

hatch door

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what?

Commercial project on product development for a mechanical hatch door

where?

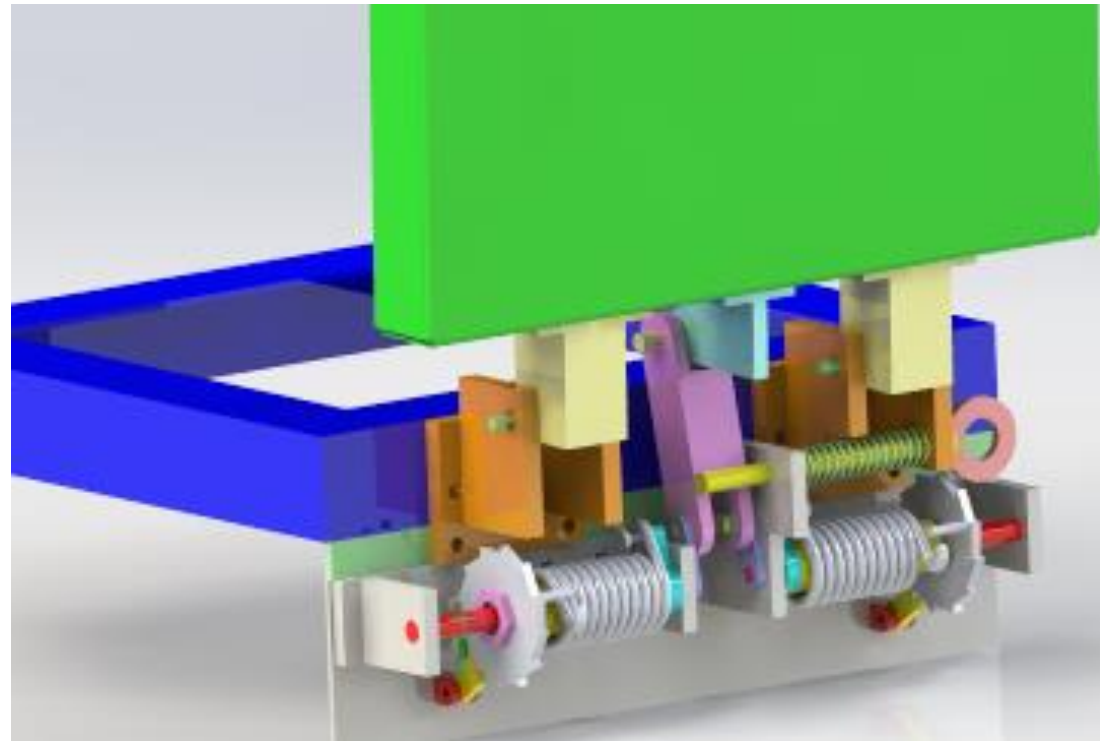
Rapid Solids Pvt. Ltd.

when?

Apr '18- Jun '18

who?

Working as a design engineer I was assigned this project single handedly



The brief was to design and manufacture a mechanically operated hatch door that shall open and close only once. Additionally the system had to be easily manufactured using standard components and CNC machined custom parts. Considering the size and loading of the door a sturdy and smooth mechanical system was designed using hinges, crank, spring, and ratchet. Component and system level optimization was carried out to ensure ease of assembly and manufacturability. A working prototype build from CNC milled parts was successfully tested and delivered to the client.

product development|mechanism|CAD|design for manufacturability|rapid prorotyping