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**A Chamber Design for Fuel/Coolant Interaction using Real Corium Material**

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**Abstract**

A chamber design for fuel/coolant interaction experiment using real corium material in two-dimensional configuration is presented. Given the amount of material involved, the bounding value for static pressure is calculated. A maximum dynamic pressure impulse is also estimated using TNT equivalent method and Henry estimate method, in case steam explosion is observed. With a judicious choice of instrumentation locations, mainly for pressure and temperature, the chamber design is expected to provide valuable information for melt behavior during the premixing stage and energetics during the propagation and expansion phases of steam explosions.