

First Article Requirements for Product Design, Material and/or Process Changes

(In the event that a conflict exists between this document and the QAPP/Contract the QAPP/Contract takes precedence)

Verification Levels	FAI per AS9102 (This could be a Delta FAI or a Full FAI and could even require requalification efforts)	First Piece Inspection (Requires Approval of Operations QE)
1.0 Changes to Product Design		
1.1 Product Design changes affecting fit, form or part function or other contractual requirements	X	
2.0 Changes to Manufacturing Facility and Equipment		
2.1 New process or production line or location of manufacture	X	
2.2 Dismantling and restarting an existing process or production line	X	
2.3 Adding new or Replacing an existing piece of machinery	X	
2.4 Moving equipment/machines within a facility	X	
2.5 Major repairs/replacement and maintenance to equipment / fixtures / tooling / etc.	X	
2.6 Minor repairs/replacement and maintenance to equipment / fixtures / tooling / etc.		X
3.0 Changes to Manufacturing Processes		
3.1 Out of production over 24 months (2 years)	X	
3.2 Major change in manufacturing process (e.g., tool path changes, sequence of cuts)	X	
3.3 Minor change in manufacturing process (e.g., new tool type, offset changes, etc.)		X
3.4 Changes early in the manufacturing process such as, roughing or grinding where no final dimensions are produced		X
3.5 Major changes to work instructions (e.g. Something being done differently)	X	
3.6 Minor changes to work instructions (e.g. Everything is done the same, clarification only)		X
3.7 Changing a special process work instruction (heat treat, plating, time, temp, chemistry, etc.)	X	
3.8 Replacing an existing piece of machinery with a machine of a different type (e.g. lathe to a mill, manual to CNC, etc.)	X	
3.9 Changing same model CNC machines using identical program and identical setup (Tools, fixtures, etc.)		X
3.10 Change of inspection test method and/or equipment	X	
3.11 Use of new, reworked, modified, relocated, or reactivated manufacturing tooling (e.g. jigs, dies, fixtures, molds, patterns, etc.)	X	
3.12 Change in numerical control program or translation to another media that can potentially affect fit, form or function	X	
3.13 A natural or man-made event which may adversely affect the manufacturing process	X	
4.0 Changes to Material/Supply		
4.1 Change in supplier of end item part	X	
4.2 Change in supplier of the material	X	
4.3 Change in supplier for component within an end item part	X	
4.4 Change from one qualified test laboratory to another qualified laboratory	X	
4.5 Change in supplier of special/outside processing services	X	
5.0 Nonconformances		
5.1 An implementation of corrective action required to complete a previous FAI (design characteristics nonconformance)	X	
The level of verification will be agreed upon between the Manufacturing Engineer and the Quality Engineer. In the event that an agreement cannot be made the Quality Manager has the ultimate authority in determining the level of verification required. Any changes not listed above shall be the responsibility of the Quality Engineer to determine.		