German Maschinenpistole 40 (Machine Pistol 40 / MP 40)

The *MP 40* descended from its predecessor the MP 38, which was in turn based on the MP 36, a prototype made of machined steel. The MP 36 was developed independently by Erma Werke's Berthold Geipel with funding from the German Army. It took design elements from Heinrich Vollmer's VPM 1930 and EMP. Vollmer then worked on Berthold Geipel's MP 36 and in 1938 submitted a prototype to answer a request from the *Heereswaffenamt* (Army Weapons Office) for a new submachine gun, which was adopted as MP 38. The MP 38 was a simplification of the MP 36, and the MP 40 was a further simplification of the MP 38, with certain cost-saving alterations, most notably in the more extensive use of stamped steel rather than machined parts.

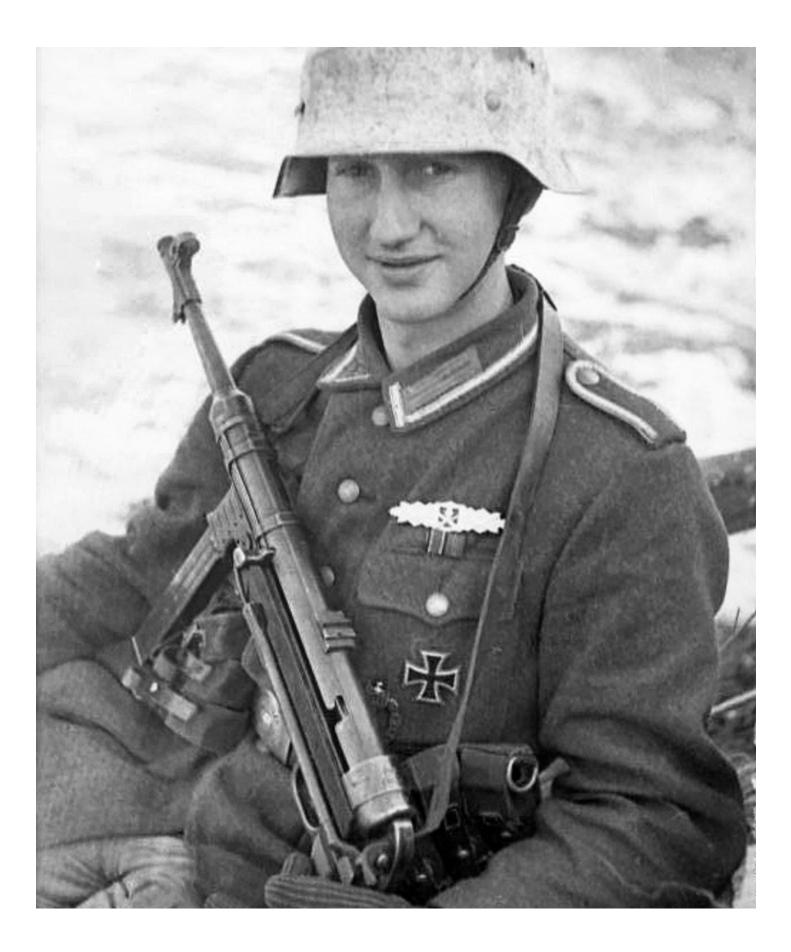
The MP 40 was often called the "Schmeisser" by the Allies, after the weapon designer Hugo Schmeisser. Schmeisser had designed the MP 18, which was the first mass-produced submachine gun. He did not, however, have anything to do with the design or development of the MP 40, although he held a patent on the magazine

The MP 40 submachine guns are open-bolt, blowback-operated automatic arms. The only mode of fire was fully automatic, but the relatively low rate of fire enabled single shots with controlled trigger pulls. The bolt features a telescoping return spring guide which serves as a pneumatic recoil buffer. The cocking handle was permanently attached to the bolt on early MP 38s, but on late production MP 38s and MP 40s, the bolt handle was made as a separate part. It also served as a safety by pushing the head of the handle into one of two separate notches above the main opening; this action locked the bolt either in the cocked (rear) or uncocked (forward) position. The absence of this feature on early MP 38s resulted in field expedients such as leather harnesses with a small loop that were used to hold the bolt in the forward position.

The MP 38 receiver was made of machined steel, but this was a time-consuming and expensive process. To save time and materials, and thus increase production, construction of the MP 40 receiver was simplified by using stamped steel and electro-spot welding as much as possible. The MP 38 also features longitudinal grooving on the receiver and bolt, as well as a circular opening on the magazine housing. These features were eliminated on the MP 40.

