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SYMPOSIUM ON BUILDING BLOCKS FOR FUTURE SPACE EXPLORATION AND  
DEVELOPMENT (D3)  
Space Technology and System Management Practices and Tools (4)

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A DESIGN-PRODUCTION-INSPECTION METHOD FOR QUALITY CONTROL OF SPACE  
PRODUCTS UNDER MASS PRODUCTION

**Abstract**

In high density mission situation, product quality is the basic requirement for success. Quality is not only guaranteed by production, also with inclusiveness of design, realization of technology, performance of components as well as inspecting methods. Thus, we propose a design-production-inspection researching and manufacturing system. In the design process, designers should consider sufficient design margin, realization of technology. Structural design should be in accordance with the operational procedures to reduce manual operation. In a single production process, designer should choose the standard components, and should do the experiment in the actual environment. Producer should formulate quantization steps for processes. The key operating results should be recorded and photographed confirmation. Through which, we clear responsibilities of the design units, production units, inspection units. This method can not only guarantee the quality of the products, but also can control the production cost.