

6.5 x 55mm Swedish Mauser *(Military Actions)*

Loads for rifles based on original military actions (Mauser 94 and 96; Krag-Jorgensen)

The 6.5x55mm cartridge was adopted in 1894 as the service cartridge by both Sweden and Norway. It was chambered in the various Swedish Mauser models and also the Norwegian Krag-Jorgensen rifle. Although it is one of the oldest smokeless powder loadings, it is still widely used in Europe as a sporting and target cartridge.

Accuracy in a quality bolt-action rifle is excellent, and its ability to handle long bullets up to 160 grains makes it an excellent game cartridge on species up to and including large deer and black bear. The cartridge uses standard .263" and .264" diameter bullets.

The 6.5x55mm was little known in the United States until the 1950's when large numbers of surplus Swedish rifles and carbines turned up. Norma of Sweden imported the first sporting ammunition and components and the cartridge has become popular with American shooters. Die sales at RCBS for this cartridge have been strong for years.

Surprising to some "armchair ballisticians," its success in the field is far better than anyone would imagine from looking at ballistics tables. In spite of this, we consider the 6.5mm Swede to be somewhat light for elk and moose in the hands of a novice hunter. However, plenty of these big animals have fallen to the cartridge—helped by a skilled rifleman and the deep penetration of heavy bullets at modest velocity.

We found that the medium- to slow-burning powders work best. Speer's 90-grain TNT hollow point is a great bullet to take afield for the spring varmint season. This is an excellent way to reinforce familiarity with your rifle more than once a year. The 120-grain Speer Hot-Cor® bullet is a good choice for smaller deer species and antelope. For game up to the size of mule deer, the 140-grain Hot-Cor spitzer provides the deep penetration that has endeared the "Swede" to so many hunters.

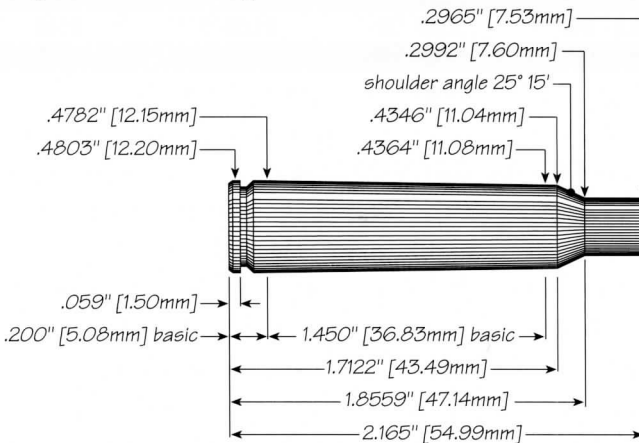
Reloaders should recall that most 6.5x55mm rifles have long chamber throats to accommodate the 160-grain military bullets used in the cartridge's early years. With this throating, you may seat the bullet to take advantage of the maximum cartridge length of 3.150-inch. However, make sure jacketed bullets do not touch the rifling at the seating length you choose.

Most U.S. and foreign ammo makers produce loaded ammunition and unprimed cases are now readily available. This is fortunate for handloaders because the Swede's case head diameter is unique, making modification of more common cases difficult.

At standard industry pressures, the 90 and 120-grain bullets are the best choice. Velocities with the 140-grain soft point were quite modest at these pressure levels. Note that our start loads are only two grains under the maximum loads. This cartridge has a steep pressure curve; reducing starting loads more than shown can result in inconsistent performance.

We have two sections for the 6.5x55mm cartridge. In the United States, the industry operating pressure for this cartridge is a modest 51,000 psi in deference to the original military actions lacking the "safety lug" of later Mausers. The loads in this section are for surplus military rifles or custom rifles using military actions and comply with current industry specifications. If in doubt about your rifle's capability and action type, check with a gunsmith familiar with military Mauser actions and their characteristics.

During the last two decades, Remington, Winchester, Ruger, and others have made 6.5x55 rifles. These are all strong bolt actions designed for cartridges rated at much higher pressure than the "Swede" produces. We created a second 6.5x55 section of handload data developed to pressures more in line with European sporting ammunition. They are to be used only in modern commercial rifles or custom rifles based on the strong M98 Mauser design.



