

Approval Certificate for Manufacturing Process

[Semi-Finished Products]



Initial Approval 4 March 2025

Manufacturer Iraeta Energy Equipment Co., Ltd.

No. 4177, Jiwang Road, Zhangqiu District, Jinan, Shandong Province, P.R.China

Product Description Semi-Finished Products

- Product form : Ingots, Billets
- Type : Carbon steel
Alloy steel
- Melting furnace : Electric arc furnace
- Casting method : Ingot and continuous casting
- Mass : Max. 80 000 kg for carbon steel ingots
Max. 85 000 kg for alloy steel ingots
- Dimension : Max. Ø 800 mm for round billets

Approval Condition Individual Product Certification is not required.

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 1 of the Rules for Classification of Steel Ships

This Certificate is valid until 3 March 2030

Issued at Shanghai, China on 4 March 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(ME25009344305) and certificate No.(QDO27835-SC001).



KOREAN REGISTER

*General Manager of
Ship System Solution Team
CHINA KR Co., Ltd.*

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.

Approval Certificate for Manufacturing Process

[Steel Forgings]



Initial Approval 24 September 2014
Manufacturer Iraeta Energy Equipment Co., Ltd.
 No. 4177, Jiwang Road, Zhangqiu District, Jinan, Shandong Province, P.R.China

Product Description Steel Forgings

- Type : Carbon steel
Alloy steel
Stainless steel
- Melting furnace : Electric arc furnace
- Casting method : Ingot casting
Continuous casting
- Forging process : Open die forging
Ring rolling
- Forging weight : Max. 65 000 kg for carbon and alloy steel
Max. 500 kg for stainless steel
- Diameter : Max. 10 130 mm for ring rolling

- Approval Condition**
1. Raw Materials are to be supplied by the approved manufacturers of this Society or to be satisfactory to the Surveyor.
 2. 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, Art. 601 & 602 of the Rules for Classification of Steel Ships

This Certificate is valid until 23 September 2029

Reissued at Shanghai, China on 4 March 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(ME25009587306) and certificate No.(QDO27835-SF001).



KOREAN REGISTER

*General Manager of
Ship System Solution Team
CHINA KR Co., Ltd.*

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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.
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Approval Certificate for Manufacturing Process

[Steel Forgings]



Initial Approval 23 June 2009

Manufacturer Iraeta (Jining) High Tech Equipment Co., Ltd.
North Overpass Old Customs, Yanzhou, Shandong Province, P.R. China

Product Description Steel Forgings

- Type : Carbon steel
Alloy steel
- Melting furnace : Electric arc furnace
- Casting method : Ingot casting
- Forging process : Open die forging
- Forging weight : Max. 12 000 kg

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, Art. 601 of Rules for the Classification of Steel Ships

This Certificate is valid until 22 June 2029
Issued at Shanghai, China on 25 June 2024



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(ME24030063632) and certificate No.(QDO24484-SF001).



KOREAN REGISTER

General Manager of
China Plan Approval Center
CHINA KR Co., Ltd.

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.