

APPROVAL OF MANUFACTURER CERTIFICATE

This is to certify:**That****Acería de Alava, S.A.U. (ACERALAVA)
Amurrio, Araba, Spain**is an approved manufacturer of
Steel Forgings

in accordance with

**DNV GL rules for classification – Ships
Offshore Standard DNVGL-OS-B101****DNV GL class programme CP-0247 – Manufacture of steel forgings – Steel forge
DNV GL class programme CP-0346 – Manufacture of metallic materials – General
requirements for manufacturer approvals**

and the following particulars:

Product	Stainless steel forgings, see page 2
Steel types	Austenitic-ferritic; 22Cr duplex
Max. weight	4 000 Kg
Delivery Condition	Solution annealed
Remarks	See page 2 for additional details

Manufacturer approved by this certificate is accepted to deliver according to DNV GL, DNV and GL rules. Materials to be applied to DNV GL classed object shall fulfill the material requirements in the applicable DNV GL class rules.

Issued at **Høvik** on **2016-12-21**for **DNV GL**This Certificate is valid until **2019-12-20**.DNV GL local station: **Bilbao**Approval Engineer: **Gorka Lozano**

Hanne Anita Hjerpetjønn
Head of Section

Job Id: **263.11-006597-1**
Certificate No: **AMMM0000138**

Particulars of the approval

Application area: Stainless steel forgings - RU SHIP Pt.2 Ch.2 Sec.6 [8]				
Steel grade	Maximum heat treatment cross section (mm)	Maximum forging weight (Kg)	Forging method ³⁾	Delivery condition ¹⁾²⁾
22Cr duplex	385	4 000	Open die forging	SA

Remarks:

¹⁾ SA: Solution annealed.

²⁾ Heat treatment carried out by Tratamientos Térmicos Yurre, S.A. or Acería de Alava, S.A.U. (max. 3600 Kg)

³⁾ Actual reduction ratio: 4.6