

# SOFT RECOIL TECHNOLOGY

Transforms your existing vehicle platforms into more mobile and lethal weapons systems



Easily integrates into your existing weapons system and mounts on your **indigenous vehicle** 



Allows for up to
60% reduction in recoil forces
transferred to the platform and
is the key ingredient to enable
larger guns on smaller
mobile platforms



**Increases** speed, lethality, agility, deployability, and survivability





## COLLABORATING TO REVOLUTIONIZE ARTILLERY SYSTEMS

AM General teamed up with Mandus Group and Supacat to develop an HMT Extenda Mk2 Concept upfitted with a 105mm light weight gun containing soft recoil technology.

#### HMT EXTENDA MK2 CONCEPT

Weight: 1250 kg (with gun installed)

Range: 17,200m; 22,600m with extended

range munitions

Fires: High Explosive, Smoke (Base Ejection), Illuminating, Target Marking, Anti-Armour (High Explosive Squash Head)

### INCREASED LETHALITY & SURVIVABILITY

Up to 60% reduction in recoil forces allows the integration of the 105mm gun onto this nimble vehicle platform.

"Shoot and scoot" – quickly deploy, fire, and displace.

Multiple levels of operation – electronic, conventional and manual.

## COST EFFECTIVE & FLEXIBLE

Fewer moving parts on the gun reduce maintenance costs and downtime.

Soft Recoil Technology can convert current towed systems to self-propelled systems like the HMT Extenda Mk2.

Integrated weapons systems allow simpler logistical deployments.

Soft Recoil Technology can be applied to multiple artillery systems utilizing your indigenous vehicle.

#### CONVENTIONAL RECOIL CYCLE VS. SOFT RECOIL CYCLE

The cannon sits in-battery and moves to the rear when fired

The cannon is released from "latch" position and moves forward to a predetermined run-up distance

The recoil system stops the rearward motion then moves it forward back into the in-battery position, which creates a counter-recoil motion Upon run-up distance, the system fires and uses a hybrid soft recoil system to absorb forces and return cannon to "latch" position

All rearward forces are transferred to the gun mount, trailer carriage or vehicle platform

This technology illustrates the concept of conservation of momentum which significantly reduces recoil forces



