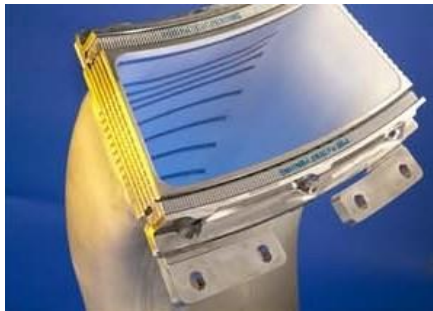


Supplier ITPs Submittal Requirements

Initial release: Nov. 9, 2018 Rev A
Updated: December 4, 2020 Rev D



- Inspection and Test Plan (ITP) is PSM's method for assuring Inspection, Qualification, Process verification and Compliance to final requirements.
- I&TPs are created based on the Purchase Order Scope of Work, component complexity and Supplier history.
- All documentation is to be submitted by the Supplier in one single package, which will be reviewed by PSM Quality, for completeness, accuracy, and conformance to requirements prior to shipment. FAI packages are to be submitted separately. Files should be named to identify their content.
- ITP's are controlled by PSM and not Supplier specific.
- ITP's Process Requirements section is to be filled out completely.
- ITP's are to be delivered for each order.

- Always call the PSM Quality department if you have any questions, or concerns.
- Always put the I&TP coversheet and Serial Number List in the Crate with hardware for tracking purposes.
- The following pages provide instructions that must be adhered to, for successful submittals to PSM.
- ITP will replace ADP in the near future.
- Below are ITP's guidelines.
- The incentive in most cases is to complete each phase in a controlled disciplined approach. The objective is to complete each phase, and to eliminate redundant documentation. Once the production phase is reached only a Certification on Conformance (CoC) will be required.

Overview of an Inspection & Test Plan



		Ansaldo Energia		Doc No.: AD000XXXX				Doc Revision: 00		EC: N/A	
				Approved Date: 4-Jan-19		Page: 1 of 1		Security Level: Shared		Language: EN	
				Inspection & Test Plan							
Part Description				Part Code	Part Class	Level	Part Numbers				
2nd Stage Turbine Vane Casting				CW	1	Final	6522010				
Inspection & Test Plan				Qualification Status Ref. PSM 530					Quality Record Type	Q-Record Number or Confirmation Stamp	
No.	Description	Reference Document No.	FAIR		VPR		Production				
			Rqmt	% or Qty	Rqmt	% or Qty	Rqmt	% or Qty			
Casting				QR - Quality Record, H - Hold point, W - Witness point					PO # / Line Item		
10	Casting Process Qualification	PSM 200 / PSM 354	H / QR	100%	QR	As req'd			List PAR #		
20	Weld Repair Qualification	PSM 200 / PSM 215	QR	1	QR	As req'd			Test Report		
30	Mechanical Tests Note 8	PSM 109 / PSM 354	QR	1	QR	As req'd			Test Report		
40	Metallurgical Evaluation Note 8	PSM 109 / PSM 354	QR	1	QR	As req'd			Lab Report		
50	Heat Treat Qualification Note 8	AD00005176	QR	1	QR	As req'd			List PAR #		
60	Liquid Penetrant Qualification	ASTM E 1417	QR	1	QR	As req'd			List PAR #		
70	Radiographic Process Qualification	ASTM E 1742	QR	1	QR	As req'd			List PAR #		
100	Material Certificatons / Master Heat	PSM 109	QR	100%	CofC	-	CofC	-	Certification Report		
200	Grain Size Inspection	PSM 354	QR	100%	CofC	-	CofC	-	Photos		
300	Heat Treat Certification Note 8	PSM 109	QR	100%	CofC	-	CofC	-	Heat Treat Chart		
400	Weld Repair (As required)	PSM 354 / 200 / 215	QR	As req'd	Stamp	As req'd	Stamp	As req'd	Record Results		
500	Visual Inspection	PSM 354	QR	100%	CofC	-	CofC	-	Record Results		
600	Liquid Penetrant Inspection	PSM 354	QR	100%	CofC	-	CofC	-	NDT Certs		
700	Radiographic Inspection	PSM 354	QR	100%	CofC	-	CofC	-	NDT Certs		
800	Dimensional Inspect	PSM 221	W / QR	100%	CTQ	As req'd	CTQ	As req'd	Results & Methods		
900	Part Marking	Drawing / AS478	QR	100%	CofC	-	CofC	-	Confirm Method		
1000	Serial Number List with Master Heat lot, or Heat Lot	PSM 500	QR	100%	QR	100%	QR	100%	In Excel Format		
1100	Packaging, Shipping & Handling	PSM 515	QR	100%	CofC	-	CofC	-	Photos		
1200	Applicable NCR, Deviation/Waivers	PSM 500	-	As req'd	-	As req'd	-	As req'd			
1300	Documentation Package		H	1	H	1	H	1	Record PO #, Line Item, Rev. Ltr & Qty		
This Inspection and test plan does not relieve the supplier from their obligation to meet all requirements as stipulated in the drawings, specifications and purchase order.											
Certificate of Conformance				By signing this document, supplier certifies that this document is completed accurately to the best of their knowledge.				PSM Acceptance			
Submitted by (supplier):		Date:				Accepted by (PSM):		Date:			

ITP Information



Header Information

	Ansaldo Energia	Doc No.: AD000XXXX	Doc Revision: 00	EC: N/A	
		Approved Date: 4-Jan-19	Page: 1 of 1	Security Level: Shared	Language: EN

Inspection & Test Plan

Part Description	Part Code	Part Class	Level	Part Numbers
2nd Stage Turbine Vane Casting	CW	1	Final	6522010

