



### TYPE APPROVAL CERTIFICATE

Certificate No.

: CSP19246-WD001

Initial Approval: 11th April, 1997

Product

: Welding Consumables

Manufacturer

: Chosun Welding Co., Ltd.

34-13, Hwasan 2-gil, Ulju-gun, Ulsan, Korea

Product Description : Flux Cored Wires with Gas for Semi-automatic Arc Welding

CSM-70T, CSF-71S, CSF-81K2 - Brand : CSF-71T,

CSF-308L, CSF-309L, CSF-316L

Wire-flux combinations for submerged arc welding

- Brand: UC36 x CA502, UC36 x CA502H, UC36 x CA508, UC43 x CA514

\* See "Appendix 1 & 2"

Approval Condition: 1. The product or packing is to be marked with manufacturer name and

type designation on a suitable position.

Individual Product Certification is not required.

3. Periodical survey is to be carried out at an interval of one(1) year in the presence of the surveyor.

THIS IS TO CERTIFY that the above-mentioned product has been approved in accordance with the relevant requirement of this Society's Rules and / or of the recognized standards as follows and entered in the "List of Approved Manufacturers and Type Approved Equipment".

Pt. 2, Ch. 2, Sec. 6 of the Rules for Classification of Steel Ships.

This Certificate is valid until 10th April, 2022

Reissued at Jangsaengpo, Korea on 22nd September, 2017

KOREAN REGISTER OF SHIPPING

General Manager of Jangsaengpo Branch Office

Note: 1. This certificate will be valid subject to complying with the approval conditions described on the certificate and/or on the Rules of this Society.

2. This certificate will be invalid from the expiry date aforementioned unless the extension or renewal has been granted to the applicant or the manufacturer.

3. Any significant modifications or changes in design or construction to the above product without approval from this Society will render this certificate invalid.

4. Should the specified rules, regulations or standards be amended during the validity of this certificate, the product is to be re-approved by this Society in accordance with the requirements as amended.

#### Appendix 1

# Product Description and/or Approval Condition

Certificate No: CSP19246-WD001 Date of Issue: 22nd September, 2017

### O Product Description;

- Flux cored wires with gas for semi-automatic arc welding

Brand	Grade	Diameter (mm)	Welding position	Current (Polarity)	Shielding Gas
CSF-71T CSF-81K2 CSF-71S	2YSG (C) H10 5Y40SG (C) H5 4Y40SG (C) H5	1. 2 ~ 1. 6	*(1)	DC (+)	CO <sub>2</sub> 100%
CSM-70T CSF-308L CSF-309L CSF-316L	2SG (C) H10 2YSG (C) H10 RW308LG (C) RW309LG (C) RW316LG (C)	1.2 ~ 1.6	*(2)	DC (+)	CO <sub>2</sub> 100%

\* Remark :

Butt & Fillet: Flat, Horizontal, Vertical-up & down and Overhead
Butt(Flat), Fillet(Flat, Horizontal-vertical)

- Wire-flux combinations for submerged arc welding

Brand	Grade	Diameter (mm)	Welding position	Current (Polarity)	
UC36 x CA502 UC36 x CA502H	2TM, 2YTM 2T, 3M, 2YT, 3YM				
UC36 x CA508 *(1)	4YTH5 4Y40MH5 *(2)	2.4 ~ 6.4	Flat	AC/DC(+)	
UC43 x CA514	3TM, 3YTM				

\* Remark :

 (1) Suitable for tandem welding
(2) Manufacturer's guaranteed mechanical properties (Min. CVN 41J\_at -60°C) < End of page >

## **Endorsement for Periodical Survey**

Certificate No: CSP19246-WD001 Date of Issue: 22nd September, 2017 Anniversary Date: 10th April This is to certify that the product is in compliance with the relevant requirements to obtain /retain the Society's approval in accordance with Pt. 2, Ch. 2, Sec. 6 of the Rules for Classification of Steel Ships. and is valid until 10th April, 2018 ■ Periodical Survey Periodical Survey has been carried out and the product is valid until Branch(Office): Jang saeng po Date: / Oct 20/8 **■** Periodical Survey Periodical Survey has been carried out and the product is valid until Branch(Office): Date: Surveyor: **■** Periodical Survey Periodical Survey has been carried out and the product is valid until Branch(Office): Date : \_\_\_\_\_ **■** Periodical Survey Periodical Survey has been carried out and the product is valid until

Note: The approval will be automatically suspended and the Certificate become invalid if not endorsed annually within 3 months after the anniversary date of this Certificate

Branch(Office):

Date:

Surveyor: