PRIMER STUDY GUIDE

SWISS K31

LESSON 208

43.5″ 111 CM	**8.8 LBS** 4 KG	**DETACH** DOUBLE STK	**6 ROUNDS** 7.5×55 MM

DEVELOPMENT HISTORY

Switzerland is one of several European nations which attempted to avoid both of the World Wars through neutrality. It was more successful than others thanks to its emphasis on remaining well armed and ready for national defense. One facet of this readiness was a national program of civilian sport shooting and an emphasis on high quality marksmanship.

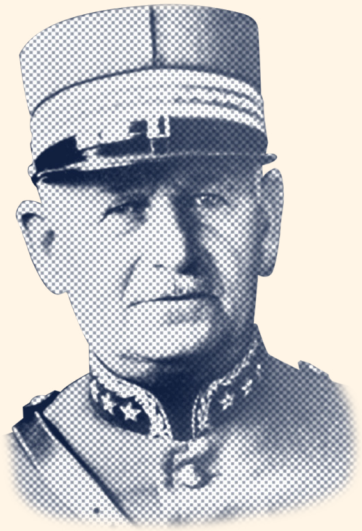
During the era of the repeating rifle, the Swiss army adopted a straight-pull, vertical box magazine service rifle designed by Rudolf Schmidt. This Gewehr 1889 was built atop of the existing Swiss Vetterli, which made for a very long overall design and left the symmetrical rear locking lugs quite far from the chamber. This was acceptable and perhaps beneficial when using the compressed black powder that was available at the time. However, even as the Gewehr 1889 was adopted into service, smokeless powder made its debut.

GEWEHR 1889
"SCHMIDT - RUBIN"

Minor upgrades would be made in 1896. This merely moved the locking lugs forward and slightly reduced the length of the bolt and receiver. This was deemed enough to provide for a series of carbines using the same action. The last of these was the Karabiner 1911, which was adopted in 1913 and served alongside the upgraded Gewehr 1911.

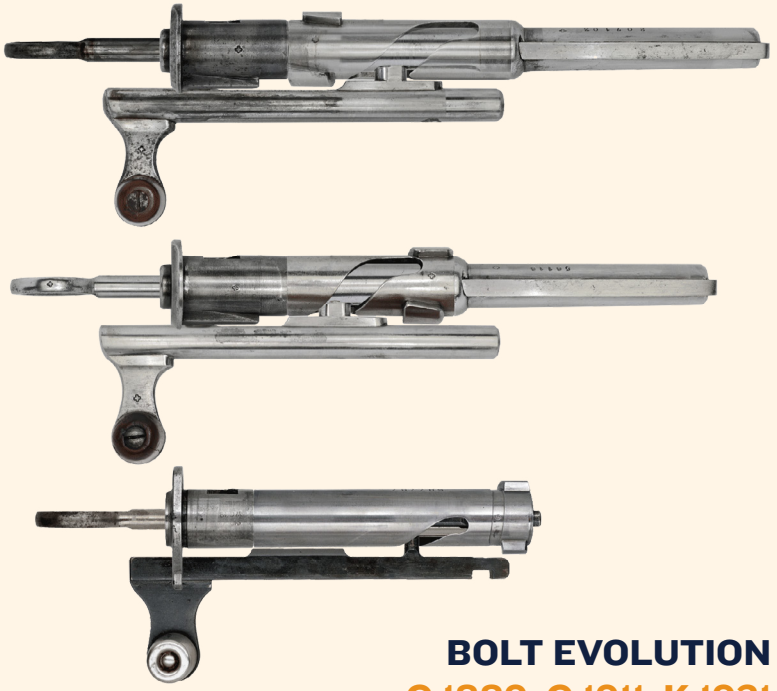
KARABINER 1911
"SCHMIDT - RUBIN"

Following the First World War, the Swiss military realized that the general issue of short rifles, or carbines, would be more practical than the then 51-inch long infantry rifles. However, the Swiss shooting competitions were carried out with service arms. Using the shorter barreled Karabiner would affect scores at ranges which were no longer relevant for your average soldier. This concern, along with more conservative views that the rifle should have the maximum possible range regardless of other considerations, led to a series of experiments. Could a short rifle with a heavier barrel be as precise shooting as the long rifle? Results from 1924 were promising.



In 1929 a redesign of the bolt and receiver was executed under the direction of Lieutenant-Colonel Adolf Furrer (1873 - 1958), director of Waffenfabrik Bern. Another round of trials were conducted and, with minor modifications, a new service rifle emerged. The bolt head was now nested into the bolt body, providing a much shorter overall length. This allowed for a shorter receiver and better balance on the finished rifle. It was paired with the heavy barrel and a great many minor changes were made to speed up and simplify manufacture.

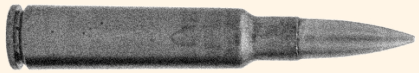
ADOLF FURRER
1873 - 1958



BOLT EVOLUTION
G.1889, G.1911, K.1931

In January of 1932 the new rifle was declared ordnance and was named for its final year of development: Karabiner 1931. The overall length and general pattern of the new rifle was carried over from the prior Karabiner 1911. However, it now had a 6cm longer barrel and longer sight radius, engineered to match performance with the much larger, prior service long rifle. The trigger group was also changed so that the sear moved vertically instead of pivoting like the previous Schmidt designs.

