

Free consultation available for low-pressure energy storage containers used in drone stations





Overview

A lightweight type-4 cylinder is developed using a polyethylene terephthalate (PET) liner for application in drones. We conducted a parametric study on the internal phenomena of the developed cylinder du.

What type of container system is used for low-pressure storage?

For low-pressure storage (nominally 172 bar), the panel chose to use a U.S. Department of Transportation (DOT) International Standards Organization (ISO) container system based on Type 4 vessels. A system using Type 110 vessels had a similar cost, but a larger footprint.

Can cylinders be used as a hydrogen storage tank in drones?

In this section, we present the results of the comparison of the storage densities of various types of cylinders. Type-3 and -4 cylinders are usually used in drones; therefore, we prepared both types of cylinders to compare their storage densities and assess their suitability as a hydrogen storage tank for application in drones.

Can drones use compressed hydrogen?

In mobility applications, compressed hydrogen is the most popular fuel, owing to its high energy density. For similar reasons, compression is an appropriate choice as a method for storing fuel for drones. To use compressed hydrogen in drones, lightweight cylinder technology is necessary.

What is energy storage container?

SCU uses standard battery modules, PCS modules, BMS, EMS, and other systems to form standard containers to build large-scale grid-side energy storage projects.



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