Qualification Req. information

Inspection & Test Plan			Qualification Status Ref. PSM 530						Quality Record Type	Q-Record Number or Confirmation Stamp
No.	Description	Reference Document No.	FAIR		VPR		Production			
			Rqmt	% or Qty	Rqmt	% or Qty	Rqmt	% or Qty		
	Casting		QR - Quality Record, H - Hold point, W - Witness point						PO # / Line Item	
10	Casting Process Qualification	PSM 200 / PSM 354	H / QR	100%	QR	As req'd			List PAR #	
20	Weld Repair Qualification	PSM 200 / PSM 215	QR	1	QR	As req'd			Test Report	
30	Mechanical Tests Note 8	PSM 109 / PSM 354	QR	1	QR	As req'd			Test Report	
40	Metallurgical Evaluation Note 8	PSM 109 / PSM 354	QR	1	QR	As req'd			Lab Report	
50	Heat Treat Qualification Note 8	AD00005176	QR	1	QR	As req'd			List PAR #	
60	Liquid Penetrant Qualification	ASTM E 1417	QR	1	QR	As req'd			List PAR #	
70	Radiographic Process Qualification	ASTM E 1742	QR	1	QR	As req'd			List PAR #	
100	Material Certificatons / Master Heat	PSM 109	QR	100%	CofC	-	CofC	-	Certification Report	
200	Grain Size Inspection	PSM 354	QR	100%	CofC	-	CofC	-	Photos	
300	Heat Treat Certification Note 8	PSM 109	QR	100%	CofC	-	CofC	-	Heat Treat Chart	
400	Weld Repair (As required)	PSM 354 / 200 / 215	QR	As req'd	Stamp	As req'd	Stamp	As req'd	Record Results	
500	Visual Inspection	PSM 354	QR	100%	CofC	-	CofC	-	Record Results	
600	Liquid Penetrant Inspection	PSM 354	QR	100%	CofC	-	CofC	-	NDT Certs	
700	Radiographic Inspection	PSM 354	QR	100%	CofC	-	CofC	-	NDT Certs	
800	Dimensional Inspect	PSM 221	W / QR	100%	CTQ	As req'd	CTQ	As req'd	Results & Methods	
900	Part Marking	Drawing / AS478	QR	100%	CofC	-	CofC	-	Confirm Method	
1000	Serial Number List with Master Heat lot, or Heat Lot	PSM 500	QR	100%	QR	100%	QR	100%	In Excel Format	
1100	Packaging, Shipping & Handling	PSM 515	QR	100%	CofC	-	CofC	-	Photos	
1200	Applicable NCR, Deviation/Waivers	PSM 500	-	As req'd	-	As req'd	-	As req'd		
1300	Documentation Package		H	1	H	1	H	1	Record PO #, Line Item, Rev. Ltr & Qty	

Process Req. information

This Inspection and test plan does not relieve the supplier from their obligation to meet all requirements as stipulated in the drawings, specifications and purchase order.

Certificate of Conformance		By signing this document, supplier certifies that this document is completed accurately to the best of their knowledge.	PSM Acceptance	
Submitted by (supplier):	Date		Accepted by (PSM):	Date

I&TPs Header Information



Header Information

	Ansaldo Energia	Doc No.: AD000XXXX		Doc Revision:	EC:
		Approved Date: 4-Jan-19		Page: 1 of 1	00
		Security Level: Shared		Language: EN	
Inspection & Test Plan					
Part Description		Part Code	Part Class	Level	Part Numbers
2nd Stage Turbine Vane Casting		CW	1	Final	6522010

This section “Header Information” contains detail information that applies to this I&TP and to the part related. It is only informative and no action is required. **The exception being Generic I&TP issued for Class 4 hardware (Ref. PSM 530). See Pages 17, 18 & 21.**

Header information such as; PSM Document No., Document Revision, Engineering Change, Approved date. Part Description, Part Code, Part Class and Part numbers that this I&TP applies to will be completed with specific information. See Example below:

	Ansaldo Energia	Doc No.: AD00001402		Doc Revision:	EC:	
		Approved Date: Jun-19		Page: 1 of 1	00	031366
		Security Level: Shared		Language: EN		
Inspection & Test Plan						
Part Description		Part Code	Part Class	Level	Part Numbers	
Disk, Compressor Stage 17		AGW	3	SF1	7336967-101	
Inspection & Test Plan						
		Qualification Status Ref. PSM 530				Record Type / Remarks
		<input type="checkbox"/> FAIR <input type="checkbox"/> VPR <input type="checkbox"/> Production				
No.	Description	Reference Document No.	Rqmt	% or Qty	Rqmt	% or Qty

Note: Serialization is comprise of the 4 digit Vendor Code and part code. The Part Code is listed in the Header (Vendor code is not).
Contact PSM Quality if you do not know your 4 digit Vendor Code. See PSM 500 for serial number requirements

ITP Sectional Information (Qualification/Process)



Qualification and Process Requirements are separated and noted by a double line that divides both sections of the requirements

Qualification Requirements are only conducted once and they normally have a direct link to a design specification in order to meet design/performance and product life. It is a way to assure components and process specs are established and in control.

Process Requirements need to be documented for each order showing process document/control information to be supplied with each purchase order.

