HACKATHON

BATTERY CASING FOR ELECTRIC VEHICLES

PROBLEM DESCRIPTION

Battery packs, especially the ones containing Lithium-ion cells, account for a major portion of the production and maintenance costs of electric vehicles. The replacement of the traditional ' battery ownership' model with 'battery swap' model, combined with the establishment of regular 'battery swapping' stations can significantly reduce the cost of three-wheeler EVs.

Battery casings are modifications present in such vehicles which enable battery swapping.

Design a swappable battery casing for a three-wheeler vehicle battery

Constraints:

The vehicle must leave the battery swapping station within 5 minutes with a new battery.