

**ARCONIC****DOC #:** 710.005.001F01  
**REL DATE:** 5/07/2013  
**REV:** 002**TITLE:** PRODUCT, MATERIAL FIXED PROCESS CONTROL PLAN FORM

## PRODUCT MATERIAL FIXED PROCESS CONTROL PLAN FORM

(1) Control Plan Number:	(2) Control Plan Date:	(3) Supplier Name: IQS Number:
(4) Control Plan Rev:	(5) Arconic Howmet Plant(s) :	(6) Supplier Address:
(7) Product/Process Name or Description:	(8) Arconic Howmet Process Owner(s):	(9) Supplier Key Contact Name:
(10) Specification/Drawing No: Rev:	(11) Arconic Howmet Plant Contact(s):	(12) Supplier Key Contact Telephone:
(13) Material Type(s):	(14) NDA Date: NDA Yrs:	(15) Date Plan submitted to SQA:

Process Sequence / Operation Number	Process Name/ Operation Description	Processing Equipment	Characteristics			Key Char	Methods					Reaction Plan	
			No.	Product	Process		Product / Process	Evaluation	(25) Sample		Control Method		
			(16)	(17)	(18)		(19)	(20)	(21)	(22)	Specification/ (23) Tolerance		Measurement Technique (24)

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			No.	Product	Process		(22)	Product / Process	Evaluation	(25) Sample		Control Method	Reaction Plan
										(19)	(20)		

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**PRODUCT, MATERIAL FIXED PROCESS CONTROL PLAN SUMMARY & SIGNATURE PAGE**


Control Plan Number:	Control Plan Revision:	Control Plan Date:	Supplier Name:
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(28) PROCESS FIXED SUMMARY

Empty space for process fixed summary
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(29) Supplier Approval Signatures	(30) Date	Ø (31) APP Arconic Howmet Approval Signatures	(32) Date
Manager		Quality Engineer	
Engineering Representative		Product/Process/ Development Engineering (as req'd.)	
Manufacturing Representative		Plant Process Owner (Corporate Process Owner as req'd.)	
Other Approval (if Req'd.)		Supplier Quality Assurance	

**FIXED PROCESS CONTROL PLAN INSTRUCTIONS**


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Field #	Description	Instruction
1	Control Plan Number	SQA to assign control plan document number using year-sequential number(08-001, etc.), which is used for tracking purposes,
2	Control Plan Date	Enter the date the fixed process control plan was initiated.
3	Supplier Name IQS Number	Enter the name of the company and/or division submitting the fixed process control plan. SQA to enter the Arconic Howmet IQS number.
4	Control Plan Rev.	Enter the current fixed control plan document revision.
5	Arconic Howmet Plant(s)	Enter Arconic Howmet plant(s) utilizing the Fixed Process Control Plan.
6	Supplier Address	Enter address, city, state, zip, province and country & postal code as applicable. (the address must identify the site of manufacture)
7	Product/Process Name or Description	Enter the name or description of the product or process being controlled by the fixed process control plan.
8	Arconic Howmet Plant Process owner (s)	Enter the appropriate Arconic Howmet Plant Process owner who have responsibility for this fixed process.
9	Supplier Key Contact	Enter the name of the supplier representative responsible for developing and maintaining the control plan.
10	Specification/Drawing No. & Rev. No.	Enter the applicable specification or drawing number that applies to the product, material or process being controlled.
11	Arconic Howmet Plant Engineering Contacts	Enter name of Arconic Howmet Plant, Product / Process / Development Engineer that is responsible for review, approval and maintenance of the fixed process control plan.
12	Supplier Key Contact Telephone No.	Enter supplier key contact phone number(s).
13	Material Type	Enter the material type used (ie. Ceramic core material, plating/coating material, etc.)
14	NDA Date NDA Years	Enter date Non-Disclosure Agreement was signed. Enter number of years Non-Disclosure Agreement is valid.
15	Date submitted to SQA	Enter date submitted to SQA for control plan document number.
16	Process Sequence / Operation Number	Enter the sequence number or step in which the operation is performed, or the operation number, as applicable.



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Field #	Description	Instruction
17	Process Name/ Operation Description	Enter the name or description or the operation number, as applicable. The process name and/or operation number should correlate to the Process Flow Diagram that best describes the activity.
18	Processing Equipment	Enter the name of the processing equipment (e.g., machine, device, jig, fixture, instrument, etc.).
19	Characteristic Number	Enter a cross reference number from all applicable documents such as, but not limited to, a numbered technical drawing, specification section or paragraph, Product Criteria paragraph, Activity Instruction paragraph, etc.
20	Product Characteristics	Enter the product characteristic, feature, or material properties defined by the technical drawing, technical specification or Product Criteria, Activity Instructions, etc. Or special product or process characteristic either defined by Howmet and/or defined in Appendix D.
21	Process Characteristics	Enter the process variable (input variables) that has a cause and effect relationship with the identified product characteristic. A process characteristic can only be measured at the time it occurs. The supplier must identify the process characteristics that must be controlled to minimize product variation. There may be one or more process characteristics for each product characteristic. In some processes one process characteristic may affect several product characteristics.
22	Key Characteristic	Each identified key product or process characteristic shall be denoted in this column by an “*” asterisk.
23	Product/Process Specification / Tolerance	Enter the product, process or specification tolerance (refer to various technical drawing, technical specification, Product Criteria or Activity Instructions, etc.).
24	Evaluation / Measurement Technique	Identify the measurement system being utilized to evaluate the product or process feature (e.g., gage, test instrument or lab equipment, etc.).
25	Sample Size / Frequency	Enter the corresponding sample size and frequency. If 100% of product is being verified, enter “100%” in the Frequency column.
26	Control Method	Provide a brief description of how the operation will be controlled, or the procedure number / revision date that provide for adequate controls. The control method should be based on effective analysis of the process and shall be determined by the type of process. Operations may be controlled by, but not limited to, SPC, attribute or variable inspection methods and data collection, mistake proofing, in-process sampling, etc. The method of control should be continually evaluated for effectiveness, i.e., significant changes in the process or process capability should trigger an evaluation of the control method.

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Field #	Description	Instruction
27	Reaction Plan	Provide a brief description of the actions to be taken to prevent producing nonconforming product or operating out of control. Or, provide the procedure number/revision date, which defines the actions and individual(s) responsible. Responsibility for preventative actions shall be clearly defined and procedurally documented for each operation. The control of suspect or nonconforming product shall be procedurally defined regarding its identification, quarantine and disposition.
28	Summary	Provide a Summary of the overall control plan including specific significant, insignificant or key sequences as necessary.
29	Supplier Approval Signatures	Signature of supplier quality, engineering, manufacturing and other supplier representative who have responsibility for development, submitting and maintenance of fixed process control plans.
30	Supplier Signature Date	Enter date each supplier representative signed fixed process control plan.
31	APP Arconic Howmet Approval Signature	Signature of each APP Arconic Howmet Plant Quality / Product / Process Development Engineer(s) approving the Fixed Process Control Plan. Signature of Supplier Quality Assurance representative who has responsibility for documenting, maintaining and distribution of the FPCP.
32	Arconic Howmet Signature Date	Enter date each Arconic Howmet representative approved the fixed process control plan.