Qualification
Req.
information

Process
Req.
information

Inspection & Test Plan			Qualification Status						Quality Record	Q-Record
No.	Description	Reference Document No.	Qualification Status Ref. PSM 530						Type	Number or Confirmation Stamp
			FAIR		VPR		Production			
			Rqmt	% or Qty	Rqmt	% or Qty	Rqmt	% or Qty		
Casting			QR - Quality Record, H - Hold point, W - Witness point						PO # / Line Item	
10	Casting Process Qualification	PSM 200 / PSM 354	H / QR	100%	QR	As req'd			List PAR #	
20	Weld Repair Qualification	PSM 200 / PSM 215	QR	1	QR	As req'd			Test Report	
30	Mechanical Tests Note 8	PSM 109 / PSM 354	QR	1	QR	As req'd			Test Report	
40	Metallurgical Evaluation Note 8	PSM 109 / PSM 354	QR	1	QR	As req'd			Lab Report	
50	Heat Treat Qualification Note 8	AD00005176	QR	1	QR	As req'd			List PAR #	
60	Liquid Penetrant Qualification	ASTM E 1417	QR	1	QR	As req'd			List PAR #	
70	Radiographic Process Qualification	ASTM E 1742	QR	1	QR	As req'd			List PAR #	
100	Material Certificatons / Master Heat	PSM 109	QR	100%	CofC	-	CofC	-	Certification Report	
200	Grain Size Inspection	PSM 354	QR	100%	CofC	-	CofC	-	Photos	
300	Heat Treat Certification Note 8	PSM 109	QR	100%	CofC	-	CofC	-	Heat Treat Chart	
400	Weld Repair (As required)	PSM 354 / 200 / 215	QR	As req'd	Stamp	As req'd	Stamp	As req'd	Record Results	
500	Visual Inspection	PSM 354	QR	100%	CofC	-	CofC	-	Record Results	
600	Liquid Penetrant Inspection	PSM 354	QR	100%	CofC	-	CofC	-	NDT Certs	
700	Radiographic Inspection	PSM 354	QR	100%	CofC	-	CofC	-	NDT Certs	
800	Dimensional Inspect	PSM 221	W / QR	100%	CTQ	As req'd	CTQ	As req'd	Results & Methods	
900	Part Marking	Drawing / AS478	QR	100%	CofC	-	CofC	-	Confirm Method	
1000	Serial Number List with Master Heat lot, or Heat Lot	PSM 500	QR	100%	QR	100%	QR	100%	In Excel Format	
1100	Packaging, Shipping & Handling	PSM 515	QR	100%	CofC	-	CofC	-	Photos	
1200	Applicable NCR, Deviation/Waivers	PSM 500	-	As req'd	-	As req'd	-	As req'd		
1300	Documentation Package		H	1	H	1	H	1	Record PO #, Line Item, Rev. Ltr & Qty	
This Inspection and test plan does not relieve the supplier from their obligation to meet all requirements as stipulated in the drawings, specifications and purchase order.										
Certificate of Conformance			By signing this document, supplier certifies that this document is completed accurately to the best of their knowledge.			PSM Acceptance				
Submitted by (supplier):	Date		Accepted by (PSM):			Date				

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ITP Sectional Information

Qualification and Process requirements are separated by a double line that divides both sections of the requirements.

Qualification and Process Requirements are described in three sections horizontal:

1. Inspection & Test Plan, 2. Qualification Status and 3. Quality Records.

To each section (1, 2, 3) vertical Requirements are identified for Qualification/Process descriptions, status and records necessary to become qualified and approved.

Qualification Req. information

Process Req. information

Inspection & Test Plan			Qualification Status						Quality Record		Q-Record Number or Confirmation Stamp
No.	Description	Reference Document N°	Qualification Status Ref. PSM 530						Type		
			FAIR		VFFS		Production				
			Rqmt	% or Qty	Rqmt	% or Qty	Rqmt	% or Qty			
	Casting		QR - Quality Record, H - Hold point, W - Witness point						PO # / Line Item		
10	Casting Process Qualification	PSM 200 / PSM 354	H / QR	100%	QR	As req'd			List PAR #		
20	Weld Repair Qualification	PSM 200 / PSM 215	QR	1	QR	As req'd			Test Report		
30	Mechanical Tests Note 8	PSM 109 / PSM 354	QR	1	QR	As req'd			Test Report		
40	Metallurgical Evaluation Note 8	PSM 109 / PSM 354	QR	1	QR	As req'd			Lab Report		
50	Heat Treat Qualification Note 8	AD00005176	QR	1	QR	As req'd			List PAR #		
60	Liquid Penetrant Qualification	ASTM E 1417	QR	1	QR	As req'd			List PAR #		
70	Radiographic Process Qualification	ASTM E 1742	QR	1	QR	As req'd			List PAR #		
100	Material Certificatons / Master Heat	PSM 109	QR	100%	CofC	-	CofC	-	Certification Report		
200	Grain Size Inspection	PSM 354	QR	100%	CofC	-	CofC	-	Photos		
300	Heat Treat Certification Note 8	PSM 109	QR	100%	CofC	-	CofC	-	Heat Treat Chart		
400	Weld Repair (As required)	PSM 354 / 200 / 215	QR	As req'd	Stamp	As req'd	Stamp	As req'd	Record Results		
500	Visual Inspection	PSM 354	QR	100%	CofC	-	CofC	-	Record Results		
600	Liquid Penetrant Inspection	PSM 354	QR	100%	CofC	-	CofC	-	NDT Certs		
700	Radiographic Inspection	PSM 354	QR	100%	CofC	-	CofC	-	NDT Certs		
800	Dimensional Inspect	PSM 221	W / QR	100%	CTQ	As req'd	CTQ	As req'd	Results & Methods		
900	Part Marking	Drawing / AS478	QR	100%	CofC	-	CofC	-	Confirm Method		
1000	Serial Number List with Master Heat lot, or Heat Lot	PSM 500	QR	100%	QR	100%	QR	100%	In Excel Format		
1100	Packaging, Shipping & Handling	PSM 515	QR	100%	CofC	-	CofC	-	Photos		
1200	Applicable NCR, Deviation/Waivers	PSM 500	-	As req'd	-	As req'd	-	As req'd			
1300	Documentation Package		H	1	H	1	H	1	Record PO #, Line Item, Rev. Ltr & Qty		
This Inspection and test plan does not relieve the supplier from their obligation to meet all requirements as stipulated in the drawings, specifications and purchase order.											
Certificate of Conformance			By signing this document, supplier certifies that this document is completed accurately to the best of their knowledge.				PSM Acceptance				
Submitted by (supplier):	Date		Accepted by (PSM):				Date				

