



# M249 200 RD Quiet Hard Pack (Audio Signature Reduction)

## PROBLEM

The M249 Hard Pack attaches to the M249 SAW and is used to house and feed 200 rounds of 5.56mm linked ammunition. Soldiers returning from combat identified a serious flaw with the container: When partially expended, the magazine would emit a loud drumming noise as the ammo rattled around in the container. This audio signature would give away the location of the soldier, particularly concerning when maneuvering at night.

## SOLUTION

PTI Tech identified and designed materials which would maintain the strength of the current hard pack magazine while significantly reducing the noise generated when a partially expended magazine was rough-handled. The interface with the weapon utilized a rigid, glass-filled nylon. The magazine body was manufactured by over-molding the interface with a sound-absorbing thermoplastic elastomer (TPE). Additionally, PTI Tech developed a cover made from the same TPE that was strong enough to not dislodge during five-foot drop-testing. The look and feel of the new design matched that of the M249 200 RD hard pack, already familiar to warfighters, for seamless adoption.



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