

# NAFLIC

*National Association For Leisure Industry Certification*

## Standards & Related Documents Committee

### TECHNICAL BULLETIN - APRIL 1998

#### 165. Roller Coaster Brake Caliper Fatigue

NAFLIC member Leisure Technical Consultants Ltd have informed us that fatigue cracking in welded connections of a brake caliper mechanism have been found on a Cavazza Diego "Nessi" coaster.

The ride employs a similar braking method to some other manufacturers' designs which are known to exhibit similar problems.

When a roller coaster operates with more than one car or train on the circuit, brakes are likely to be safety critical. In such circumstances, the design specification needs to be carefully considered and, depending upon the results, a programme of regular inspection may need to be specified in order to detect the onset of fatigue cracking. For key components this would probably need to involve, at least, visual inspection on a regular basis, supplemented by occasional NDT.

Committee Members :- Dr Garry Fawcett (Chairman), Mr Richard Barnes, Mr Bob Nicholls, Mr Robert Casey,  
Mr Peter Smith and representatives of Plant Safety Ltd, and Banwell & Associates Ltd

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