I&TPs Qualification Information

Qualification
Req.
information

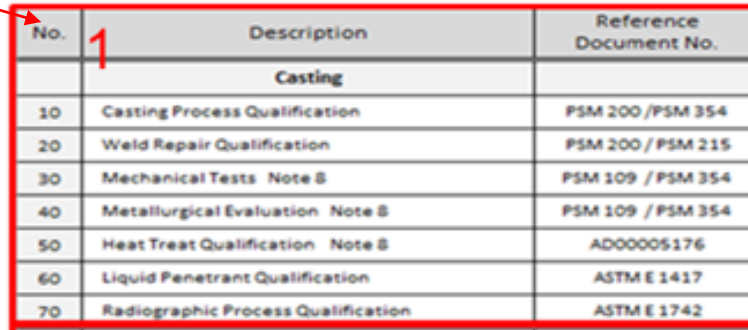
Inspection & Test Plan			Qualification Status						Ref. PSM 530	Quality Record	Q-Record
No.	Description	Reference Document No.	FAIR		VPR		Production		Type	Number or Confirmation Stamp	
			Rqmt	% or Qty	Rqmt	% or Qty	Rqmt	% or Qty			
Casting			QR - Quality Record, H - Hold point, W - Witness point						PO # / Line Item		
10	Casting Process Qualification	PSM 200 / PSM 354	H / QR	100%	QR	As req'd			List PAR #		
20	Weld Repair Qualification	PSM 200 / PSM 215	QR	1	QR	As req'd			Test Report		
30	Mechanical Tests Note B	PSM 109 / PSM 354	QR	1	QR	As req'd			Test Report		
40	Metallurgical Evaluation Note B	PSM 109 / PSM 354	QR	1	QR	As req'd			Lab Report		
50	Heat Treat Qualification Note B	AD00005176	QR	1	QR	As req'd			List PAR #		
60	Liquid Penetrant Qualification	ASTM E 1417	QR	1	QR	As req'd			List PAR #		
70	Radiographic Process Qualification	ASTM E 1742	QR	1	QR	As req'd			List PAR #		

Qualification Requirements are divided into three main section:

1. Inspection & Test Plan (Always “X” the status of the hardware when submitting.)
 - No.:
 - Description:
 - Reference Document:
2. Qualification Status (Always “X” the status of the hardware when submitting.)
 - FAIR
 - QPR/VPR
 - Production
3. Quality Record
 - Quality Record Type
 - Q-Record Number of Confirmation Stamp

Qualification Information

Qualification
Req.
information



No.	Description	Reference Document No.
1	Casting	
10	Casting Process Qualification	PSM 200 / PSM 354
20	Weld Repair Qualification	PSM 200 / PSM 215
30	Mechanical Tests Note B	PSM 109 / PSM 354
40	Metallurgical Evaluation Note B	PSM 109 / PSM 354
50	Heat Treat Qualification Note B	AD00005176
60	Liquid Penetrant Qualification	ASTM E 1417
70	Radiographic Process Qualification	ASTM E 1742

1. Inspection & Test Plan

- No.: The sequence of operations or qualification requirements needed for approval.
- Description: of the qualification needed.
- Reference Document: Specification to meet in order to become qualified.
- Note: When a PSM Specification is listed in the I&T plan and it is not on the drawing, the flow down requirement originates with the governing specification PSM 500 & PSM 210.

Qualification Information



Inspection & Test Plan			Qualification Status Ref. PSM 530						Quality Record Type	Q-Record Number or Confirmation Stamp
No.	Description	Reference Document No.	FAIR		VPR		Production			
			Rqmt	% or Qty	Rqmt	% or Qty	Rqmt	% or Qty		
	Casting		QR - Quality Record, H - Hold point, W - Witness point						PO # / Line Item	
10	Casting Process Qualification	PSM 200 /PSM 354	H / QR	100%	QR	As req'd			List PAR #	
20	Weld Repair Qualification	PSM 200 / PSM 215	QR	1	QR	As req'd			Test Report	
30	Mechanical Tests Note 8	PSM 109 / PSM 354	QR	1	QR	As req'd			Test Report	
40	Metallurgical Evaluation Note 8	PSM 109 / PSM 354	QR	1	QR	As req'd			Lab Report	
50	Heat Treat Qualification Note 8	AD00005176	QR	1	QR	As req'd			List PAR #	
60	Liquid Penetrant Qualification	ASTM E 1417	QR	1	QR	As req'd			List PAR #	
70	Radiographic Process Qualification	ASTM E 1742	QR	1	QR	As req'd			List PAR #	

2. Qualification Status

This area is managed by the supplier and PSM in order to understand what is required in the Qualification process.

- FAIR: Section shows Requirement and % or Qty to be produced for a FAIR.
- Conditional Qualification: used after FAIR parts has been in controlled and approved.
- (Conditional Qualification is used to dial in the process after the first lot, but prior to Production).
- Production- Requirements have been approved and ready for full production.

* QR: Quality Record Information to be recorded

* H: Hold Point are used to Hold product until further noticed example waiting for test results.

* W: Witness Point are used in order to witness a process by PSM or Representative.

(Qualification Status starts by developing the FAIR parts needed to understand if the supplier has the capability. Then, it moves to Conditional Qualification where parts are produced in order to dial in the process. Once Conditional approval has been granted full production and the process is locked in)

Qualification Information



Inspection & Test Plan			Qualification Status Ref. PSM 530						Quality Record Type	Q-Record Number or Confirmation Stamp
No.	Description	Reference Document No.	FAIR		VPR		Production			
			Rqmt	% or Qty	Rqmt	% or Qty	Rqmt	% or Qty		
	Casting		QR - Quality Record, H - Hold point, W - Witness point						PO # / Line Item	
10	Casting Process Qualification	PSM 200 / PSM 354	H / QR	100%	QR	As req'd			List PAR #	
20	Weld Repair Qualification	PSM 200 / PSM 215	QR	1	QR	As req'd			Test Report	
30	Mechanical Tests Note 8	PSM 109 / PSM 354	QR	1	QR	As req'd			Test Report	
40	Metallurgical Evaluation Note 8	PSM 109 / PSM 354	QR	1	QR	As req'd			Lab Report	
50	Heat Treat Qualification Note 8	AD00005176	QR	1	QR	As req'd			List PAR #	
60	Liquid Penetrant Qualification	ASTM E 1417	QR	1	QR	As req'd			List PAR #	
70	Radiographic Process Qualification	ASTM E 1742	QR	1	QR	As req'd			List PAR #	

3. Quality Record

- Quality record Type; type of document or record used for approval to document qualification or process approval.
- Q-Record Number or confirmation: approval number of quality record type or stamp of approval (meaning the Qualification or Process number has been approved and meets the requirement).
- **Note: Once qualified, providing the objective evidence of compliance is critical. Most documentation in this category have control numbers. Please provide the control number in the area provided. Test and Lab reports must be provided with the package upon submittal to PSM.**

