

The Pak 36 Anti-Tank Gun

The Panzerabwehrkanone 36 (Pak) was the standard anti-tank weapon of the Wehrmacht for the early part of the second world war. The Pak 36 was designed to be extremely mobile and easily pulled by horses or manpower. The combat ready weight of the Pak 36 was only just over 430kg (946lb), half that of the British 2 Pounder gun, this enabled the Pak 36 to be much more manoeuvrable and easily manhandled in difficult terrain.

The Pak36 however was a very underpowered weapon, performance was vastly inferior to that of the British 2 Pounder and only equalled that of the French 25mm anti-tank gun. For the invasion of Poland the pak36's performance was adequate but against the French tanks of May 1940 the poor performance was clearly highlighted. The heavy tanks such as the French Char B1 and the British Matilda were virtually immune to the Pak36, even the lighter tanks such as the H39 and R35 proved difficult targets for the Pak 36.

To attempt to improve the performance of the Pak 36 tungsten cored ammunition, Pzgr 40 was produced, this was a lighter projectile than the standard armour piercing ammunition and thusly had a significantly higher muzzle velocity, this significantly improved performance. As the projectile was light it

lost energy rapidly and the performance increase only lasted for a few hundred metres before it fell below that of standard ammunition. Production of this ammunition appears to have begun around June 1940, there is some debate as to whether or not it was issued during the Battle of France, if it was the numbers would have been extremely small. Later attempts to keep the weapon useful as tank armour increased involved a spigot bomb and although it could defeat significant amounts of armour its range was limited to around 300m

The pak 36 had seen extensive production before the beginning of WWII and by October 1939 over 10,000 had been issued and by May 1940 this number had risen to around 14,000. With the introduction of the Pak38 and tank armour advances rendering the Pak 36 obsolete production was scaled back in 1941 and the final weapons were completed in 1942.

Pak 36 Anti-Tank Gun Statistics

Total Length

340cm

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Written by David Boyd

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Total Width
Total Height

Length of Gun

165cm

Calibre

3.7cm

Elevation

-8 down 25 up

Transverse

60 degrees, 6 with trials closed

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Rate of fire	12-15rpm
Rifling	16 grooves

Weight in Action

432kg

Performance of the Pak 36 Anti-Tank Gun

Ammunition

Weight of shot/shell

Complete Weight

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Bursting Charge

Propellant Charge

Muzzle Velocity

Angle

Plate

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100 m

600m

Sprgr Patr

0.61kg

0.97kg

25gm

164gm

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Pzgr

0.685kg

1.32kg

13gm

175gm

762m/s

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MQ

34

27

Pzgr 40

0.368kg

0.97kg

-

150gm

1030m/s

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MQ

64

22.5

Stielgranate 41

8.6kg

8.6kg

2.42kg

217gm

110m/s

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MQ

180

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