One unique feature found on most MP 38 and MP 40 submachine guns was an aluminum, steel, or Bakelite resting bar or support under the barrel. This was used to steady the weapon when firing over the side of open-top armored personnel carriers such as the Sd.Kfz. 251 half-track. A hand guard, made of a synthetic material derived from Bakelite, was located between the magazine housing and the pistol grip. The barrel lacked any form of insulation, which often resulted in burns on the supporting hand if it was incorrectly positioned. The MP 40 also had a forward-folding metal stock, the first for a submachine gun, resulting in a shorter overall weapon when folded. However, this stock design was at times insufficiently durable for hard combat use.

Cartridge	9×19mm Parabellum
Effective firing range:	100–200 m
Maximum firing range:	250 m
Rate of fire:	500–550 rounds/min
Place of origin:	Nazi Germany
Barrel length:	251 mm (9.9 in)
Overall length	833 mm (32.8 in) stock extended, 630 mm (24.8 inches) stock folded
Weight	3.97 kg (8.75 lb
Unit cost:	57 RM (1940); 230 EUR current equivalent
Designer:	Heinrich Vollmer; Berthold Geipel
Produced	1940–1945
No. built	1,100,000 (estimated
Manufacturer	Steyr-Mannlicher
	Erma Werke
	Haenel
Variants	MP 36
	MP 38
	MP 40
	MP 40/1
	MP 41





Magazine pouches, magazines and loading tool

A modern round consists of the following:

1. bullet, as the projectile;

2. cartridge case, which holds all parts together;

3. propellant, for

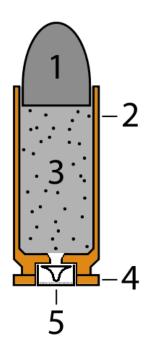
example gunpowder or cordite;

4. rim, which provides the extractor on the

firearm a place to grip the casing to remove

it from the chamber once fired;

5. primer, which ignites the propellant.





Part of a German training chart (dated November 15, 1942) showing an MP40 and section view of an MP38.

- Barrel a
- Bushing al
- a2 Front sight protector
- a3 Barrel bar
- Front sight base a4
- a5
- Bushing spring Front sight base pin a6
- Front sight a7
- a8 Barrel bar pin
- Barrel nut a9
- Ring (two halves) a10
- Barrel nut safety ring a11
- a12 Ring for sling
- Receiver housing, b complete
- Back sight, complete b1
- b2 Magazine housing
- b3 Ejector
- b4 Magazine catch
- Magazine housing pin b5
- b6 Ejector pin
- b7
- Magazine release knob Magazine catch spring b8
- b9 Back sight flap
- Back sight flap spring b10
- b11 Back sight pin
- b12 Back sight base
- c1 Lower receiver
- Grip, complete c2
- c3 Lower receiver lock
- screw
- c5 Trigger c6 Sear
- c7
- Stock release button c8 Stock bushing
- c9 Stock spring
- c9 Stock release button
- spring
- c10 Stock arm, right
- Stock arm, left c11
- Stock release button pin c12
- c13 Trigger mechanism
- Sear pin c14
- Trigger pin c15
- Shaft for trigger spring c16
- Trigger spring c17
- c18 Receiver lock screw

 - spring
- Grip plate screw c30

- d10 Front recoil spring tube
- -0408 c 20 c 18 c 27 c 19 c 3 c14 c28 66 Einzelteile dl d12 1 ĥ d 13 www d 15 d 16 c 32 c3 18 MM c 19 c 24 c 20 c19 Receiver lock screw c31 Grip plate screw d11 Center recoil spring tube button Trigger bar pin c32 d12 Recoil spring tube w/buffer c20 Receiver lock screw pin Safety wire d13 Recoil spring c33 c21 Shoulder piece Bolt d14 Recoil spring guide d1 c22 Shoulder piece spring d2 Firing pin d15 Recoil guide c23 Shoulder piece shaft d3 Extractor d16 Internal firing pin spring w/notch Retracting handle d4 Magazine housing, e1 c24 Shoulder piece pin Retracting handle pin d5 complete c25 Grip plate, left Retracting handle ball Magazine floorplate, d6 e2 c26 Grip plate, right bearing complete c27 Grip screw d7 Retracting handle spring Magazine follower, e3 Grip locking screw c28 d8 Firing pin bushing complete c29 Grip plate bushing d9 Firing pin spindle e4 Magazine spring

Schnitt (MP 38)

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