Qualification Req. EXAMPLES



Inspection & Test Plan			Qualification Status Ref. PSM 530						Quality Record Type	Q-Record Number or Confirmation Stamp
No.	Description	Reference Document No.	FAIR		VPR		Production			
			Rqmt	% or Qty	Rqmt	% or Qty	Rqmt	% or Qty		
	Casting		QR - Quality Record, H - Hold point, W - Witness point						PO #/ Line Item	
10	Casting Process Qualification	PSM 200 /PSM 354	H / QR	100%	QR	As req'd			List PAR #	
20	Weld Repair Qualification	PSM 200 / PSM 215	QR	1	QR	As req'd			Test Report	
30	Mechanical Tests Note 8	PSM 109 / PSM 354	QR	1	QR	As req'd			Test Report	
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60	Liquid Penetrant Qualification	ASTM E 1417	QR	1	QR	As req'd			List PAR #	
70	Radiographic Process Qualification	ASTM E 1742	QR	1	QR	As req'd			List PAR #	

Examples on 3 different qualification Highlighted in red.

No: 10

Description: Casting Process Qualification.

Reference Document: PSM 200 / PSM 354 (Supplier must follow this specification in order to be qualified for this process.

Qualification data must be submitted to PSM Process Engineering for review and approval. A PAR document (Form 000123) and associated control number will be provided to the supplier. It is this PAR Number that must be recorded.

FAIR

- Rqtm "H / QR" % or Qty "100%"

Meaning: In the FAIR phase there is Hold meaning PSM will need to verify the pilot parts and a Quality Record that must be used for recording 100% of inspection.

QPR/VPR:

- Rqtm "QR"
- % or Qty "As req'd"

Meaning: in the VPR Phase, a Quality Record must be used in order to record the inspection results and As req'd the quantity to be inspected. **This information is communicated to the Supplier via the FM000254 Approval form.**

Quality Record type states the type of document needed and Q-Record indicates to add approval number or stamp number of approver in that column. (Example Employee Number)

Process Information



Qualification Req. information

Process Req. information

Inspection & Test Plan			Qualification Status Ref. PSM 530						Quality Record Type	Q-Record Number or Confirmation Stamp
No.	Description	Reference Document No.	FAIR		VPR		Production			
			Rqmt	% or Qty	Rqmt	% or Qty	Rqmt	% or Qty		
Casting			QR - Quality Record, H - Hold point, W - Witness point						PO # / Line Item	
10	Casting Process Qualification	PSM 200 / PSM 354	H / QR	100%	QR	As req'd			List PAR #	
20	Weld Repair Qualification	PSM 200 / PSM 215	QR	1	QR	As req'd			Test Report	
30	Mechanical Tests Note B	PSM 109 / PSM 354	QR	1	QR	As req'd			Test Report	
40	Metallurgical Evaluation Note B	PSM 109 / PSM 354	QR	1	QR	As req'd			Lab Report	
50	Heat Treat Qualification Note B	AD00005176	QR	1	QR	As req'd			List PAR #	
60	Liquid Penetrant Qualification	ASTM E 1417	QR	1	QR	As req'd			List PAR #	
70	Radiographic Process Qualification	ASTM E 1742	QR	1	QR	As req'd			List PAR #	
100	Material Certificatons / Master Heat	PSM 109	QR	100%	CofC	-	CofC	-	Certification Report	
200	Grain Size Inspection	PSM 354	QR	100%	CofC	-	CofC	-	Photos	
300	Heat Treat Certification Note B	PSM 109	QR	100%	CofC	-	CofC	-	Heat Treat Chart	
400	Weld Repair (As required)	PSM 354 / 200 / 215	QR	As req'd	Stamp	As req'd	Stamp	As req'd	Record Results	
500	Visual Inspection	PSM 354	QR	100%	CofC	-	CofC	-	Record Results	
600	Liquid Penetrant Inspection	PSM 354	QR	100%	CofC	-	CofC	-	NDT Certs	
700	Radiographic Inspection	PSM 354	QR	100%	CofC	-	CofC	-	NDT Certs	
800	Dimensional Inspect	PSM 221	W / QR	100%	CTQ	As req'd	CTQ	As req'd	Results & Methods	
900	Part Marking	Drawing / AS478	QR	100%	CofC	-	CofC	-	Confirm Method	
1000	Serial Number List with Master Heat lot, or Heat Lot	PSM 500	QR	100%	QR	100%	QR	100%	In Excel Format	
1100	Packaging, Shipping & Handling	PSM 515	QR	100%	CofC	-	CofC	-	Photos	
1200	Applicable NCR, Deviation/Waivers	PSM 500	-	As req'd	-	As req'd	-	As req'd		
1300	Documentation Package		H	1	H	1	H	1	Record PO #, Line Item, Rev. Ltr & Qty	
This inspection and test plan does not relieve the supplier from their obligation to meet all requirements as stipulated in the drawings, specifications and purchase order.										
Certificate of Conformance			By signing this document, supplier certifies that this document is completed accurately to the best of their knowledge.				PSM Acceptance			
Submitted by (supplier):	Date		Accepted by (PSM):				Date			

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Inspection and Test Plans, Qualification and Process Requirements are read and filled out as explained above.

Note: Providing the objective evidence of compliance is critical. Most documentation in this category have control numbers. Please provide the control number in the area provided. Process Certs, Test and Lab reports and other documents number must be recorded and provided with the package upon submittal to PSM. Verification requires a signature , or clock number.