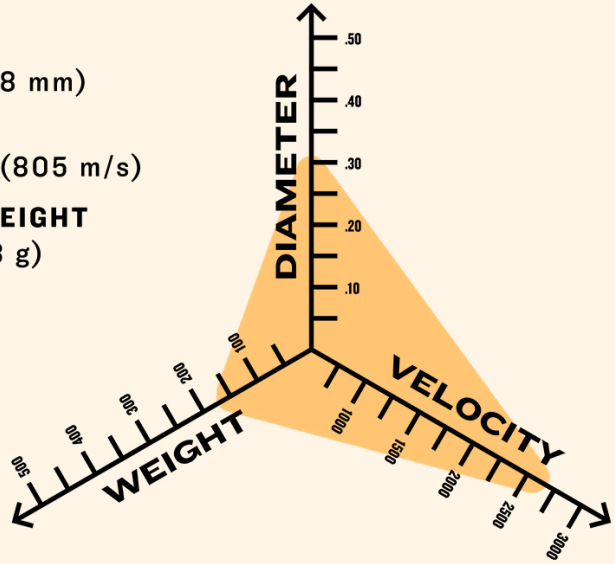
7.5 SWISS GPII
7.5×55MM



CALIBER
.309 in (7.8 mm)

VELOCITY
2640 FPS (805 m/s)

BULLET WEIGHT
174 gr (11.3 g)



The service cartridge remained unchanged. This was a 7.5mm, jacketed, spitzer bullet weighing 11.3 g and moving at approximately 805 m/s. Loading was also unchanged: A cardboard charger with a tin base carrying six cartridges.

Much of the Swiss Army was made up by universal conscription. This provided for a large, trained body of men which could be called up in times of need. It also meant many rifles would need to be on hand and in reserve. Instead of replacing all of these at once, and because the old and new rifles shared ammunition, it was decided to initially produce the K31 for issue to new troops. As time passed, this was slowly expanded to displace as many long rifles as possible, with existing K11s filling in the gaps until complete rearmament.

Production was radically expanded, along with the army, during World War 2, though Swiss neutrality was maintained. Material shortages led to failed attempts to use alternative metals and successful programs to use two-piece stocks. Even post war, shortages meant lighter beechwood stocks were used.

Post war, the K31 was eventually replaced by the Stg-57 autoloading rifle. This created another transition period before they finally left service entirely during the 1970s. Total martial production exceeded 530,000 Karabiners 31.

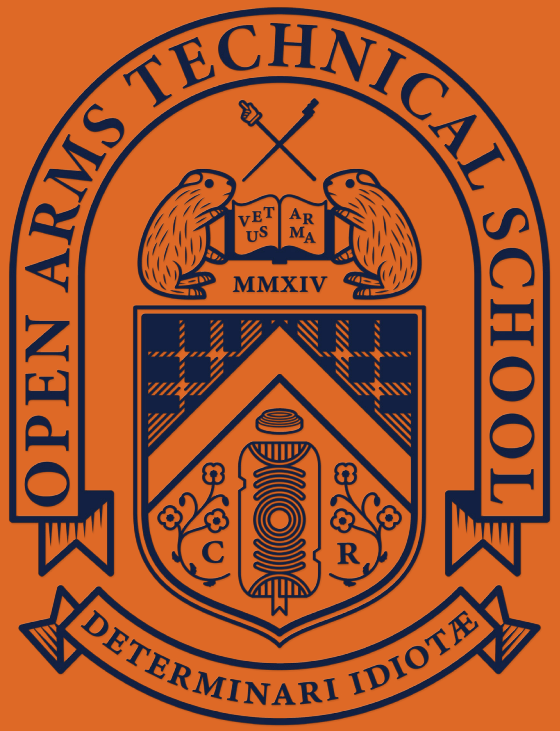
K.31 SERIAL RANGES
ANNUAL ENDING SERIAL

	520151
1933	521202
1934	536736
1935	550400
1936	561727
1937	573366
1938	583700
1939	599000
1940	632575
1941	686725
1942	736075
1943	786550
1944	838450
1945	864650
1946	880250
1947	901200
1948	921300
1949	936800
1950	950000
1951	973050
1952	994450
	999999
1953	215001
1954	239600
1955	250850
1956	257250
1957	260200
1958	263330

Three factors brought about the need for the Karabiner 31 in Swiss service.

1) A desire for a short rifle capable of accuracy comparable to the long rifle
2) Inefficient design of the current rifle's bolt, resulting in excessive length
3) Various innovations and changes to production to ease manufacture

The resulting K31 achieved all of its stated goals, along with additional improvements. While it was not used in conflict, it did serve as part of an overall strategy to make Switzerland "indigestible" to the warring nations. The K31 has earned a strong reputation for accuracy, ease of service, and smooth operation.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