

Annexure I to Certificate No.- COC/API/CBE/2021/014
Job No.: 8118846028

Date : 16th June 2021
Page1 of 4

Conditions of Issue :

Qualification castings as per API 20A 2nd Edition, August 2017, Addendum 2, APRIL 2020 have been produced, tested, and evaluated by the casting supplier and witnessed by the Surveyor to TUV India Pvt. Ltd. in order to establish qualification for a range of products listed in this Annexure.

The Manufacturing Procedure Specification (MPS) files as referenced below, submitted by the manufacturer, have been reviewed.

Manufacturing Procedure: **ACS/MPS-01/API20A/CSL3/B/Rev 00/Dt.10.9.20**
Specification (MPS) ref.

Verification of Qualification Test Records : **ACS/QTR/API20A/AS/01 Rev00**
(QTR) nos.

This Certificate of Compliance is issued and is applicable only to the firm stated on above referred COC, and for the specified product, and/or the manufacturing plant stated and is Non-Transferable.

Welding shall be performed using weld procedures qualified in accordance with ASME BPVC, Section IX for CSL-3.

This statement of compliance is valid only for those products which are covered in the QTR within the limits of CSL qualification.

This Certificate of Compliance is valid for 3 years from date of issue, i.e. till 14.05.2024 subject to satisfactory annual surveillance audits and within the limits of qualification of production castings for each CSL, and subject to manufacturer maintaining the same production processes including metal refining steps, maintaining the same process control variables, design and maintenance of patterns, same processes of inspection, quality control, marking, traceability and record retention (10 years) as per the requirements of API 20A.

This COC Does not Constitute Certification to API Monogram Program as per API Q1

Place : Mumbai, India


Jayprakash Hiremath
AVP- PED, ASME & Special services
TUV India Pvt. Ltd.



Annexure I to Certificate No.- COC/API/CBE/2021/014
JobNo.: 8118846028

Date : 16th June 2021

TÜV NORD GROUP

Page 2 of 4

Reference Standard	API 20A- 2nd Edition, August 2017, Addendum 2, APRIL. 2020	
API Material Group/ CSL Level	Group B- Low Alloy Steel /CSL-1,2&3	
Manufacturing Procedure Specification	ACS/MPS-01/API20A/CSL3/B/Rev 00/Dt.10.9.20	
Manufacturing Doc Ref	ACS/MQR-01/API20A/CSL3/B/Rev 00/Dt.14.5.21	
ASTM Ref.	ASTM A487 Gr.4D(UNS-J13047)	
Qualification Test Record No.	ACS/QTR/API20A/AS/01 Rev00	
Tested and Qualified Weight Range		
Products and Manufacturing Processes	Tested Casting Weight Pounds (Kgs)	Qualified Casting weight Pounds(Kgs)
Body GV,MOD M,2 9/16”3/5M FE Steel Castings and Co2 sand Moulded Process	233.02(105.70)	1 – 499 (1 -226)



Jayprakash Hiremath
AVP- PED, ASME & Special services.
TUV India Pvt. Ltd.

Annexure I to Certificate No.- COC/API/CBE/2021/014
JobNo.: 8118846028

Date : 16th June 2021
Page 3 of 4

Table 2—Material Groups

Material Group	Description
Group A	Carbon steels
Group B	Low alloy steels
Group C	Stainless steels (other than duplex)
Group D	Duplex stainless steels
Group E	CRA

Table 1—As-cast Weight Range

CSL	As-cast Weight in Pounds (kilogram)			
	1-499	500-2,499	2,500-9,999	10,000+
CSL-1	1 Qualification			
CSL-2	1 Qualification		1 Qualification	
CSL-3	1 Qualification	1 Qualification	1 Qualification	1 Qualification
CSL-4	Weights are not applicable for CSL 4. Each casting shall be individually qualified.			

Table 3—Casting Weld Repair Limitations

CSL	% Surface Area	% Wall Thickness
CSL-1	50 %	50 %
CSL-2	25 %	25 %
CSL-3	20 %	20 %
CSL-4	10 %	10 %

Annexure I to Certificate No.- COC/API/CBE/2021/014
JobNo.: 8118846028

Date : 16th June 2021

Page 4 of 4

Table 4—Guidance for Qualification Examination/Testing Requirements

CSL	Section References									
	Visual	Inspection	Hardness	Surface	Volumetric NDE	Mechanical	Micro-structure	Sacrificial Casting	Chemistry	Additional Testing
CSL-1	4.5.2	4.5.3	4.5.4	—	—	4.5.6	—	—	4.5.8	4.5.9.3 Group D
CSL-2	4.5.2	4.5.3	4.5.4	4.5.5.1 4.5.5.2	—	4.5.6	—	—	4.5.8	4.5.9.3 Group D
CSL-3	4.5.2	4.5.3	4.5.4	4.5.5.1 4.5.5.2	4.5.5.3	4.5.6	4.5.7	—	4.5.8	4.5.9.3 Group D
CSL-4	4.5.2	4.5.3	4.5.4	4.5.5.1 4.5.5.2	4.5.5.3	4.5.6	4.5.7	4.5.9.2	4.5.8	4.5.9.3 Group D

Table 9—Limits of CSL Production Casting Summary

Requirement	Ref.	CSL 1	CSL 2	CSL 3	CSL-4
ASTM keel block	Figure 4, Figure 5	X	X	—	—
Equivalent round or integral test specimen	Figure 1, Figure 2, Figure 3	X	X	X	—
Sacrificial casting	4.5.9.2	—	—	—	X
Change in material group	5.7.1.1	X	X	X	X
Revision or new pattern	5.7.1.2	X	X	X	X
Pattern is re-rigged	5.7.1.3	X	X	X	X
Change in risers or padding	5.7.1.3	X	X	X	X
Change in external chills	5.7.1.3	X	X	X	X
As-cast weight range class	5.7.2.2	—	X	X	X
Casting practice	5.7.2.3	—	X	X	X
Chemistry tolerance outside the UNS range by greater than 15 %	5.7.4.3	—	—	—	X
Change in melt practice	5.7.3.2	—	—	X	X
Material specification/grade	5.7.4.2	—	—	—	X

NOTE: This table provides a matrix of requirements and should be used as a reference only since it may not include all requirements.

