

# NAFLIC

*National Association For Leisure Industry Certification*

## **Standards & Related Documents Sub-Committee**

### **TECHNICAL BULLETIN - SEPTEMBER 1995**

#### **120. Reverchon Matterhorn Accident**

We have been advised of an accident which occurred on 3 August 1994 in France and involved a Matterhorn type ride manufactured by Gaston Reverchon et Fils. The circumstances indicated that a defect in the design led to the accident.

The Matterhorn is a rotating ride having swinging cars suspended from main radial arms. The car suspension is via steel hollow sections members extending up from the front and rear of each unit. Where these members pass through the fibreglass body shell the oversize holes are tidied up by decorative stainless steel protective plates. It is these plates which are implicated in the accident.

Because of the force fluctuations applied to the car structure as it swings, twice per ride revolution, the front and rear steel members attempt to flex and move relative to the car shell. In the accident, damage had occurred to the suspension hollow sections as a result of the rubbing of the decorative stainless steel plates. The wear grooves not only reduce the wall thickness locally but introduce a notch stress raiser to significantly reduce the fatigue classification of the region.

We can confirm that this is not an isolated instance and advise any person responsible for examination or maintenance of a Reverchon Matterhorn to look out for the problem.

Committee Members :- Dr Garry Fawcett (Chairman), Mr Richard Barnes, Mr Bob Nicholls, Mr Les Howson,  
Mr Malcolm Tennant, Mr Peter Steffens

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2A GROVE PARADE, BUXTON, DERBYSHIRE. SK17 6AJ  
TEL: (01298) 22384 FAX: (01298) 70784