

□ The 2.8cm schwere Panzerbüchse 41 Anti-Tank Gun

The 2.8cm s Pzb 41 was one of the more unusual weapons the Second World War, it operated under the Gerlich principle where a tapering bore squeezed a projectile to enable a much higher muzzle velocity. With this weapon a 28mm projectile was squeezed to 20mm achieving a muzzle velocity of around 1,400 m/s.

Compared to a standard weapon of similar calibre the Pzb 41 was significantly more powerful, the weapon was also very light particularly as no elevation/transverse gear was fitted. A double shield consisting of two 4mm thick plates was fitted to give protection against small arms. Introduced in 1941 the Pzb 41 saw limited production,.

The Pzb 41 fired special ammunition that consisted of a tungsten carbide core surrounded by a soft iron body, the body had fins that could be squeezed as the projectile progressed down the tapering barrel. The projectile was also fitted with a magnesium cap. As stated before a very high muzzle velocity was achieved, this significantly improved the performance of the weapon but as the projectile was very light it lost velocity rapidly thus performance at longer ranges was poor.

Testing carried out by the British on a captured Pzb 41 in 1941 showed that while the the entrance hole was small quite a few high velocity fragments emerge from the rear of the place, it was also shown however that the projectile was likely to break up even when hitting a thin plate and could be easily defeated by a spaced armour. A high explosive round was also provided but it is unlikely that it was particularly effective.

Pzb 41 Anti-Tank Gun Statistics

Length of Gun

171.4cm

2.8cm schwere Panzerbüchse 41 Anti-Tank Gun

Written by David Boyd

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Calibre

2.8cm tapering to 2cm

Elevation

-5°, +45°

Transverse

90°

Rifling 12 grooves
Crew 5

~~Weight in Action~~

~~229kg~~

Performance of the Pzb41 Anti-Tank Gun

Ammunition

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Weight of shot/shell

Complete Weight

Bursting Charge

Propellant Charge

Muzzle Velocity

Angle

Plate

100m

500 m

1000m

Pzgr Patr 41

85gm

577gm

5gm

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150gm

1,400

30

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-

-

-

Spgr Patr39

131gm

630gm

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152gm	1,400
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30

MQ

60

40

19

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Sources - Germany Artillery of World War Two, German Anti-Tank Guns