

CERTIFICATE OF FORGING FACILITY AND PROCESS APPROVAL

This is to certify that a representative of ABS did, at the request of
COGNE ACCIAI SPECIALI S.P.A.
VIA PARAVERA, 16, 11100 AOSTA, Italy

attend its facilities as indicated in the ABS Genoa Port port office survey report number 3041083 dated 09 December 2015 in order to carry out a survey of the facilities and associated quality procedures. The facility is considered capable of manufacturing

Stainless Steel Forging components for marine applications

in accordance with the ABS Approval letter (Reference T1486701), ABS Rules, designated standards and ABS approved drawings. The approval is valid till 08 December 2020 subject to adherence to relevant ABS Rules, Survey requirements and annual endorsement by an ABS representative.



Marcus Cridland
Chief Metallurgist, ABS

ISSUE DATE: 09 December 2015

EXPIRY DATE: 08 December 2020

FIRST ANNUAL
ENDORSEMENT:



SECOND ANNUAL
ENDORSEMENT:

THIRD ANNUAL
ENDORSEMENT:

FOURTH ANNUAL
ENDORSEMENT:

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of ABS or a statutory, industrial or manufacturer's standards. It is issued solely for the use of ABS, its committees, its clients or other authorized entities. This Certificate is a representation only that the structure, item of material, equipment, machinery or any other item covered by this Certificate has met one or more of the Rules, Guides, standards or other criteria of ABS as of the date of issue. Parties are advised to review the Rules for the scope and conditions of classification and to review the survey records for a full description of any restrictions or limitation on the vessel's service or surveys. The validity, applicability and interpretation of this Certificate is governed by the Rules and standards of ABS who shall remain the sole judge thereof. Nothing contained in this Certificate or in any notation made in contemplation of this Certificate shall be deemed to relieve any designer, builder, owner, manufacturer, seller, supplier, repairer, operator or other entity of any warranty express or implied.



COGNE ACCIAI SPECIALI S.P.A. (896623)
VIA PARAVERA, 16
11100, AOSTA
ITALY

Reference: KS/NV T1486701
Project Number: 3476733
Certificate no: FOR- T1486701

ATTN: ELENA BALDUCCI

Initial Stainless Steel Forging Facility and Process Approval ABS Approval of COGNE ACCIAI SPECIALI S.P.A., Aosta, Italy

We have the ABS plant survey report 3041083 dated 09 December 2015 along with your submittals together with enclosures relative to the subject. With regard thereto we advise that Cogne Acciai Speciali S.P.A., Aosta, Italy is considered approved to produce machinery forgings to the requirements of *ABS Materials & Welding Rules Part 2 (2016)* as outlined below, provided the Rules are adhered to in all respects and all production, testing and inspection are to the satisfaction of the attending ABS Surveyor.

Grade	Non-ABS Grade Austenitic stainless steel Martensitic stainless steel Duplex stainless steel Ferritic stainless steel Martensitic Precipitation-Hardening stainless steel (17-4PH/15-5PH) XM19
Melting Practice	EAF and AOD
Casting Practice	Ingot and Continuous Casting
Forging Practice	Drop and Open Die Forge
Maximum Weight	74500 Kg
Maximum Thickness/Diameter	1000mm
Heat treatment facility	In-House
Product Examples	Stainless Steel Ingots, Blooms, Round Bars, or Semis

Weld repair is generally not permitted on forgings, unless specially approved by the ABS Engineering Office.

The approval is valid for five years subject to annual endorsement survey and will expire on 08 December 2020. Please note it is the responsibility of the facility to inform ABS of any changes to the manufacturing parameters and request annual endorsement survey or renewal of approval prior to the five year expiry date. Our invoice to cover the costs of the technical review is subject to a separate correspondence.

ABS EUROPE LTD.

No. 1 FRYING PAN ALLEY, LONDON, ENGLAND, E1 7HR

TEL: 44-20-7247-3255 FAX: 44-20-7247-3053 Email: abs-eur@eagle.org

www.eagle.org

Electronically published by ABS London.
Reference T1486701, dated 17-FEB-2016.



A copy of the documentation appropriately stamped to indicate our review is being retained. If you need to contact ABS regarding this review please email Kin-Ling Sham at ksham@eagle.org and Nikolaos Vrellos at nvrellos@eagle.org.

Very truly yours

Dimitrios G. Kostaras
Vice President of Engineering
ABS Europe Ltd.

A handwritten signature in black ink, appearing to read 'N. Vrellos', is written over a horizontal line.