Process Req. EXAMPLES



Inspection & Test Plan			Qualification Status Ref. PSM 530						Quality Record Type	Q-Record Number or Confirmation Stamp
No.	Description	Reference Document No.	FAIR		VPR		Production			
			Rqmt	% or Qty	Rqmt	% or Qty	Rqmt	% or Qty		
100	Material Certificatons / Master Heat	PSM 109	QR	100%	CofC	-	CofC	-	Certification Report	
200	Grain Size Inspection	PSM 354	QR	100%	CofC	-	CofC	-	Photos	
300	Heat Treat Certification Note 8	PSM 109	QR	100%	CofC	-	CofC	-	Heat Treat Chart	
400	Weld Repair (As required)	PSM 354 / 200 / 215	QR	As req'd	Stamp	As req'd	Stamp	As req'd	Record Results	
500	Visual Inspection	PSM 354	QR	100%	CofC	-	CofC	-	Record Results	
600	Liquid Penetrant Inspection	PSM 354	QR	100%	CofC	-	CofC	-	NDT Certs	
700	Radiographic Inspection	PSM 354	QR	100%	CofC	-	CofC	-	NDT Certs	
800	Dimensional Inspect	PSM 221	W / QR	100%	CTQ	As req'd	CTQ	As req'd	Results & Methods	
900	Part Marking	Drawing / AS478	QR	100%	CofC	-	CofC	-	Confirm Method	
1000	Serial Number List with Master Heat lot, or Heat Lot	PSM 500	QR	100%	QR	100%	QR	100%	In Excel Format	
1100	Packaging, Shipping & Handling	PSM 515	QR	100%	CofC	-	CofC	-	Photos	
1200	Applicable NCR, Deviation/Waivers	PSM 500	-	As req'd	-	As req'd	-	As req'd		
1300	Documentation Package		H	1	H	1	H	1	Record PO #, Line Item, Rev. Ltr & Qty	

Examples Process Verification/Certification Highlighted in red.

No: 100, Material Certification must meet PSM 109. PILOT/FAIR will require Quality records and 100% inspection recorded. Conditional Qual will require quality records and 100% inspection. Production phase will require Quality records and 100% inspection. Quality Records a Certification Report will be needed.

The reason this is 100% Inspection required is because it is the Raw material or Material certs.

No. 800, Dimensional Inspect must meet PSM221. FAIR requires a Witness of inspection and pilot parts inspected 100% in order to meet FAIR with a Quality Record. Conditional Qual will require Quality Records and a sample of parts to be inspected. Production will also require quality records of inspection and also a sample size. Quality Record Type will be dimensional results and methods of inspection. Q-records will be stamp or signature of who inspected the parts.

Process Req. PSM 520 & KRCs



Inspection & Test Plan										
Part Description			Part Code	Part Class	Level	Part Numbers				
Disk, Compressor Stage 17			AGW	3	SF1	7336967-101				
Inspection & Test Plan			Qualification Status Ref. PSM 530						Record Type / Remarks	Q-Record Number or Confirmation Stamp
No.	Description	Reference Document No.	FAIR		VPR		Production			
			Rqmt	% or Qty	Rqmt	% or Qty	Rqmt	% or Qty		
Machining			QR - Quality Record, H - Hold point, W - Witness point							
10	Machining Process Qualification	PAP 2192	H / QR	100%	QR	As req'd	-	-	List PAR #	
20	MPI Process Qualification Note 9	ASTM 1444	H / QR	100%	QR	As req'd	-	-	List PAR # or NADCAP #	
100	Machining Certification	PSM 388 / PSM 210	QR	100%	C of C	-	C of C	-	Process Cert	
200	MPI Process Certification Note 9	AMS 2442	QR	100%	C of C	-	C of C	-	NDT Certs	
300	Verify receipt of correct forging. Material documentation on file at PSM	Forging 7336958-1	QR	100%	C of C	-	C of C	-	Confirm	
400	Visual Inspection Note 7	PSM 601	QR	100%	C of C	-	C of C	-	Record Results	
500	Dimensional Inspect Note 12	PSM 221/PSM 520	W / QR	100%	QR	KRC	C of C	KRC	Results & Method	
600	Part Marking & Location	Drawing / AS 478	QR	100%	C of C	-	C of C	-	Confirm Method	
700	Serial Number List	PSM 500	QR	100%	QR	100%	QR	100%	In Excel Format	
800	Packaging, Shipping & Handling	PSM 515	Stamp	100%	C of C	-	C of C	-	Packaging Method	
900	Applicable NCR, Deviation/Waivers	PSM 500	-	As req'd	-	As req'd	-	As req'd	Record Doc Number	
1000	Documentation Package	All of the above	H	1	H	1	H	1	Record PO # , Line Item, Rev. Ltr & Qty	
Record	Shipping Address								PO	Item#

Along with complying with the Dimensional Inspection and First Article requirement, Critical Characteristics and /or Key Recordable characteristics (KRC) are required as part of this sequence. PSM 520 provides guidance on how to document and submit to PSM Engineering. KRC's are process control dimension and are either defined on the drawing or communicated to the Supplier via a supplemental drawing that defines which dimension to inspect, record and submit to PSM. If no KRCs are identified in the Drawing or Specification the entry to the I&T plan would be "N/A" in the VPR or Production phase..

Generic Inspection and Test Plans Class 4 Parts



		Doc No.: AD00001062		Doc Revision: 00		EC: N/A				
		Approved Date: May-19		Page: 1 of 1		Security Level: Shared		Language: EN		
Inspection & Test Plan										
Part Description			Part Code	Part Class	Level		Part Numbers			
Reference Purchase order Part Number Nomenclature Record Here			OO	4	Final		Reference Purchase order		Record Part Number here	
Inspection & Test Plan			Qualification Status Ref. PSM 530						Record Type / Remarks	Q-Record Number or Confirmation Stamp
<input type="checkbox"/> FAIR	<input type="checkbox"/> Production									
No.	Description		Reference Document No.	Rqmt	% or Qty	Rqmt	% or Qty	Rqmt	% or Qty	
QR - Quality Record, H - Hold point, W - Witness point										
Machining or Fabrication										
100	Material Certification		List Requirement	QR	100%	-	-	C of C	-	
200	Visual Inspection		PSM 601	QR	100%	-	-	C of C	-	
300	Dimensional Inspect		PSM 221	W / QR	100%	-	-	C of C	-	
400	Part Marking B/P Note		Drawing Note	QR	100%	-	-	C of C	-	
500	Packaging, Shipping & Handling		PSM 515	QR	100%	-	-	C of C	-	
600	Applicable NCR, Deviation/Waivers		PSM 500	-	As req'd	-	-	-	As req'd	
700	Documentation Package		All of the above	H	1	-	-	H	1	
Record	Shipping Address							PO	Item#	
Send the documentation package to " Quality@PSM.ansaldoenergia.com "										
This inspection and test plan does not relieve the supplier from their obligation to meet all requirements as stipulated in the drawings, specifications and purchase order.										
Certificate of Conformance			By signing this document, supplier certifies that this document is completed accurately to the best of their knowledge.			PSM Acceptance				
Submitted by (supplier):		Date	Accepted by (PSM):	Date						

