



CERTIFICATE NUMBER
STML-T1836429-1

ISSUING OFFICE
London Ship Eng - Materials

CERTIFICATE OF STEEL MILLS FACILITY AND PROCESS APPROVAL

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

ILSENBURGER GROBBLECH GMBH

POSTFACH: 10 10 13, D-38210 SALZGITTER, Germany

attend its facilities as indicated in the ABS City Hamburg Port port office survey report number 3617529 dated 08 February 2019 in order to carry out a survey of the facilities and associated quality procedures. The facility is considered capable of manufacturing

Plate components for marine applications

in accordance with the ABS Approval letter (Reference T2011868), ABS Rules, designated standards and ABS approved drawings. The approval is valid till 07 February 2024 subject to adherence to relevant ABS Rules and Survey requirements.



Marcus Cridland
Chief Metallurgist, ABS

ISSUE DATE: 08 February 2019
EXPIRY DATE: 07 February 2024

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.



Task - T2011868 Rev 1
Steel Mill Approval - Renewal
Certificate No. STML- T1836429-1

Attention: Kerstin Brecht, Ilsenburger Grobblech GmbH, Germany (WCN723404)

The documents shown in the attached list are reviewed or filed for reference in accordance with the applicable requirements of the following and the facility is considered approved to manufacture products for hull application as outlined in the process/product approval.

1. ABS Rules for Materials and Welding Part 2 (2020)

Please note it is the responsibility of the facility to inform ABS of any changes to the manufacturing parameters and request renewal of approval prior to the five year expiry date.

Mechanical tests (for the grades covered under the current extension of approval) during production are to be witnessed by attending ABS Surveyor and submitted to ABS Materials Department for reference.

For any clarifications, contact Satya Meruva at +44 207 377 4524, smeruva@eagle.org.

Very truly yours,

Wei-Biao (Bill) Shi
Vice President

Electronically Signed by: Satya Meruva

Documents List

Drawing No.	Rev. No.	Title	Status
Correspondence	-	Ilsenburger Grobblech GmbH Renewal Request	Filed by ABS for Reference Only
Extension of Approval with Non-ABS-Grades		Based on qualification of equivalent ABS Grades	Filed by ABS for Reference Only
API 2W Grade 60		Prequalification Test Results (API 2Z)	Reviewed
API 2W Grade 50		Prequalification Test Results (API 2Z)	

Electronic copies of the documents, appropriately stamped are available through the ABS Eagle Construct Engineering Manager (O2E), Web portal.



Process/Product Approval

Product	Grade	Thickness	Fine Grain Practice	Casting Practice	Delivery condition
Plates	API 2W Grade 50Z and Grade 60Z	100 mm	(Al+Nb+V)	CC	TMCP + ACC
Steel Making Practice: BOF Deoxidation Practice: Aluminum + Silicon Heat treatment Facility: NA					
Plate	Non-ABS – EN10025-6 S620/690 Q/QL/QL1 Z25	120 mm	(Al+Nb), (Al+V)	CC	QT
Steel Making Practice: BOF Deoxidation Practice: Aluminum + Silicon Heat treatment Facility: In-house					
Plate	Non-ABS – 15NiMn6, 12Ni14, X12Ni5, X8Ni9 + QT680, X8Ni9 + QT640 Ni Alloy Steels	50 mm	from Salzgitter Flachstahl Gmbh (744301)		QT
Steel Making Practice: from Salzgitter Flachstahl Gmbh (744301) Deoxidation Practice: from Salzgitter Flachstahl Gmbh (744301) Heat treatment Facility: In-house					
Plate	ABS – A*/B*/D	140 mm	(Al)/ (Al+Nb)	Ingot Cast or CC	N
Plate	ABS – A*/B*/D*/E	51 mm	(Al)/ (Al+Nb)	Ingot Cast or CC	N
Plate	ABS - AH*/DH*/EH*/FH 32*/36	51 mm	(Al+Nb)/ (Al+Nb+V)	CC	N
Plate	ABS - AH*/DH*/EH 32*/36	100 mm	(Al+Nb+Ti)/ (Al+Nb+V)/ (Al+V+Ti)	CC	N
Plate	ABS - AQ*/DQ*/EQ*/FQ 51*/56 Z35	120 mm	(Al+Nb)	CC	QT
Plate	ABS - AQ*/DQ*/EQ*/FQ 63*/70 Z25	120 mm	(Al+Nb), (Al+V)	CC	QT



Steel Making Practice: BOF					
Deoxidation Practice: Aluminum + Silicon					
Heat treatment Facility: In-house					
Plate	ABS - AH*/DH*/EH 32*/36	70 mm	(Al+Nb+Ti)/ (Al+Nb+V)/ (Al+V+Ti)	Ingot Cast or CC	TMCP
Plate	ABS - AH*/DH*/EH 32*/36/40 Z35	120 mm	(Al+Nb+Ti)/ (Al+Nb+V)/ (Al+V+Ti)	Ingot Cast or CC	TMCP+ ACC
Plate	ABS - AH*/DH*/EH 40	50 mm	(Al+Nb+Ti)/ (Al+Nb+V)/ (Al+V+Ti)	CC	TMCP
Plate	ABS – A*/B*/D	40 mm	(Al)	Ingot Cast or CC	CR
Plate	ABS – AH*/DH 32*/36	30 mm	(Al)/ (Al+Nb)	Ingot Cast or CC	CR
Plate	ABS - AQ*/DQ*/EQ*/FQ 43*/47 Z35	100 mm	(Al+Nb+V)	CC	TMCP
Steel Making Practice: BOF					
Deoxidation Practice: Aluminum + Silicon					
Heat treatment Facility: NA					
Plate	Non-ABS - 1.5%, 3%, 5% and 9% Ni Alloy Steel	50 mm	from Salzgitter Flachstahl Gmbh (744301)		QT
Steel Making Practice: from Salzgitter Flachstahl Gmbh (744301)					
Deoxidation Practice: from Salzgitter Flachstahl Gmbh (744301)					
Heat treatment Facility: In-house					

* Approval of these grades is based on qualification tests carried out on the higher grade.