



**CERTIFICATE OF APPROVAL OF MANUFACTURERS OF
MATERIALS
No. FAB399123WS**

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 ingots
<i>Type</i>	Carbon and carbon-manganese steel and alloy steel
<i>Manufacturer</i>	Jinlei Technology Co., Ltd.
<i>Place of manufacture</i>	No.18, Shuangyuan Street, Gangcheng District Jinan (Shandong) CHINA
<i>Reference standards</i>	RINA Rules for the approval of manufacturers of materials

Issued in **RINA China Marine** on **April 17, 2024**. *This Certificate is valid until* **April 16, 2029**



Yongjun Pan
RINA Services S.p.A.

This certificate consists of this page and 1 enclosure

CERTIFICATE OF APPROVAL OF MANUFACTURERS OF MATERIALS

No. FAB399123WS

Enclosure - Page 1 of 1

Carbon and carbon-manganese steel and alloy steel

APPROVAL CONDITIONS

Approval particulars:

- Steel making process: Basic Oxygen Converter;
- Casting process: Continuous Casting;
- Deoxidation practice, condition of supply and dimension:

Steel Type	Production process	Deoxidation practice and fine grain elements	Max. weight (t)	Heat Treatment
C, C-Mn Steel	EAF+LF+VD+IC	Killed; Al	85	Annealing
Alloy Steel	EAF+LF+VD+IC	Killed; Al	85	Annealing

Note: EAF: Electric Arc Furnace LF: Ladle Furnace; VD: Vacuum Degassing; IC: Ingot casting

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.

RINA China Marine 04/17/2024