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Magnesium Elektron

Abstract

### **Flammability - Why do some Magnesium Alloys perform better than others ?**

A difference in flammability performance has clearly been demonstrated between different Magnesium based alloys. This was well documented by the FAA in test bar evaluation in June 2007. In these tests, no burning occurred until the material melted, at which point alloys such as Elektron WE43 melted and tended to self extinguish, where as “poor performing alloys”, tended to continue to burn and in the worst case progressively consumed the test piece.

Research activity has sought to understand this phenomena in terms of both melting initiation and the effect of surface oxide film formation.

In addition, understanding oxide film formation and processing has contributed to the industrial development of a commercial grade alloy, Elektron 43 . This alloy is aimed at commercial aircraft and can now be produced as industrial slab for subsequent extrusion & rolling stock.