



CERTIFICATE NUMBER  
14-MMPS-CWFA-053

PORT OFFICE  
ABS MATERIALS HOUSTON

# CERTIFICATE OF SHAFT CLADDING FACILITY APPROVAL

**This is to certify that a representative of ABS did, at the request of**  
**Cascadura Industrial S.A., Rio de Janeiro, Brazil**

attend its facilities as indicated in the ABS Rio de Janeiro port office survey report number RJ2619245-A dated 21 August 2014, in order to carry out a survey of the facilities and associated quality procedures. The facility has qualified for stainless steel clad welding of shafts in accordance with ABS Rules Part 7, Appendix Section 11, "Guide for Repair and Cladding of Shafts."

PROCESS	Laser Beam Welding		
SHAFT MATERIAL	SS316L (UNS31603)		
FILLER METAL	316L Powder, 100/325 mesh		
PROCEDURE	CD-WPS No: 01_7250 dated 14 Feb 14		
ISSUE DATE	21 Aug 14	EXPIRATION DATE	20 Aug 19

SIGNATURE

V. BALASUBRAMANIAM  
PRINCIPAL ENGINEER,  
ABS MATERIALS HOUSTON



Project #: 3371684; Task #: T1279137; Office Ref #: T1263271

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.