

PUBLIC QUALITY EVIDENCE SAMPLE | PMI / Alloy Verification | Material Traceability | Calibrated Instrument | Inspection Records

Customer	CONFIDENTIAL / REDACTED	Report No.	YK-PMI-SAMPLE-001	Revision	1 / Public Sample
Project / Purpose	Website Quality Evidence - PMI Report Format	PO / Contract No.	[REDACTED]	Inspection Date	18-Aug-2026
Manufacturer	CHINA YINKE VALVE CO., LIMITED	PMI Procedure	YK-QC-PMI-[CONTROLLED]	Reference	API RP 578, 3rd Ed. (Oct. 2020)

1. VALVE IDENTIFICATION & MATERIAL VERIFICATION SCOPE

Valve Type	Gate Valve, Bolted Bonnet, OS&Y	Size / Rating	NPS 4 / ASME Class 300	Design Standard	API 600
End Connection	RF Flanged	Specified Body Material	ASTM A351 CF8M	Valve Serial No.	[REDACTED]
Body Heat No.	[REDACTED]	Bonnet Heat No.	[REDACTED]	MTC / CMTR No.	[REDACTED]
Verification Scope	Body, Bonnet, Wedge, Stem, Seat Rings	PMI Extent	Per approved PO / ITP / PMI procedure	Surface Condition	Clean metallic surface at test spot

2. PMI EQUIPMENT, METHOD & CONTROL

Method	Handheld X-ray Fluorescence (XRF)	Instrument ID	[REDACTED]	Calibration Certificate	[REDACTED / CONTROLLED]
Analyzer Range	Alloy identification / major elements	Pre-use Verification	Reference alloy check completed	Instrument Status	Within calibration validity
Operator	Qualified QC / PMI personnel	Test Location	Accessible parent-metal surface	Recording	Elemental reading + alloy match + component ID

TECHNICAL NOTE: Handheld XRF is suitable for rapid alloy verification of major alloying elements such as Cr, Ni and Mo. Carbon is not directly measured by standard handheld XRF. Where carbon content or low-alloy grade differentiation is critical, a suitable complementary method (for example OES/LIBS or laboratory chemistry) and document traceability should be used as required by the approved procedure.

3. ILLUSTRATIVE PMI READING SUMMARY

Component / Location	Specified Material	Cr %	Ni %	Mo %	Other / Key Reading	Alloy Match	Status
Body - accessible boss	ASTM A351 CF8M	18.7	10.4	2.22	Mn 1.15; Fe balance	Consistent with CF8M	SAMPLE MATCH
Bonnet - outer surface	ASTM A351 CF8M	18.9	10.2	2.18	Mn 1.08; Fe balance	Consistent with CF8M	SAMPLE MATCH
Wedge - accessible area	ASTM A351 CF8M	18.5	10.6	2.26	Mn 1.12; Fe balance	Consistent with CF8M	SAMPLE MATCH
Stem - exposed section	ASTM A182 F316	17.3	10.5	2.11	Mn 1.03; Fe balance	Consistent with F316	SAMPLE MATCH
Seat Ring A	ASTM A182 F316	17.1	10.8	2.08	Mn 1.01; Fe balance	Consistent with F316	SAMPLE MATCH
Seat Ring B	ASTM A182 F316	17.2	10.7	2.10	Mn 1.06; Fe balance	Consistent with F316	SAMPLE MATCH

SAMPLE RECORD NOTE: The readings above are illustrative values showing the report format only. They do not certify an actual valve or material heat. Actual production PMI records are generated from controlled inspections and linked to component identification, heat numbers, MTC/CMTR and instrument records.

	POSITIVE MATERIAL IDENTIFICATION (PMI) REPORT Alloy Verification & Traceability Record - Public Sample	WEBSITE SAMPLE CUSTOMER DATA REDACTED Page 2 of 2
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4. ACCEPTANCE & EVALUATION

Acceptance Basis	Specified material grade + approved PMI procedure	Evaluation Method	Compare alloying elements / analyzer grade match	Disposition	MATCH / HOLD / NCR as applicable
Positive Match	Reading consistent with specified alloy family / grade	Mismatch	Segregate component and initiate controlled review	Retest	Required after surface correction or disputed result
MTC Correlation	PMI supports, but does not replace, material certification	Traceability	Component ID -> Heat No. -> MTC/CMTR -> PMI record	Final Release	QC approval after all required checks complete

5. PRE-TEST / INSPECTION VERIFICATION CHECKLIST

Item	Verification Requirement	Status	Record / Reference
01	PO / datasheet / MTC material requirement reviewed before PMI	TO BE RECORDED	Actual order QC record
02	Instrument identification and calibration validity verified	TO BE RECORDED	Calibration certificate
03	Reference alloy / standardization check completed before inspection	TO BE RECORDED	PMI instrument check record
04	Test location cleaned to expose representative parent metal	TO BE RECORDED	Inspection record / photo if required
05	Each required component linked to valve ID / heat number / location	TO BE RECORDED	Traceability record
06	Readings compared with specified alloy and approved acceptance criteria	TO BE RECORDED	PMI report
07	Any mismatch placed on HOLD and escalated through NCR / technical review	TO BE RECORDED	NCR if applicable
08	Final PMI status reviewed before valve QC release	TO BE RECORDED	QC release record

6. DOCUMENT & EVIDENCE CROSS-REFERENCE

No.	Supporting Record	Reference No.	Traceability / Purpose	Issue Status
1	Material Test Certificate / CMTR	[REDACTED / CONTROLLED]	Links component material grade and heat number to certified chemistry	Available with applicable order / audit
2	PMI Analyzer Calibration Certificate	[REDACTED / CONTROLLED]	Instrument calibration traceability	Available with applicable order / audit
3	Approved PMI Procedure	YK-QC-PMI-[CONTROLLED]	Defines method, surface prep, acceptance, retest and disposition	Controlled internal / customer review
4	Inspection & Test Plan / QCP	[REDACTED / CONTROLLED]	Defines PMI extent and Hold / Witness / Review points	Available with applicable order / audit
5	PMI Photographs / Data Log	[REDACTED / CONTROLLED]	Optional evidence of component, test location and analyzer screen	When required by ITP / customer

7. INSPECTION STATUS & RELEASE AUTHORIZATION

PMI Operator	QC Inspector	Customer / TPI Witness	Final Approval
Name: _____ Sign: _____ Date: _____	Name: _____ Sign: _____ Date: _____	Name: _____ Sign: _____ Date: _____	Name: _____ Sign: _____ Date: _____

ACTUAL REPORT CERTIFICATION: Production PMI records are released only after QC confirms the required components were checked to the approved procedure and remain traceable to instrument and material records.

PUBLIC WEBSITE SAMPLE - NOT AN ACTUAL PRODUCT PMI CERTIFICATE. Redacted website sample. Chemistry values are illustrative only; actual reports use controlled, traceable QC records.