Max. Case Length: 2.165"
Trim-to Length: 2.155"
Max Cart. OAL: 3.150"
RCBS Shell Holder: #2

Cart. Case: Remington
Primer: CCI 200; 250*
Test Firearm: Universal Receiver
Barrel Length: Krieger 24"

6.5 x 55mm Swedish Mauser *(Military Actions)*



| 0.264" | 6.5mm TNT HP |
|-----------------------|-----------------|
| Weight, grains | 90 |
| Ballistic Coefficient | 0.281 |
| Sectional Density | 0.184 |
| COAL Tested: | 2.850" |
| Speer Part No. | 1445 |

| Propellant | START CHARGE | | MAXIMUM CHARGE | |
|------------------------|--------------|-------------------------|----------------|-------------------------|
| | Weight, grs | Muzzle Velocity, ft/sec | Weight, grs | Muzzle Velocity, ft/sec |
| H414* | 48.0 | 3155 | 50.0 | 3278 |
| AA 2700* | 47.0 | 3121 | 49.0 | 3244 |
| IMR 4064 | 42.0 | 3105 | 44.0 | 3238 |
| H4350 | 48.0 | 3098 | 50.0 | 3223 |
| Varget | 41.0 | 3084 | 43.0 | 3193 |
| IMR 4895 | 41.0 | 3051 | 43.0 | 3185 |
| IMR 4350 | 48.0 | 3048 | 50.0 | 3178 |
| IMR 3031 | 39.5 | 3038 | 41.5 | 3169 |
| AA 4350 | 49.0 | 3029 | 51.0C | 3149 |
| AA 5744 (reduced load) | 19.0 | 1841 | 21.0 | 2018 |



| | |
|-----------------------|---------------------------|
| 0.264" | 6.5mm Spitz SP |
| Weight, grains | 120 |
| Ballistic Coefficient | 0.392 |
| Sectional Density | 0.246 |
| COAL Tested: | 3.000" |
| Speer Part No. | 1435 |

| Propellant | START CHARGE | | MAXIMUM CHARGE | |
|------------------------|--------------|-------------------------|----------------|-------------------------|
| | Weight, grs | Muzzle Velocity, ft/sec | Weight, grs | Muzzle Velocity, ft/sec |
| IMR 4350 | 40.0 | 2602 | 42.0 | 2705 |
| H4350 | 39.0 | 2591 | 41.0 | 2700 |
| IMR 4831 | 40.0 | 2567 | 42.0 | 2697 |
| H4831SC | 43.0 | 2581 | 45.0 | 2688 |
| Reloder 22 | 40.0 | 2594 | 42.0 | 2670 |
| Reloder 19 | 39.0 | 2589 | 41.0 | 2655 |
| H414* | 36.0 | 2536 | 38.0 | 2619 |
| IMR 4064 | 34.0 | 2502 | 36.0 | 2608 |
| Varget | 34.0 | 2497 | 36.0 | 2603 |
| AA 5744 (reduced load) | 22.0 | 1918 | 24.0 | 2068 |

Maximum Loads should be used with CAUTION • C = Compressed Load • *Magnum Primer used with this powder.

6.5 x 55mm Swedish Mauser (Military Actions)



| 0.264" | 6.5mm Spitz SP |
|-----------------------|-------------------|
| Weight, grains | 140 |
| Ballistic Coefficient | 0.498 |
| Sectional Density | 0.287 |
| COAL Tested: | 3.000" |
| Speer Part No. | 1441 |

| Propellant | START CHARGE | | MAXIMUM CHARGE | |
|------------|--------------|-------------------------|----------------|-------------------------|
| | Weight, grs | Muzzle Velocity, ft/sec | Weight, grs | Muzzle Velocity, ft/sec |
| Reloder 22 | 38.0 | 2382 | 40.0 | 2461 |
| Reloder 19 | 38.0 | 2312 | 40.0 | 2399 |
| H4831SC | 37.0 | 2288 | 39.0 | 2379 |
| H4350 | 34.0 | 2257 | 36.0 | 2350 |
| IMR 4831 | 34.0 | 2254 | 36.0 | 2339 |
| IMR 4350 | 34.0 | 2254 | 36.0 | 2337 |
| IMR 4064 | 31.0 | 3193 | 33.0 | 2300 |
| Varget | 31.0 | 2165 | 33.0 | 2276 |

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6.5 x 55mm Swedish Mauser (*Strong Commercial Actions*)

Loads for strong, modern commercial actions ONLY

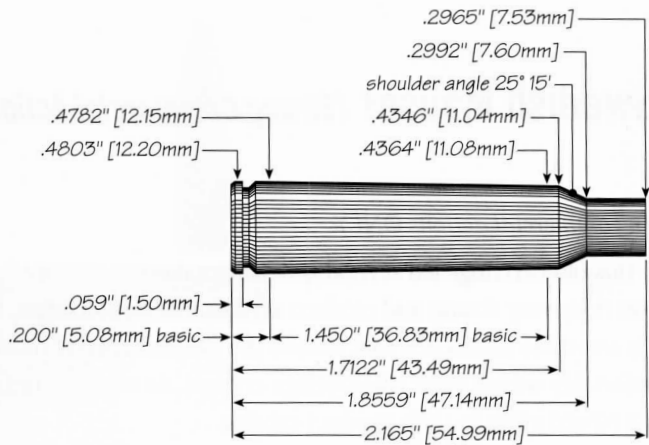
The renewed interest in this old cartridge led several U.S. rifle makers to create 6.5x55mm rifles based on their very strong and modern actions. For handloaders, this means they can carefully assemble handloads that exceed the performance of most factory ammo yet stay comfortably within their rifle's design criteria. As of our printing date, only Ruger still lists 6.5x55 rifles in their product catalog.

