

Approval Certificate for Manufacturing Process

[Steel Forgings]



Initial Approval 3 November 2010

Manufacturer Hyundai Integrated Forging Co., Ltd.
46, Yulchonsandan 5-ro, Haeryong-myeon, Suncheon-si, Jeollanam-do, 58034, Rep. of Korea

Product Description Steel Forgings

- Type : Carbon steel
Alloy steel
- Melting furnace : Electric arc furnace
- Casting method : Ingot casting
- Forging process : Open die forging
Semi-closed die forging
CGF (continuous grain flow) forging
- Forging weight : Max. 100 000 kg
- Remark : Crank throws for cylinder diameter up to 980 mm
CGF crankshafts for cylinder diameter up to 540 mm

Approval Condition Individual Product Certification is required unless otherwise specifically exempted.

THIS IS TO CERTIFY that the manufacturing process for the above mentioned product has been approved in accordance with the relevant requirement of this Society's Rules and/or of the recognized standards as follows.

Pt. 2, Ch. 1, Sec. 6, Art. 601 of the Rules for Classification of Steel Ships

This Certificate is valid until 2 November 2030

Issued at Yeosu, Korea on 4 September 2025



This certificate is signed electronically in accordance with IMO FAL.5/Circ.39/Rev.2. Validation and authentication of the certificate can be confirmed from "<http://e-cert.krs.co.kr>" by using the tracking No(ME25038528236) and certificate No.(YSU26285-SF001).



KOREAN REGISTER

*General Manager of
Yeosu-Gwangyang Branch Office*

Note : 1. This certificate will be valid subject to complying with the approval conditions described on the certificate and/or on the Rules of this Society.
2. This certificate will be invalid from the expiry date aforementioned unless the extension or renewal has been granted to the applicant or the manufacturer.
3. Any significant modifications or changes in design or construction to the above product without approval from this Society will render this certificate invalid.
4. Should the specified rules, regulations or standards be amended during the validity of this certificate, the product is to be re-approved by this Society in accordance with the requirements as amended.