

120 mm Pulsed Induction EM Mortar

Radar precisely tracks projectile to energize coils sequentially.

Hardstand capable of elevation for future testing at gun range.

Gun Mount absorbs recoil and routes cables to capacitor banks.

SAND2016-2679C

120 mm XM934 mortar round

Steel catchbox fragments projectile

25 Tesla Coil

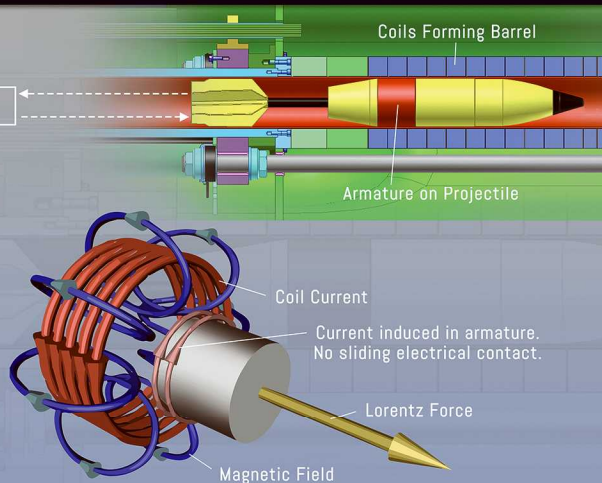
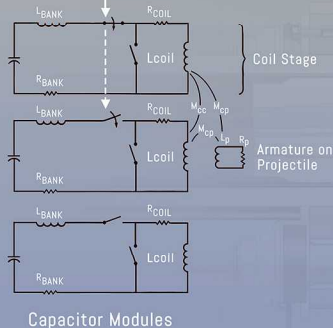
Coils Forming Barrel

ELECTROMAGNETIC LAUNCH

ADDRESSING DIFFICULT CHALLENGES FOR EM GUNS AND PROJECTILES

Projectile monitored with probes between coils and with radar

Gun Firing Control $z(t)$ $v(t)$ 94 GHz Radar



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