

# Certificate of Design Assessment

N. MAC185116PU/CDA

This is to certify that, at request of the Applicant, design plans and data for the products listed below have been examined against applicable sections of the Rules. This certificate is not a type approval certificate or a production control certificate and does not exempt the product from being tested in accordance with applicable RINA rules and procedures for its installation on board. It will remain valid until the expiring date and will automatically become invalid in case of, either changes in the applicable Rules or changes in the product carried out without RINA approval.

## DESCRIPTION

**Hammer Union (Butt Weld Type & Thread Type)**

## APPLICANT

**SANDONG METAL INDUSTRY CO., LTD.**  
#24-25, 2Sanupdanji 2-Gil, Waegwan-eub, Chilgok-gun  
Gyongsangbuk-do, Korea

## RULES

**RINA Rules Pt C, Ch 1, Sec 10**

Issued at **BUSAN** on **20 December 2016**

This Certificate is valid until **19 December 2021**

RINA



Young-Kwang KIM

This certificate consists of this page and 1 enclosure.

**Enclosure to Certificate of Design Assessment  
N. MAC185116PU/CDA**

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**Specification :**

- 1) Approval Range & Specification  
Refer to the Attachment #1.
  
- 2) Material
  - ASTM A105
  - ASTM A350 LF2
  - ASTM A29 / AISI 4130
  - KS D 3867 / SCM 440

**Documentation :**

Technical documentation identified with RINA approval number PUMC-10304 on 20 December 2016 including:

- Calculation sheet
- Technical specifications with drawing

**Condition for acceptance on board:**

The product is to be tested by the Manufacturer according to Part C, Ch 1, Sec 10 of RINA Rules in force.  
The product is to be surveyed by the Society during testing unless an alternative inspection scheme is agreed by the Society with the Manufacturer whereby the attendance of the Surveyor will not be required as indicated above.

**Validity:**

This product is covered under Certificate of Design Assessment (CDA) certificate No. MAC185116PU/CDA dated 20 December 2016. This CDA certificate expires December of 2021. It will remain valid for the 5 years from the date of issue or until the Rules or specification used in the assessment are revised (whichever occurs first).

Attachment #1

No.	Model No.	End Connection Type	Grade of Pressure (FIG)	Design Pressure (psi)	Thickness	Diameter (inch)
1	SMI-FIG100(BW)	BW	100	1,000	SCH80	2
2			100		SCH40	2
3			100		SCH40	3
4			100		SCH80	4
5			100		SCH40	4
6			100		SCH40	6
7			100		SCH80	8
8			100		SCH40	8
9	SMI-FIG200(BW)	BW	200	2,000	SCH80	1
10			200		SCH40	1
11			200		SCH80	1.5
12			200		SCH80	2
13			200		SCH40	2
14			200		SCH80	2.5
15			200		XXH	3
16			200		SCH80	3
17			200		SCH40	3
18			200		XXH	4
19			200		SCH160	4
20			200		SCH120	4
21			200		SCH80	4
22			200		SCH40	4
23			200		SCH160	5
24			200		SCH80	5
25			200		SCH40	5
26			200		SCH160	6
27			200		SCH80	6
28			200		SCH40	6
29			200		SCH80	8
30			200		SCH40	8
31			200		SCH80	10
32			200		SCH40	10
33	SMI-FIG206(BW)	BW	206	2,000	SCH40	1
34			206		XXH	3
35			206		SCH80	3
36			206		SCH40	3
37			206		XXH	4
38			206		SCH160	4
39			206		SCH120	4
40			206		SCH80	4
41			206		SCH40	4

YLS