

Design of Factory Acceptance Testing of slit assemblies for Neutron Reflectometry

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Reliable, accurate and repeatable neutron beam slit systems are required for reflectometry experiments. The design of the factory acceptance tests (FAT) and methods of encoding and verification are essential to the operational excellence of slit systems. While simple in concept, the reliable operation of neutron beam slits can be the cause of several issues including lost position and drift over time during use. The independent confirmation of operational requirements at the FAT can be employed to check performance against the specification, to confirm that the encoding technique employed is fit for purpose, and to assess reliability and endurance. In this talk several aspects of slit assembly design and specification will be explored and options for FAT endurance, repeatability and accuracy testing will be discussed for neutron beam slit assemblies.

Formal Invitation Letter Required

No

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