

ABSTRACT

PFN (Pulse Forming Network) is a tool used to store large electrical charges and release them in a short time. PFN consists of capacitors and inductors arranged in parallel. PFN has two ways of working: charging and discharging. Charging PFN is the same as charging a capacitor that connects PFN with a DC voltage source. Charging from PFN is relatively long depending on the amount of storage element (capacitor). Discharging PFN is to connect PFN with a small resistance (less than one Ohm) to produce a large current in a short time (in milisekon). The shape of the signal (signal) generated by the PFN is not the same as the discharge of the capacitor because in the PFN circuit it has an inductor that produces the voltage from the induced current generated by the capsitor. The resulting signal is more shaped near the box.

Railgun is an electromagnet catapult that uses the principle of lorentz style. Railgun requires a large current to be able to catapult objects (projectiles) so that PFN can be used as a source of Railgun energy because it can produce large currents. PFN Railgun is currently used as a military weapon.

Keywords: *PFN, Railgun.*