## **QUALIFICATION TEST CERTIFICATE**

Test Cert. No.:	API20A-2024-01	Cert. Date:	18 <sup>th</sup> Dec. 2024		
Project Name:	API Spec 20A-3rd Ed. – Casting Qualification				
Customer Name:	Alchemy Precision Cast Pvt. Ltd.				
Customer Address:	Plot No. PAP-SH-107/1, Chakan Industrial Area, Phase II, Village Shinde Wasuli, Tal. Khed, Dist. Pune 410507. Maharashtra, INDIA.				
MPS Number:	MPS-20A-CSL2A- WCB	Rev. No.:	00		
CQR Number:	CQR-20A-CSL2A- WCB	Rev. No: 00			
Part Description:	DN300X250 RB CL 600 TV2 BODY	Heat No./Heat Treat Lot No.:	C1391 00025/24-25		
Material Grade:	ASTM A216:2021 Gr. WCB	Material Group:	Group A – Carbon Steel		
CSL Level:	CSL-2	As Cast Weight in Kgs:	320 Kgs.		
Qualification Casting Weld Repair Limitation	25% of total Internal and External Surface Area	Wall Thickness Weld Repair Limitation:	25% of Wall Thickness		
Actual Weld Repair on Qualification Casting	Not Performed neither on Internal nor on Surface Area	Actual Weld Repair on Qualification Casting	Not Performed on Wall Thickness		
Qualification Scaling:					
Qualification Grade:	Group A – Carbon Steel	CSL Level;	CSL 1 CSL2		
Weld Repair Limitation Qualified:	25% of total Internal and External Surface Area 25% of Wall Thickness	Weight Range Qualified:	CSL 1 – All Weight Ranges (01-4538+ Kgs) CSL 2 – (01-226 and 227- 1134 Kgs.)		
Manufacturing Proces	s Specification / Castir	g Qualification Record	<b>Test Controls:</b>		
Visual Inspection		100% Performed a	100% Performed and Acceptable		
Dimensional Inspection		100% Performed and Acceptable			
Hardness Inspection		100% Performed and Acceptable			
Surface NDE Inspection - MPI		100% Accessible Area Performed and Acceptable			
Volumetric NDE Inspection - RT		100% Accessible Area Performed and Acceptable			
Chemistry Check		Heat Basis Performed and Acceptable			
Mechanical Testing – T	ensile, Hardness	Heat Treat Lot Basis Performed and Acceptable			
Mechanical Testing - Impact		Heat Treat Lot Basis Performed and Acceptable			
Microstructure – Grain Size		Heat Treat Lot Basis Performed and Acceptable			
Macrostructures		Heat Treat Lot Basis Performed and Acceptable			



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This certificate of qualification is issued upon the request of manufacturer to confirm that the manufacturer has demonstrated the conformance to the Casting Qualification Requirement (CQR) as per API Spec 20A, 3<sup>rd</sup> Ed., July 2024, Carbon Steel, Alloy Steel, Stainless Steel, and Nickel Base Alloy Castings for Use in the Petroleum and Natural Gas Industry to the Casting Specification Level (CSL), Material Group, Weight Range Qualification and Weld Repair Limitations.

The following table defines the limits of CSL Qualifications Summary:

Requirement	API Spec 20A, 3 <sup>rd</sup> Ed. Ref.	CSL-1	CSL-2	CSL-3
Change in material Group	4.8.1	Х	Х	Х
As-cast weight range class	4.8.2	_	Х	Х
Change in Melt-refining practice	4.8.3	_	Х	Х

This certificate shall be referred in accordance with TUVR Inspection Report No. TRI/MUM/ALCH/ALCH/IR-2024-05437 dated 18<sup>th</sup> Dec. 2024 scope, inspection, testing witness/review, and verifications. This certificate does not exempt the manufacturer from its responsibility to ensure that its products are manufactured, inspected, tested, verified and certified in conformance with API Spec. 20A, 3<sup>rd</sup> Edition at all the time.

Place: Pune, Maharashtra, India Date of Issue: 18/12/2024 Date of Validity\*: 17/12/2027

\*Subject to the continued conformance and qualification updated as necessary to API Spec 20A, 3<sup>rd</sup> Ed.



