



Fireproof Modular Design & ABRC Composite for FSAEJ Battery

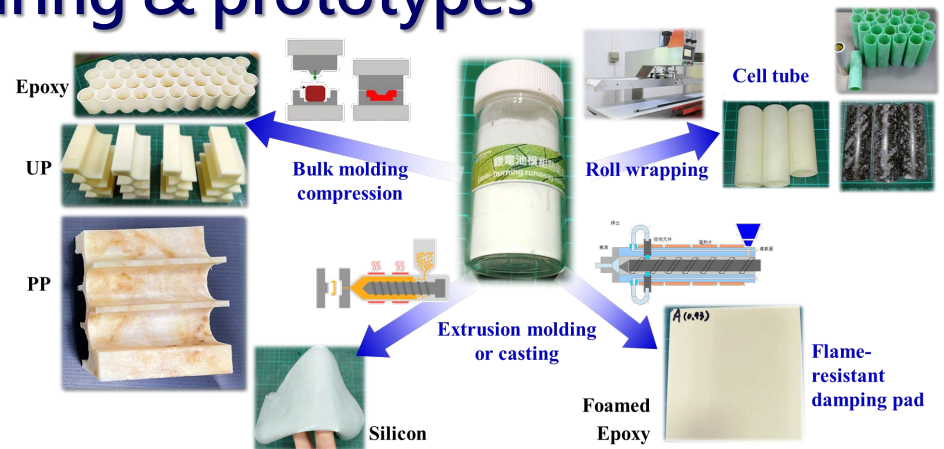
□ Introduction

Fireproof composite (ABRC) using hydrate resin is designed by thermal decomposition and manufacturing process, ABRC could provide two functions, eliminating free radicals and generating cooling gases. Here, tube insulator, electrode plate sheet and base were introducing into FSAEJ race car to be as a total solution for passive fire protection.

□ Technical features

- Compared with engineering plastic, ABRC shows High thermal conductivity, $K=0.7\sim 1.1\text{ W}/(\text{m}\cdot\text{K})$. (the value can be modified by tuning recipe)
- ABRC+fiber, Fiber-reinforced plastic, drastically raise Mechanical properties.
- ABRC had passed UL945VA, RoHS and Reach
- ABRC cost is much cheaper than fire-resistant plastic.

□ Manufacturing & prototypes



□ Application

ABRC can be as fireproof materials into high power battery module.

3C battery, EVs, Energy Storage Cabinet and so on.