Generic Inspection and Test plans are assigned to simple or non-complex hardware. The supplier must fill out the in the Header field with the Part Number and Part Nomenclature. ITP # **AD00001062** is for use on hardware with No Special processing. This ITP is assigned and will be provided by the PSM Buyer or PSM Quality department. Please check "X" the box based on Qualification status of FAIR or Production Phase when submitting

Generic Inspection and Test Plans with Special Processes



		Ansaldo Energia		Doc No.: AD00001063				Doc Revision: 00		EC: N/A	
				Approved Date: Apr-19		Page: 1 of 1		Security Level: Shared		Language: EN	
Inspection & Test Plan											
Part Description				Part Code	Part Class	Level		Part Numbers			
Reference Purchase order Part Number Nomenclature Record Here				OO	4	Final		Reference Purchase order Part Number Record Here			
Inspection & Test Plan											
No.	Description		Reference Document No.	Qualification Status Ref. PSM 530				Record Type / Remarks	Q-Record Number or Confirmation Stamp		
				<input type="checkbox"/> FAIR	<input type="checkbox"/> Production						
				Rqmt	% or Qty	Rqmt	% or Qty	Rqmt	% or Qty		
	Machining or Fabrication with Special Process			QR - Quality Record,	H - Hold point,	W - Witness point					
100	Process Certification Spec PSM 211-2 (if applicable)		PSM 211-2	QR	100%	-	-	C of C	-	Process Cert	
200	Process Certification Spec PSM 212-1 (If Applicable)		PSM 212-1	QR	100%	-	-	C of C	-	Process Cert	
300	Material Certification		List Requirement	QR	100%	-	-	C of C	-	Material Certs	
400	Visual Inspection		PSM 601	QR	100%	-	-	C of C	-	Record Results	
500	Dimensional Inspect		PSM 221	W / QR	100%	-	-	C of C	-	Results & Method	
600	Part Marking Note 4		Drawing Note	QR	100%	-	-	C of C	-	Confirm Method & Location	
700	Packaging, Shipping & Handling		PSM 515	QR	100%	-	-	C of C	-	Packaging Method & Photos	
800	Applicable NCR, Deviation/Waivers		PSM 500	-	As req'd	-	-	-	As req'd	Record Doc Number	
900	Documentation Package		All of the above	H	1	-	-	H	1	Record PO # , Line Item, Rev. Ltr & Qty	
Record	Shipping Address									PO Item#	
Send the documentation package to " Quality@PSM.ansaldoenergia.com "											
This inspection and test plan does not relieve the supplier from their obligation to meet all requirements as stipulated in the drawings, specifications and purchase order.											
Certificate of Conformance				By signing this document, supplier certifies that this document is completed accurately to the best of their knowledge.				PSM Acceptance			
Submitted by (supplier):		Date		Accepted by (PSM):		Date					

Generic Inspection and Test plan # **AD00001063** is for use on hardware with some Special processing that does not require qualification, only certification. This ITP is assigned and will be provided by the PSM Buyer or PSM Quality department. The supplier must fill out the in the Header field with the Part Number and Part Nomenclature.

Please check "X" the box based on Qualification status of FAIR or Production Phase when submitting

Certificate of Conformance



		Ansaldo Energia		Doc No.: AD00001062				Doc Revision: 00		EC: N/A		
		Approved Date: May-19		Page: 1 of 1		Security Level: Shared		Language: EN				
Inspection & Test Plan												
Part Description				Part Code	Part Class	Level	Part Numbers					
Reference Purchase order Part Number Nomenclature Record Here				OO	4	Final	Reference Purchase order		Record Part Number here			
Inspection & Test Plan												
			Qualification Status Ref. PSM 530						Record Type / Remarks		Q-Record Number or Confirmation Stamp	
No.	Description		Reference Document No.		<input type="checkbox"/> FAIR		<input type="checkbox"/> Production					
			Rqmt	% or Qty	Rqmt	% or Qty	Rqmt	% or Qty				
QR - Quality Record, H - Hold point, W - Witness point												
Machining or Fabrication												
100	Material Certification		List Requirement		QR	100%	-	-	C of C	-	Material Certs	
200	Visual Inspection		PSM 601		QR	100%	-	-	C of C	-	Record Results	
300	Dimensional Inspect		PSM 221		W / QR	100%	-	-	C of C	-	Results & Method	
400	Part Marking B/P Note		Drawing Note		QR	100%	-	-	C of C	-	Confirm Method & Location	
500	Packaging, Shipping & Handling		PSM 515		QR	100%	-	-	C of C	-	Packaging Method & Photos	
600	Applicable NCR, Deviation/Waivers		PSM 500		-	As req'd	-	-	-	As req'd	Record Doc Number	
700	Documentation Package		All of the above		H	1	-	-	H	1	Record PO # , Line Item, Rev. Ltr & Qty	
Record	Shipping Address										PO	Item#
Send the documentation package to Quality@PSM.ansaldoenergia.com												
This inspection and test plan does not relieve the supplier from their obligation to meet all requirements stipulated in the drawings, specifications and purchase order.												
Certificate of Conformance						By signing this document, supplier certifies that this document is completed accurately to the best of their knowledge.			PSM Acceptance			
Submitted by (supplier):			Date						Accepted by (PSM):			Date

Certificate of Conformance (CoC): Supplier may provide their own Company specific CoC along with the signing of the ITP CoC. The supplier may choose to only utilize the ITP CoC. PSM will recognize either scenario.

