## ್ಜಿಯೆಯೆಯೆಯೆಯೆಯೆಯೆಯೆ NIPPON KAJI KYOKAI ಯೆಯೆಯೆಯೆಯೆಯೆಯೆಯೆ



Approval No. AL25RO Certificate No. TA181393E

## APPROVAL OF MANUFACTURING PROCESS

This is to certify that

# ELVAL S.A. Oinofytal, Viotia Greece

has been approved for the manufacturing process of undermentioned materials by the NIPPON KAIJI KYOKAI in accordance with the requirements of 1.2, Part K of the Society's "Rules for the Survey and Construction of Steel Ships" and Chapter 5, Part 1 of the Society's "Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use".

#### MATERIALS : Aluminium Alloys

The details of the relevant approval conditions are given in the PARTICULARS OF APPROVAL listed in the reverse of this certificate.

The products for the ships classed with the Society are to be manufactured, tested and inspected in compliance with the Rules.

This Certificate is valid from 5 December 2018 until 4 December 2023. Issued at Tokyo on 5 December 2018.

Initial Approval Date: 5 December 2018

H. Kobayashi

General Manager

Material and Equipment Department



No. : TA181394E

Date: 5 December 2018

### PARTICULARS OF APPROVAL

## Approval Conditions for Manufacturing Process of Aluminium Alloys

1. Manufacturer : ELVAL S.A.

2. Kind of Product : Rolled Products

3. Grade : 5083P and 5086P

4. Temper Condition : See Table

5. Max. Thickness : 50mm

6. Remark : 5083P-O and 5083P-H321 manufactured by

ELVAL S.A. is not applicable to the extremely low

temperature such as tanks for liquefied gas

carrier.

#### **Table Supply Conditions**

Grade	Temper Condition	Max. Thickness (mm)
5083P	0	50
	H111	
	H116	
	H321	
5086P	H116	50

H. Kobayashi

General Manager

Material and Equipment Department