

NAFLIC

National Association For Leisure Industry Certification

Standards & Related Documents Sub-Committee

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024. Reverchon Explorer

Wilson Consultants reported to us that earlier this year an incident occurred in which a Reverchon Explorer ride suffered collapse of its main slewing ring support structure.

The failure consisted of a fatigue crack propagating fully round the toe of the circular fillet weld attaching the bottom flange plate for slewing ring bolting to the vertical 960 mm diameter tube passing through (and providing the connection to) the chassis.

A design review of the region based on approximate data implied that there is a design weakness (rather than just poor welding). Medium term fatigue failure seems inevitable on the existing design.

Any member responsible for the examination of such a ride should ensure that appropriate methods are applied to the detection of the problem. If the problem develops, modification (rather than repair) may need to be considered.