Nikolaos Vrellos
Principal Engineer, Materials
London Offshore Engineering Department

CC: ABS Genoa

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CERTIFICATE OF ROLLED BARS - MACHINERY FACILITY AND PROCESS APPROVAL

This is to certify that a representative of ABS did, at the request of

COGNE ACCIAI SPECIALI S.P.A.
VIA PARAVERA, 16, 11100 AOSTA, Italy

attend its facilities as indicated in the ABS Genoa Port port office survey report number 3051409 dated 09 December 2015 in order to carry out a survey of the facilities and associated quality procedures. The facility is considered capable of manufacturing

Stainless Rolled Bar components for marine applications

in accordance with the ABS Approval letter (Reference T1486702), ABS Rules, designated standards and ABS approved drawings. The approval is valid till 08 December 2020 subject to adherence to relevant ABS Rules, Survey requirements and annual endorsement by an ABS representative.



Marcus Cridland
Chief Metallurgist, ABS

ISSUE DATE: 09 December 2015

EXPIRY DATE: 08 December 2020

FIRST ANNUAL
ENDORSEMENT:

 **S. BELTRATTI** 16.11.16

SECOND ANNUAL
ENDORSEMENT:

 **S. BELTRATTI** 14.12.17

THIRD ANNUAL
ENDORSEMENT:

FOURTH ANNUAL
ENDORSEMENT:

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of ABS or a statutory, industrial or manufacturer's standards. It is issued solely for the use of ABS, its committees, its clients or other authorized entities. This Certificate is a representation only that the structure, item of material, equipment, machinery or any other item covered by this Certificate has met one or more of the Rules, Guides, standards or other criteria of ABS as of the date of issue. Parties are advised to review the Rules for the scope and conditions of classification and to review the survey records for a full description of any restrictions or limitation on the vessel's service or surveys. The validity, applicability and interpretation of this Certificate is governed by the Rules and standards of ABS who shall remain the sole judge thereof. Nothing contained in this Certificate or in any notation made in contemplation of this Certificate shall be deemed to relieve any designer, builder, owner, manufacturer, seller, supplier, repairer, operator or other entity of any warranty express or implied.



COGNE ACCIAI SPECIALI S.P.A. (896623)
VIA PARAVERA, 16
11100, AOSTA
ITALY

Reference: KS/NV T1486702
Project Number: 3476733
Certificate no: ROB-T1486702

ATTN: ELENA BALDUCCI

Initial Stainless Steel Rolled Bar Facility and Process Approval ABS Approval of COGNE ACCIAI SPECIALI S.P.A., Aosta, Italy

We have the ABS plant survey report 3051409 dated 09 December 2015, along with your submittals together with enclosures relative to the subject. With regard thereto we advise that Cogne Acciai Speciali S.P.A. is considered approved to produce rolled bars for machinery applications to the requirements of *ABS Materials & Welding Rules Part 2 (2016)* as outlined below, provided the Rules are adhered to in all respects and all production, testing and inspection are to the satisfaction of the attending ABS Surveyor.

Grades	Non-ABS Grade Austenitic stainless steel Martensitic stainless steel Duplex stainless steel Ferritic stainless steel Martensitic Precipitation-Hardening stainless steel (17-4PH/15-5PH) XM19
Melting Practice	EAF and AOD
Maximum Weight	4500 kg
Maximum Diameter*	200mm
Heat treatment facility	In-house
Product Examples	Stainless Steel Blooms, Round Bars, or Semis

* Rolling reduction ratio shall be to the requirements of ABS Rules Part 2-3-8

Weld repair is generally not permitted on rolled bars used in lieu of forgings, unless specially approved by the ABS Engineering Office.

The approval is valid for five years subject to annual endorsement survey and will expire on 08 December 2020. Please note it is the responsibility of the facility to inform ABS of any changes to the manufacturing parameters and request annual endorsement survey or renewal of approval prior to the five year expiry date. Our invoice to cover the costs of the technical review is subject to a separate correspondence.

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A copy of the documentation appropriately stamped to indicate our review is being retained. If you need to contact ABS regarding this review please email Kin-Ling Sham at ksham@eagle.org and Nikolaos Vrellos at nvrellos@eagle.org.

Very truly yours

Dimitrios G. Kostaras
Vice President of Engineering
ABS Europe Ltd.

A handwritten signature in black ink, appearing to read 'N. Vrellos', written over a horizontal line.

Nikolaos Vrellos
Principal Engineer, Materials
London Offshore Engineering Department

CC: ABS Genoa

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