



Indian Register of Shipping

Place : Mumbai
Date : 02nd November 2016
Certificate No. : 2016WAC028

WORKS APPROVAL CERTIFICATE FOR ROLLED STEEL PRODUCTS

This is to certify that based on the satisfactory assessment of existing manufacturing facilities and quality control procedures by our surveyors the name of

SUQIAN NANJING IRON & STEEL GROUP JINXIN STEEL ROLLING CO. LTD.

No.89, Jingshan Road, Suyu District, Suqian City, Jiangsu – Post Code 210035, P.R. China

is being included in the list of approved steel mills for manufacturing of rolled steel products in accordance with the relevant requirements of Part 2, Chapter 3 of "Rules and Regulations for the Construction and Classification of Steel Ships" and "Classification Notes on Approval Scheme for the Manufacturing Process of Normal and Higher Strength Hull Structural Steel".

DESCRIPTION	: Normal Strength Steel and Higher Strength Steel Grades
PRODUCT FORM	: Flats, Bulb Flats, Equal/Unequal angles, Inverted angles as per details in <i>Annexure -I</i>
INTENDED SERVICE	: For use in the Construction of Ships Structures
CONDITIONS OF APPROVAL	: See <i>Annexure -II</i>
VALIDITY	: until 01 st November 2021


**PREMJIT PANIGRAHI
PRINCIPAL SURVEYOR**

See Overleaf for Conditions of Issue of this Certificate

ANNEXURE - I

(TO CERTIFICATE NO. 2016WAC028 DATED 02nd November 2016)

Steel Making Process : Basic Oxygen Converter

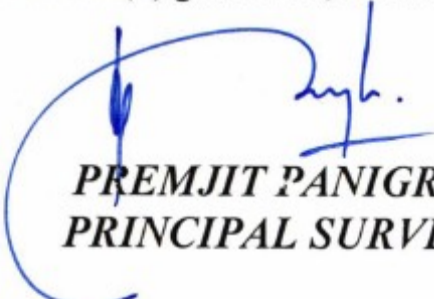
Slab Making Process : Continuous Casting

Sr. No.	Product Type	Steel Grade	Dimension (mm)	Deoxidation	Grain Refinement	Supply Condition
1	Bulb Flat	A*, B	≤ HP 430* 20	Al	-Nil-	AR
		AH32*, DH32		Al	Al+V	CR
		AH36*, AH40*, DH36*, DH40		Al	Al+V	CR
		D*, E		Al	Al+Ti	CR
		EH32*, EH36		Al	Al+V+Ti	CR
2	Inverted Angle	A*, B	≤ L450* 125* 13* 18	Al	-Nil-	AR
		AH32*, DH32		Al	Al+V	CR
		AH36*, AH40*, DH36*, DH40		Al	Al+V	CR
		D*, E		Al	Al+Ti	CR
		EH32*, EH36		Al	Al+V+Ti	CR
3	Equal/Unequal Angle	A*, B	≤ ∠ 250* 250*20	Al	-Nil-	AR
		AH32*, DH32		Al	Al+V	CR
		AH36*, AH40*, DH36*, DH40		Al	Al+V	CR
		D*, E		Al	Al+Ti	CR
		EH32*, EH36		Al	Al+V+Ti	CR
4	Flat	A*, B	≤ 350* 20	Al	-Nil-	AR
		AH32*, DH32		Al	Al+V	CR
		AH36*, AH40*, DH36*, DH40		Al	Al+V	CR
		D*, E		Al	Al+Ti	CR
		EH32*, EH36		Al	Al+V+Ti	CR

(AR = As Rolled, CR= Controlled Rolling)

NOTE:

The approval of *ast: risk* (*) grade steel is based on qualification test data submitted for higher grade steel in the same strength level. In order to retain the validity of the above approval, it is to be ensured that the chemical analyses, method of manufacture and condition of supply of *ast: risk* (*) grade steel, is similar to its respective qualifying grade.

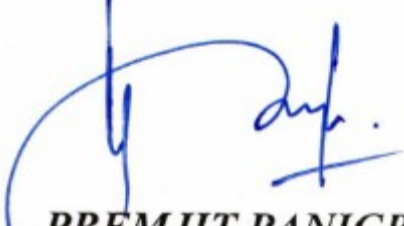

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ANNEXURE - II

(TO CERTIFICATE NO. 2016WAC028 DATED 02nd November 2016)

CONDITIONS OF APPROVAL

1. This approval is subject to
 - a. Annual audit being carried out by the surveyors of Indian Register of Shipping as per Annexure III schedule.
 - b. Any alteration being made to manufacturing facilities and procedures would require re-assessment of the works for continued approval.
 - c. Testing being carried out only at approved test houses to surveyor's satisfaction.
2. Approval of works under this scheme does not eliminate normal inspection and testing.
3. The steel sections manufactured are to be intended for welding with Heat Input not exceeding 50 KJ/cm.


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DESCRIPTION : Normal Strength Steel and Higher Strength Steel Grades

PRODUCT FORM : Flats, Bulb Flats, Equal/Unequal angles, Inverted angles as per details in *Annexure -I*

INTENDED SERVICE : For use in the Construction of Ships Structures

CONDITIONS OF APPROVAL : See *Annexure -II*

VALIDITY : until *01st November 2021*


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		AH36*, AH40*, DH36*, DH40		Al	Al+V	CR
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		EH32*, EH36		Al	Al+V+Ti	CR
2	Inverted Angle	A*, B	≤ L450* 125* 13* 18	Al	-Nil-	AR
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		AH36*, AH40*, DH36*, DH40		Al	Al+V	CR
		D*, E		Al	Al+Ti	CR
		EH32*, EH36		Al	Al+V+Ti	CR
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4	Flat	A*, B	≤ 350* 20	Al	-Nil-	AR
		AH32*, DH32		Al	Al+V	CR
		AH36*, AH40*, DH36*, DH40		Al	Al+V	CR
		D*, E		Al	Al+Ti	CR
		EH32*, EH36		Al	Al+V+Ti	CR

(AR = As Rolled, CR= Controlled Rolling)

NOTE:

The approval of *asterisk* (*) grade steel is based on qualification test data submitted for higher grade steel in the same strength level. In order to retain the validity of the above approval, it is to be ensured that the chemical analyses, method of manufacture and condition of supply of *asterisk* (*) grade steel, is similar to its respective qualifying grade.


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