

E-Seat Simulator Design

Client: Undisclosed

ideas^o
smart thinking



Many motion simulator seats have been adapted from general purpose seating designs, often resulting in seat failure at an early age.

The E-SEAT has been specifically designed by ideas* for extended use in the dynamic environment of motion simulators.

The E-SEAT is used in a number of Australian places including Movie World, The Melbourne Aquarium, and Underwater World. It is also in use in the Basan Aquarium in South Korea.

The seats feature seat belt locking sensors to ensure all occupants are locked in, and counterweighted seat pans that tilt to the vertical position to allow easy access to seating.

The seats were designed using 3D modelling software to allow for full FEA analysis and to ensure ergonomic comfort. They were tested to $\pm 1g$ beyond 1 million cycles.



The E-Seat in production.