



# Design Appraisal Document

Lloyd's Register EMEA  
Copenhagen Technical Support Office  
Strandvejen 104A  
DK-2900 Hellerup  
Denmark  
copenhagen-technical-support@lr.org

Date  
**14 May 2020**

Please quote this reference number on all future communications  
**M/I122189/2000261/JLJ**

## Machinery General Design Appraisal

Client : CC Jensen A/S, Svendborg, Denmark  
Manufacturer : CC Jensen A/S, Svendborg, Denmark  
Subject : Type HDU 15/25 – Offline Fine Filter

This Machinery General Design Appraisal is valid for a period of 5 years from the date of issue or until a change of the Rules, whichever comes first.

- The Documents listed in paragraph 1 of the appendix have been examined for compliance with **LR Rules and Regulations for the Classification of Ships July 2019 incorporating Notice No. 1, 2, 3 and 4, Part 5, Chapters 11, 12, 13 and 14** as applicable and have been assigned an appraisal status as indicated subject to the following:
- Product Description**

Makers Designation	:	CJC HDU 15/25
Class	:	III (piping)
Design Pressure	:	≤ 0.7 MPa
Design Temperature	:	≤ 60 °C
Function	:	Oil Fine Filtration System
- Comments**
  - Lloyd's Register must be advised of any design or material modifications. Failure to do so will render this general approval invalid.
  - Please observe that the requirements of the European Directive "The Marine Equipment Directive" will be applicable for installations on board all EU Flag vessels.

FINAL ACCEPTANCE OF ACTUAL ITEM(S) DEPEND(S) ON SATISFACTORY SURVEY AND TESTING

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- 3.3. The items referred to in this document are approved for installation on a ship which is classed by Lloyd's Register.
- 3.4. The filter dome is considered as a Class 3 pressure vessel according to Part 5 Chapter 11 1.5.3, although it is not subject to plan approval according to 1.6.1.
- 3.5. It is assumed that piping joints, valves, flanges and other fittings are suitable for the application. For details please refer to Part 5, Ch. 12, as they will be subject to inspection by the attending surveyor.
- 3.6. With reference to Part 5, Ch. 12, 4.2 concerning the material of the filter base, it has been noted that substantial positive functional experience has been recorded by the client and therefore the use of grey cast iron, GG20, has been accepted. Part 5, Ch. 12, 4.2.3 is to be considered for pipes, valves and fittings only.



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## Appendix

1. The documents listed below have been examined

Document No.	Rev.	Title	Status	Date
46 050 03-3 (2 sheets)	1	CJC Fine Filter Type HDU 15/25 Y Assembly Drawing + Parts List (b)	SI	23 Mar 2015
14 001 50-4	4	Daeksel for HDU 15/25 M2000	SI	23 Mar 2015
12 001 33-4	1	Stagbolt for HDU 15/25 M2000	SI	23 Mar 2015
1802302	A	Hus f.forvarmer indstik 500mm	SI	23 Mar 2015
1802111 (2 sheets)	A	Hus for HDU 15/25 M02 + 1/2" afg	SI	23 Mar 2015
7000641	-	Piping Diagram HDU 15/25	A	23 Mar 2015
7000642	-	Piping Diagram HDU 15/25 H1	A	23 Mar 2015
7000645	-	PI Legend	SI	23 Mar 2015

2. The documents listed below have been considered together with the submitted documents in the appraisal

Document No.	Rev.	Title
-	-	HDU 15/25 Offline Fine Filter Product Sheet
-	-	Design Specifications: E-mail 23/03/2015
-	1.1	CJC Filter Units – Piping Dimensions and Specification

### Appraisal Status Key

- A Approved - provided the arrangements are to the surveyor's satisfaction  
SI Retained as supporting documentation for information only

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