

6.5x25 CBJ ST against gelatin

Purpose:

This test will demonstrate the effect of the 6.5x25 CBJ ST in bare gelatin at 3 different velocities. The velocities will correspond to 3 different weapon types, alternatively to one weapon type at different ranges.

Test setup:

3 blocks of 10% ordnance gelatin, shot at 4°C, were each shot with a 6.5x25 CBJ ST, but from different barrel lengths. The lengths of the barrels and corresponding weapon type were:

Shot 1: 300mm, carbine at 8m.

Shot 2: 200mm, submachine gun at 8m, alt. carbine at 70m.

Shot 3: 150mm, pistol at 8m, alt. submachine gun at 60m or carbine at 110m.

The dimensions of the block are: Length (Firing direction): 340mm, Height: 200mm, Width: 250mm. The distance between the muzzle and the target was 8m.

Results:

The obtained muzzle velocities were:

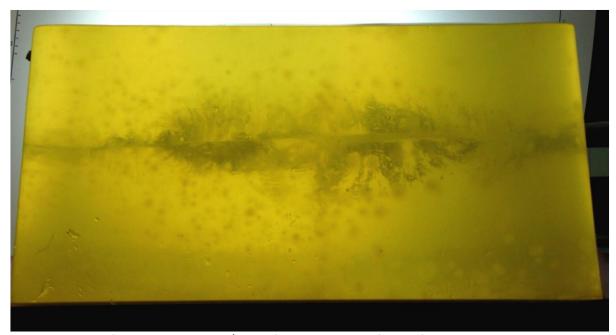
Shot 1: 902m/s Shot 2: 840m/s Shot 3: 769m/s

The effect in the tissue simulant can be studied in the pictures and Wound Profiles below.

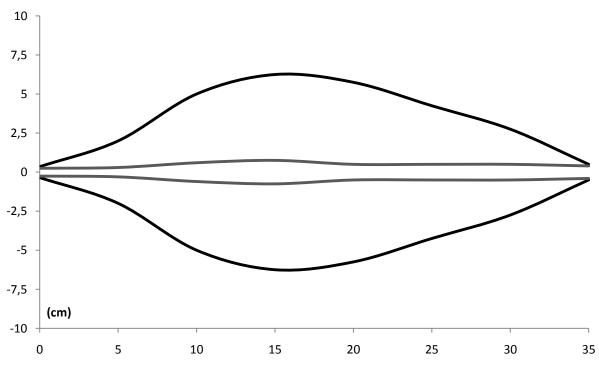
Comments:

This test confidently shows that the cartridge gives good effect when used in all weapon types for which it is intended, also at range.

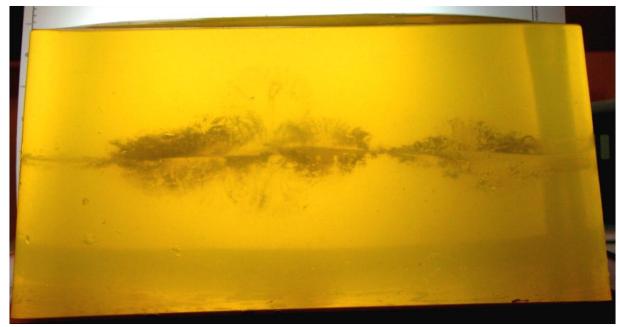
The angle to the target at which the bullet impacts affects the depth where the temporary cavity can effectively contribute to the incapacitation of the target. The even distribution of the temporary cavity insures that the 6.5x25 CBJ ST will be effective in any impact situation.



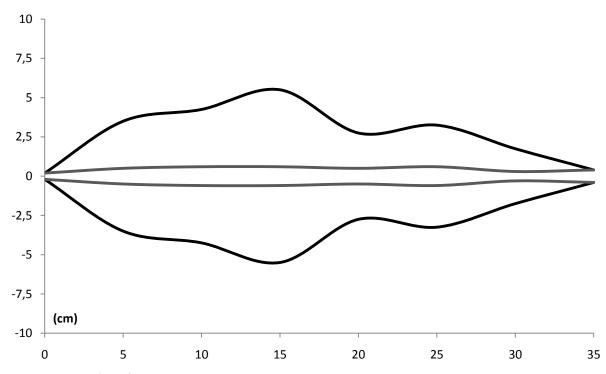
The gelatin block for shot 1, V_0 : 902m/s. The firing direction is from left to right. The contamination (spots) on the block is irrelevant to the test.



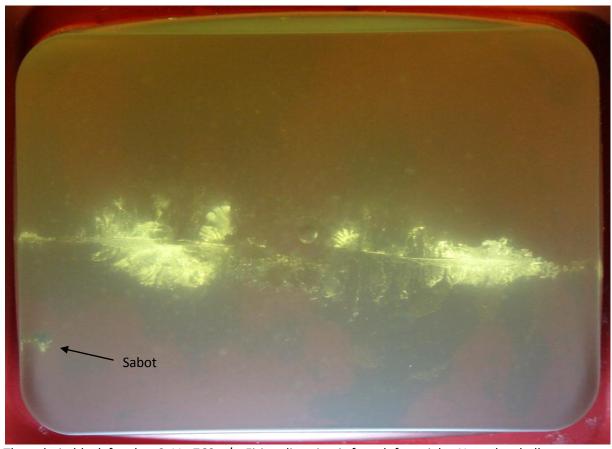
The Wound Profile of shot 1.



The gelatin block for shot 2, V₀: 840m/s. Firing direction is from left to right.



The Wound Profile of shot 2.



The gelatin block for shot 3, V_0 : 769m/s. Firing direction is from left to right. Note the shallow penetration of the sabot, considering that the range was only 8m.

