



DATE: 22/10/2014

**SHANDONG IRAETA HEAVY INDUSTRY CO.,
LTD.**

OUR REF.: 2014SH1634SQS

YOUR REF.:

RINA No

File No 2014-WS01-1089

SUBJECT: RINA Test Certificate FAB108414WS (2014-WS01-1089, certificate of approval of manufacturers of materials)

ENCLOSURES 1set

Enclosed please find Original certificate(s) in subject for your filing purpose.
Thank you for your attention.

Kind regards

RINA



**CERTIFICATE OF APPROVAL OF MANUFACTURERS OF
MATERIALS
No. FAB108914WS**

This is to certify that the manufacture of the product identified below is in compliance with the applicable requirements of the RINA Rules for the Approval of Manufacturers of Materials.

<i>Description</i>	Steel forgings
<i>Type</i>	Carbon; Carbon-Manganese; Low-Alloy; Austenite stainless steel Forgings
<i>Applicant</i>	SHANDONG IRAETA HEAVY INDUSTRY CO, LTD NO.9001 JIWANG ROAD, ZHANGQIU, JINAN SHANDONG CHINA
<i>Manufacturer</i>	SHANDONG IRAETA HEAVY INDUSTRY CO, LTD
<i>Place of manufacture</i>	NO.9001 JIWANG ROAD, ZHANGQIU, JINAN SHANDONG CHINA
<i>Reference standards</i>	RINA Rules for the approval of manufacturers of materials

Issued in **SHANGHAI** on **August 19, 2014**. *This Certificate is valid until* **August 19, 2019**



 **RINA**
RINA Services S.p.A.
Hong Gu

This certificate consists of this page and 1 enclosure

CERTIFICATE OF APPROVAL OF MANUFACTURERS OF MATERIALS

No. FAB108914WS

Enclosure - Page 1 of 1

Carbon

Carbon-Manganese

Low-Alloy

Austenite

stainless steel Forgings

APPROVAL CONDITIONS

- **Steel types:** carbon & carbon-manganese, low-alloy and austenite stainless steel;
- **Manufacturing process of steel :** open die forging from ingot & billet by RINA approved manufacturers;
- **Max. weight :** 4,000 kg for Ring forged pieces (flanges);
- **Condition of supply :**

Steel grade	Carbon & carbon-manganese	Low-alloy	Austenite stainless steel
Delivery condition	Normalizing Normalizing + tempering	Quenching + tempering	Solution treatment

- **Survey conditions:** all forgings to be used for construction of ships classed with RINA shall meet the requirements of the RINA Rules and shall be tested accordingly.

General conditions for the approval

- The approval is granted on condition that the RINA Rules for the approval, manufacture, testing and certification of materials are complied with in all respects.
- RINA is to be notified of any change of materials, manufacturing process, quality control routines that may affect the validity of this certificate.



SHANGHAI August 19, 2014