ITP Acceptance



		Ansaldo Energia		Doc No.: AD00001062				Doc Revision: 00		EC: N/A		
		Approved Date: May-19		Page: 1 of 1		Security Level: Shared		Language: EN				
Inspection & Test Plan												
Part Description				Part Code	Part Class	Level	Part Numbers					
Reference Purchase order Part Number Nomenclature Record Here				OO	4	Final	Reference Purchase order			Record Part Number here		
Inspection & Test Plan												
Qualification Status Ref. PSM 530												
<input type="checkbox"/> FAIR <input type="checkbox"/> Production												
No.	Description		Reference Document No.	Rqmt	% or Qty	Rqmt	% or Qty	Rqmt	% or Qty	Record Type / Remarks	Q-Record Number or Confirmation Stamp	
QR - Quality Record, H - Hold point, W - Witness point												
Machining or Fabrication												
100	Material Certification		List Requirement	QR	100%	-	-	C of C	-	Material Certs		
200	Visual Inspection		PSM 601	QR	100%	-	-	C of C	-	Record Results		
300	Dimensional Inspect		PSM 221	W / QR	100%	-	-	C of C	-	Results & Method		
400	Part Marking B/P Note		Drawing Note	QR	100%	-	-	C of C	-	Confirm Method & Location		
500	Packaging, Shipping & Handling		PSM 515	QR	100%	-	-	C of C	-	Packaging Method & Photos		
600	Applicable NCR, Deviation/Waivers		PSM 500	-	As req'd	-	-	-	As req'd	Record Doc Number		
700	Documentation Package		All of the above	H	1	-	-	H	1	Record PO # , Line Item, Rev. Ltr & Qty		
Record	Shipping Address									PO	Item#	
Send the documentation package to " Quality@PSM.ansaldoenergia.com "												
This inspection and test plan does not relieve the supplier from their obligation to meet all requirements as stipulated in drawings, specifications and purchase order.												
Certificate of Conformance				By signing this document, supplier certifies that this document is complete accurately to the best of their knowledge.				PSM Acceptance				
Submitted by (supplier):			Date					Accepted by (PSM):			Date	

After the successful review and approval of an Inspection and Test plan package submittal, PSM Quality will provide approval via an e-mail that states **"This ITP / ADP has been approved, you are authorized to ship"**. This e-mail is equivalent to the signed returned copy of the ITP Cover sheet..

Class 4 Hardware ONLY – Production Status Process



Once a Supplier has reached Production Status for Class 4 Hardware and a MQR Number has been issued for that part number, submittal of the ITP and authorization to ship will no longer be required.

All that is necessary for this simple approach is to record the MQR Number on the Packing slip only with the CoC and then ship with the hardware directly to PSM. If a shipment is received and the MQR number is not recorded, the shipment will be placed on hold or rejected. A list of all approved Class 4 Production part numbers will be provided periodically to each Supplier.

Note: All MQR Numbers begin with “AD000XXXXX”

Part Numbers listed here



Component Information	
Part Number:	Manufacturing Qualification Record
Part Name:	Process Specification: PMS 500/PSM 221
Drawing Number:	Process Description: Machining/Fabrication
Revision: ---	Deviation/ Waiver #: None
EC #: N/A	Detail or Assembly: Class 4 detail parts only
Part Class: 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input checked="" type="checkbox"/>	
Qualification Phase: DMR <input type="checkbox"/> FAIR <input type="checkbox"/> QPR <input type="checkbox"/> VPR <input type="checkbox"/> Production <input checked="" type="checkbox"/>	

Or Part Numbers listed here



Supplier Information	
Name:	Contact:
SAP Vendor code:	Phone:
City:	E-Mail:
State: N/A	Purchase Order #:
Country:	Line item #:
Notes: No NCRs Recorded. Parts Moved from FAIR to Production Phase. This Manufacturing Qualification Record covers multiple part numbers and various Purchase orders. See list below. First Article Inspection(s) (FAI) have been reviewed and approved for the following Part Numbers: XXXXXXXX-XX	

MQR Format Example

Conditional Approval Follow-Up Items	
Item	Est. Completion Date

Approvals		
Approval Type:	Conditional	Final <input checked="" type="checkbox"/> X
Discipline	Name	Signature
Quality Engineer	John Doe	TC Approvals in left margin
Process Engineer	N/A	
Product Engineer	N/A	
Product Quality Dir. (if risk release)	N/A	
<small>Note: This qualification approval is only valid through the phase listed above. Further qualification requirements may be required to release the component into Production and depends on part class. For additional details, see specification PSM 530 or contact PSM Quality.</small>		

ITP Do's & Don'ts

Do:

- Submit ITP's in a timely manner 3+days prior to shipment is preferred.
- Contact PSM Quality at any time with questions.
- An ITP's is required for all PSM Hardware. COTS parts are the only exception.
- Complete ITP's header with purchase order line item number & quantity being submitted / set number if applicable.
- **Complete shipping address to next PO destination. Located at the bottom of new I&T Plans.**
- Check "X" in the hardware status block
- Review documentation for accuracy and typographical errors.
- For inspection reports and first article inspections, verify any noted nonconformance has an associated NCR submitted to PSM.
- Always submit serial numbers in the required Excel format along with the corresponding part number.
- Follow PSM serial number format (vendor code-part code-number)
- When submitting ITP's on the same day for the same part number add a revision level (-A, -B, -C) as needed to the ITP's number to maintain separation.
- Production Approved Class 4 Hardware :Always record the MQR Number on the Packing Slip and ship with hardware.

• *Always submit ITP's packages to*
"quality@PSM.ansaldoenergia.com"

Don't:

- Leave the ITP's blank.
- Alter the ITP's format.
- Submit incomplete ITP packages.
- Submit multiple ITP's in one email.
- Combine line items on the ITP's (i.e. LINE 10/20).
- Combine multiple PO's (PO numbers) per ITP's.
- Combine/leave multiple part numbers on one line item.
- Insert dashes, spaces, or back slash into PSM serial number format. See PSM500 section 9.1.3.