylinder (balanced) Dwg No. D-7087U, Rev. (D); 7087 Cylinder (unbalanced) Dwg No. D-7087B, Rev. (B); 7087 Cylinder (balanced) Dwg No. D-7090U, Rev. (B); 7090 Cylinder (unbalanced) Dwg No. D-7093, Rev. (-); 7093 Cylinder (balanced & unbalanced) Dwg No. D-7094DL, Rev. (E); 7094DL Cylinder (Die cast 2" rod) Dwg No. D-7095D, Rev. (C); 7095D Die Cast Cylinder Dwg No. D-7096D, Rev. (-); 7096D Cylinder (Die Cast) Dwg No. D-7098, Rev. (-); 36" Stroke Cylinder Dwg No. D-7100, Rev. (-); 36" Stroke Cylinder Dwg No. D-7147, Rev. (G); Full Power Follow Up Cylinder

**Term of Validity:**

This Product Design Assessment (PDA) Certificate 14-HS1172074-PDA, dated 28/Apr/2014 remains valid until 27/Apr/2019 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.

**ABS Rules:**

2014 Steel Vessels Rules 1-1-4/7.7, 1-1 A3, 1-1-A4, 4-3-4/3, 4-3-4/7, 4-6-7/3.5.5; 2000 Guide for Motor Pleasure Yachts, Section 18.11

- National Standards:**
- International Standards:**
- Government Authority:**
- EUMED:**
- Others:** None

| Model Certificate | Model Certificate No | Issue Date  | Expiry Date |
|-------------------|----------------------|-------------|-------------|
| PDA               | 14-HS1172074-PDA     | 28/APR/2014 | 27/APR/2019 |



ABS Programs

ABS has used due diligence in the preparation of this certificate and it represents the information on the product in the ABS Records as of the date and time the certificate was printed. Type Approval requires Drawing Assessment, Prototype Testing and assessment of the manufacturer's quality assurance and quality control arrangements. Limited circumstances may allow only Prototype Testing to satisfy Type Approval. The approvals of Drawings and Products remain valid as long as the ABS Rule, to which they were assessed, remains valid. ABS cautions manufacturers to review and maintain compliance with all other specifications to which the product may have been assessed. Further, unless it is specifically indicated in the description of the product; Type Approval does not necessarily waive witnessed inspection or survey procedures (where otherwise required) for products to be used in a vessel, MODU or facility intended to be ABS classed or that is presently in class with ABS. Questions regarding the validity of ABS Rules or the need for supplemental testing or inspection of such products should, in all cases, be addressed to ABS.