

## The Schmidt-Rubin 1889



Barrel Length - 30.7 inches: 3-groove, RH, concentric rifling, 1 in 10.63

Overall Length - 51.25 inches

Weight - 10.69lbs empty

Action - Schmidt-Rubin Straight Pull

Caliber - 7.5x53.5 Swiss (GP90 & GP 90/03)

7.5x54.5 Swiss (GP90/23)

Capacity - 12 round detachable box magazine

Sights - Quadrant sight graduated to 2000m

Total Production : 212,000

Bayonet: Model 1889

Officially adopted in 1889, the Schmidt-Rubin Model 1889 was the result of several years of testing. In 1882 Eduard Rubin began testing the first small-caliber copper-jacketed bullet which could successfully withstand high velocities. In 1885, this round was combined with Rudolf Schmidt's first straight-pull action. The straight-pull action relied upon an actuating rod, set in a channel to the right of the breech, to rotate the bolt through a helical channel cut in the bolt sleeve. Twin locking lugs were positioned midway through the bolt sleeve, locking the bolt into the receiver directly above the trigger. Over the next three years both the rifle design and cartridge were refined. The final result was adopted on June 26, 1889.



1889 Bolt

The Model 1889 was chambered for the 7.5x53.5 round (GP90) with a 213 grain paper patched round producing a velocity of 1935fps. The cartridges were held in a detachable magazine holding 12 rounds. Production ceased in 1897, due to the weakness of the 89s bolt. Approximately 211,890 rifles were produced.

## The Schmidt-Rubin Model 1889/96

(See picture of Model 1889)



Barrel Length - 30.7 inches: 3-groove, RH, concentric rifling, 1 in 10.63

Overall Length - 51.2 inches

Weight - 9.92lbs empty

Action - Schmidt-Rubin Straight Pull

Caliber - 7.5x53.5 Swiss (GP90 & GP 90/03)

7.5x54.5 Swiss (GP90/23)

Capacity - 12 round detachable box magazine

Sights - Quadrant sight graduated to 2000m

Total Production : 137,050

Bayonet: Model 1889, Model 1899, Model 1889/92, and Model 1906

Even before the Model 1889 entered service, the Swiss Rifle Technical Commission had reservations about the strength of the Model 1889s action. In 1888 they requested Col. Schmidt to redesign the Model 1889 action by moving the locking lugs forward on the bolt sleeve. However, Colonel Rudolph Schmidt, then the Director of Armament Manufacturing, refused the request, claiming such a change was “not feasible.”

As the Model 1889 entered service, the Rifle Commission's fears were realized, by 1892, it became apparent the rear mounted locking lugs of the Model 1889 were problematic. On November 3, 1892, Col. Vogelsang was assigned the task of designing three rifles with improved actions, shortly thereafter, an additional 50 rifles were requested.

Col. Vogelsang's, along with the assistance of his co-worker Rebholz, changes were fairly simple. In essence, he merely moved the locking lugs from the rear of the bolt sleeve to the front of the bolt sleeve. These changes weren't quite that simple however, as it required a redesign of the bolt (including the bolt sleeve, firing pin and firing pin spring), receiver, and the stock.

Due to turnover amongst Armament Manufacturer Department Heads testing of the new action was delayed until 1895. On 1 January 1895, the test rifles were delivered to the shooting school in Walenstadt. Testing of the new design showed numerous improvements in performance.

Testing determined –

The bolt itself was strengthened,

Breakage of the locking lugs was reduced,

The action could handle higher pressure cartridges,

There was less binding of the bolt,

There was tighter lock-up of the bolt, producing better accuracy,

There was an increase in the length of pull, by 2cm, allowing for a better shooting position,

And there was a decrease in weight of about 100g,

It was determined that it would be impractical to attempt to convert the existing Model 1889s to the new action type, thus a new rifle model was required. Thus on July 31, 1896, a new rifle, designated the Model 1889/96 was approved for service.

Several minor modifications to the design were made throughout the service life of the rifle. Even before the rifle entered into production the barrel band and firing pin spring was redesigned and the rear of the receiver was widened slightly.

Shortly thereafter, the firing pin itself was widened from 3.5 to mm in diameter.

Nearly all of the 1889/96 were converted into Model 1896/11 in the 1910s. Of the 137,000 89/96s produced, only 1,280 remained in their original configuration.