



CERTIFICATE NUMBER
14-MMPS-FF&PAC-577

PORT OFFICE
ABS MATERIALS HOUSTON

CERTIFICATE OF FORGING FACILITY AND PROCESS APPROVAL

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

Chandan Steel Ltd., Valsad, Gujarat, India

attended its facilities as indicated in the ABS Mumbai port office survey report number BY2666514 dated 15 July 2014, in order to carry out a survey of the facilities and associated quality procedures. The facility is considered capable of manufacturing

Stainless Steel Forgings for Marine Applications

in accordance with the ABS Approval letter, ABS Rules, designated standards and ABS approved drawings. The approval is valid subject to adherence to relevant ABS Rules and survey requirements and annual facility endorsement by an ABS representative.

ISSUE DATE 15 Jul 14 EXPIRATION DATE 14 Jul 19

SIGNATURE

**V. BALASUBRAMANIAM
PRINCIPAL ENGINEER
ABS MATERIALS, HOUSTON**



FIRST ANNUAL
ENDORSEMENT

SECOND ANNUAL
ENDORSEMENT

THIRD ANNUAL
ENDORSEMENT

FOURTH ANNUAL
ENDORSEMENT

Project #: 3262645; Task #: T1227927; Office Ref #: MMPS: 8106

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.



FROM: ABS Materials, Houston

TO: ABS Mumbai

ATTN: Anandamoy Das

MMPS: 8106

ENGINEER: V.K. Mantravadi

DATE: July 21, 2014

O2E TASK: 1227927

PAGE: 1

OID: 3262645

FAX: 91-22-22-65-8953

SUBJECT: Chandan Steel Ltd., Valsad, Gujarat, India

Initial Approval of Forging Facility to Produce Forged Stainless Steel Components used in Marine Applications.

We have your electronic submittals and Plant Survey Report BY2666514 dated 15 July 2014 on the subject, together with enclosures, relative to the subject, and with regard thereto, we advise that Chandan Steel Ltd., Valsad, Gujarat, India is considered facility and process approved to produce Stainless Steel Forgings as outlined below. The relevant ABS Rules [Part 2: Materials & Welding 2-3-7 (2014)] are to be adhered to in all respects, and production, inspection, and testing of forgings are to be to the satisfaction of the attending ABS Surveyor.


Products	:	Stainless Steel Forgings⁽¹⁾⁽²⁾ (Flanges, Stub Ends)⁽³⁾⁽⁴⁾
Alloy Types	:	Non-ABS Grades Grades 304/304L/304H, 316/316L/316H, 321/321H, 347/347H, F317/F317L, F310/F310H, F51, F53, F60 in accordance with ASTM A182 Specification.
Forging Processes	:	Open Die Forging/Closed Die Forging
Supply Condition	:	Solution Annealed
Maximum Weight	:	1,500kg

Notes:

1. Stainless Steel Forgings are to be design approved when used on ABS Classed Vessels.
2. It is the responsibility of the facility to inform and obtain ABS approval, if any changes are made in the manufacturing procedure specification(s), and/or, to the processing parameters as compared to initially approved technical document(s).
3. Weld repair of listed and approved forged components are not carried out as per reviewed document.
4. Forgings produced for ABS Classed Applications are to have an ABS Surveyor in attendance at the facility for unit certification.

Very truly yours,

Daniel Cronin
Vice President of Engineering
ABS Americas

By: 
V. Balasubramaniam
Principal Engineer,
ABS Materials, Houston