

Improved Projectile Test Tool as Per Hasbro SRS 045L



Description

Determine through experimentation if discharge mechanism is capable of discharging projectiles other than the projectile specifically designed for use with the discharge mechanism. Testing of improvised projectiles shall include, but is not limited to, the following objects:

Types of improvised projectiles

- A) Pen and Marker Caps
- B) Pens, Pencils and Markers
- C) Paper Clips
- D) Pen Refills
- E) Batteries
- F) Marbles
- G) Pebbles
- H) Coins

Specification

NOTE: All dimensions shown are in millimeters (mm).

Designation	Name	Material	D	X1	X2	R	H
Shafts (image 1)							
A	Pencil	Hardwood	7	155	15	0.5	
B	Long nail / pen refill	Aluminium	3	100	5	0.1	
C	Short nail / toothpick	Aluminium	1.5	50	2.3	0.05	
D	Toothpick	Aluminium	1.5	25	2.3	0.05	
Spheres (image 3)							
E	Steel ball	Steel	8				
F	Marble 1	Glass	16				
G	Marble 2	Glass	25				

Discs (image 2)							
H	Small coin	Steel	15				1.5
I	Medium coin	Steel	20				2
J	Large coin	Steel	25				3
K	X-Large Coin	Steel	30				3

Tolerances:

Shaft A: X1 & X2 = ± 2 mm; D = ± 0.5 mm

Shafts B, C & D: X1 & X2 = ± 1 mm; D = ± 0.2 mm

Spheres E, F & G: D = ± 1 mm

Discs H, I, J & K: D = ± 0.5 mm; H = ± 0.2 mm

Radius on shaft tips are not critical dimensions and no tolerances are specified.

NOTE: Due to possible dimensional changes caused by heat and/or humidity, the improvised projectiles should be stored in a controlled environment of 21 ± 1 °C and $65 \pm 5\%$ relative humidity.