



Indian Register of Shipping

PROVISIONAL CERTIFICATE

Place : Mumbai
Date : 23rd November 2016
Certificate No. : 2016WAC032

Works Approval Certificate for Continuous Cast Steel Mill

This is to certify that based on the existing manufacturing facilities and satisfactory assessment of Manufacturing and Quality Control procedures by our Surveyors, the name of

***Companhia Siderurgica do Pecem (CSP)
Rodovia CE 155-S/N-Km 11.5, Sao Goncalo do Amarante – CE,
Brazil***


is included in the list of approved steel mill in accordance with the relevant requirements of Part 2, Chapter 3 of "Rules & Regulations for the Construction & Classification of Steel Ships".

Description : Manufacture of IRS Grade Steel Slabs as semi finished products for further production of Rolled Steel Plates (For details, see Annexure – 1)

Intended Service : For use in the construction of Ship's hull and machinery structure

Conditions of Approval : See Annexure -I

Validity : This certificate is valid until 22nd November 2017


**PREMJIT PANIGRAHI
PRINCIPAL SURVEYOR**

See Overleaf for Conditions of Issue of This Certificate

ANNEXURE - I

(TO CERT. NO. 2016WAC032 DATED 23RD NOVEMBER 2016)

PRODUCT DESCRIPTION:

Product Type: Steel Slabs

Steel Making Process: Basic Oxygen Furnace


Slab Making Process: Continuous Casting

De-oxidation Method: Al-Si Killed

IRS Grade	Thickness (mm)	Max. Width (mm)	Grain Refining
A	220 - 300	2300	Al / Al+Nb / Al+Nb+Ti
B	220 - 300	2300	Al / Al+Nb / Al+Nb+Ti
D	220 - 300	2300	Al / Al+Nb / Al+Nb+Ti
E	220 - 300	2300	Al / Al+Nb / Al+Nb+Ti
AH32	220 - 300	2300	Al / Al+Nb / Al+V / Al+Nb+Ti / Al+Nb+V+Ti
DH32	220 - 300	2300	Al / Al+Nb / Al+V / Al+Nb+Ti / Al+Nb+V+Ti
EH32	220 - 300	2300	Al / Al+Nb / Al+V / Al+Nb+Ti / Al+Nb+V+Ti
AH36	220 - 300	2300	Al / Al+Nb / Al+V / Al+Nb+Ti / Al+Nb+V+Ti
DH36	220 - 300	2300	Al / Al+Nb / Al+V / Al+Nb+Ti / Al+Nb+V+Ti
EH36	220 - 300	2300	Al / Al+Nb / Al+V / Al+Nb+Ti / Al+Nb+V+Ti
AH40	220 - 300	2300	Al / Al+Nb / Al+Nb+Ti
DH40	220 - 300	2300	Al / Al+Nb / Al+Nb+Ti
EH40	220 - 300	2300	Al / Al+Nb / Al+Nb+Ti

CONDITIONS OF APPROVAL:

1. This approval is subject to the following:
 - a. Any alteration being made to manufacturing facilities and procedures would require re-assessment of the works for continued approval.
 - b. Testing being carried out at approved test houses to surveyor's satisfaction when supplying slabs to clients under IRS inspection.
2. Approval of works under this scheme does not eliminate normal inspection and testing.


PREMJIT PANIGRAHI
PRINCIPAL SURVEYOR