

How much energy can an electromagnetic launcher store





Overview

Are chemical launchers better than electromagnetic launchers?

In recent years conventional launchers like steam launchers, chemical launchers are replaced by electromagnetic launchers with auxiliary benefits. The electromagnetic launchers like rail-gun and coil-gun elevated with multi pole field structure delivers great muzzle velocity and huge repulse force in limited time.

Are electromagnetic launchers based on solar energy?

This understanding led to the design and analysis of electromagnetic launchers (EMLs) 6, 7, 8, 9 that will launch from the moon or space relying only on solar energy, without any fuels or oxygen. Space missions to Mars 10 and outer space are also considered in two stages where the second stage is from space.

What are electromagnetic launchers - 6 - 9?

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What are the different types of electromagnetic launchers?

Electromagnetic have two basic categories, i.e. rail-gun launcher and coil-gun launcher . Coil gun launcher is differentiated by its design structure and properties in five categories Induction coil-gun, Reconnection coil-gun, Reluctance coil-gun, helical coil-gun, Thompson's ring.



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A multi-stage 130 m/s reluctance linear electromagnetic launcher

Jan 5, 2023 · In this paper, a successful implementation of a multi-stage reluctance launcher is presented that reaches the highest reported launching speeds from a reluctance coilgun.

A multi-stage 130 m/s reluctance linear electromagnetic launcher

Experiments showed that the launching mass and energy can be extended, but the speed remained low. Research 17 - 35 has shown results of simulations and related experiments ...

Electromagnetic Launcher : Review of Various Structures

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Magnetic Launcher

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Magnetic Launcher

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