

CERTIFICATE OF APPROVAL OF MANUFACTURERS OF MATERIALS No. FAB050318XP/001

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.

Description Carbon, Carbon - manganese and low alloy steel Ingots and steel

forgings

Stainless steel forgings

Type Steel making ingots max. weight 20 ton

Steel forgings max. weight 10 ton

Stainless steel forgings max. weight 4 ton

Manufacturer ZDAS A.S.

Place of manufacture Strojírenská 675/6

591 01 Zdar Nad Sazavou CZECH REPUBLIC

Reference standards RINA Rules for the approval of manufacturers of materials

Reference documents -

Issued in RINA Poland Marine on October 11, 2018. This Certificate is valid until October 2, 2023

Adam Łobodziński Senior Marine Surveyor Head of Poland Marine Jurisdiction: Poland, Slovakia, Czech Republi

RINA Services S.p.A.

Adam Konrad Lobodzinski

This certificate consists of this page and 1 enclosure





CERTIFICATE OF APPROVAL OF MANUFACTURERS OF MATERIALS

No. FAB050318XP/001

Enclosure - Page 1 of 1
Steel making ingots max. weight 12 ton
Steel forgings max. weight 10 ton
Stainless steel forgings max. weight 4 ton

APPROVAL CONDITIONS

- Steelmaking: electric arc furnace
- Steel types: carbon, carbon-manganese and alloy steels; martensitic stainless steel
- Forging process: open die forging.
- Heat treatment: normalizing, normalizing and tempering, quenching and tempering.
- 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.

RINA Poland Marine October 11, 2018