Although the 6.5x55 is now one of our "Century" cartridges, its well-proportioned case with ample propellant capacity allows it to continue competing with more modern cartridges. Loaded to a more robust pressure limit, this cartridge can safely push most bullets 120 to 150 ft/sec faster than ammo loaded to U.S. industry pressure limits.

The handloads in this section approach pressures of 58,000 psi and are in the same class as the 257 Roberts +P and 6.5x55mm ammunition loaded in Europe. They are intended for modern commercial rifle actions that are routinely chambered for other cartridges having maximum pressure limits of up to 65,000 psi. The higher pressure level permits much better velocities from the 140-grain bullet.

Some fine custom 6.5x55 rifles have been crafted using both military and commercial Mauser Model 98 actions. Even then, you must verify your rifle's chamber dimensions and headspace are correct. These loads are not to be used in any rifle having a military surplus action other than a properly identified M98 Mauser. Users of the more common M94 and M96 Swedish Mauser actions must use the loading data provided in the previous section.

6.5 x 55mm Swedish Mauser (Strong Commercial Actions)



| | | | |
|--------------------|--------|----------------|--------------------|
| Max. Case Length: | 2.165" | Cart. Case: | Remington |
| Trim-to Length: | 2.155" | Primer: | CCI 200; 250* |
| Max Cart. OAL: | 3.150" | Test Firearm: | Universal Receiver |
| RCBS Shell Holder: | #2 | Barrel Length: | Krieger 24" |



| | |
|-----------------------|-----------------|
| 0.264" | 6.5mm TNT HP |
| Weight, grains | 90 |
| Ballistic Coefficient | 0.281 |
| Sectional Density | 0.184 |
| COAL Tested: | 2.850" |
| Speer Part No. | 1445 |

| Propellant | START CHARGE | | MAXIMUM CHARGE | |
|------------|--------------|-------------------------|----------------|-------------------------|
| | Weight, grs | Muzzle Velocity, ft/sec | Weight, grs | Muzzle Velocity, ft/sec |
| Varget | 45.0 | 3193 | 47.0 | 3410 |
| H414* | 50.0 | 3278 | 52.0 | 3401 |
| AA 2700* | 49.0 | 3244 | 51.0 | 3385 |
| IMR 4350 | 51.0 | 3243 | 53.0C | 3373 |
| IMR 4064 | 44.0 | 3238 | 46.0 | 3371 |
| H4350 | 50.0 | 3223 | 52.0C | 3348 |
| IMR 4895 | 43.0 | 3185 | 45.0 | 3320 |
| IMR 3031 | 41.5 | 3169 | 43.5 | 3301 |

6.5 x 55mm Swedish Mauser *(Strong Commercial Actions)*



| 0.264" | 6.5mm Spitz SP |
|-----------------------|-------------------|
| Weight, grains | 120 |
| Ballistic Coefficient | 0.392 |
| Sectional Density | 0.246 |
| COAL Tested: | 3.000" |
| Speer Part No. | 1435 |

| Propellant | START CHARGE | | MAXIMUM CHARGE | |
|------------|--------------|-------------------------|----------------|-------------------------|
| | Weight, grs | Muzzle Velocity, ft/sec | Weight, grs | Muzzle Velocity, ft/sec |
| IMR 4350 | 43.0 | 2765 | 45.0 | 2851 |
| IMR 4831 | 43.0 | 2737 | 45.0 | 2841 |
| Reloder 22 | 44.0 | 2743 | 46.0 | 2830 |
| Reloder 19 | 44.0 | 2754 | 46.0 | 2820 |
| H4350 | 41.0 | 2700 | 43.0 | 2808 |
| H4831SC | 45.0 | 2688 | 47.0 | 2795 |
| H414* | 40.0 | 2705 | 42.0 | 2781 |
| IMR 4064 | 37.0 | 2659 | 39.0 | 2764 |
| Varget | 37.0 | 2656 | 39.0 | 2762 |

Maximum Loads should be used with CAUTION • C = Compressed Load • *Magnum Primer used with this powder.

6.5 x 55mm Swedish Mauser *(Strong Commercial Actions)*



| 0.264" | 6.5mm Spitz SP |
|-----------------------|-------------------|
| Weight, grains | 140 |
| Ballistic Coefficient | 0.498 |
| Sectional Density | 0.287 |
| COAL Tested: | 3.000" |
| Speer Part No. | 1441 |

| Propellant | START CHARGE | | MAXIMUM CHARGE | |
|------------|--------------|-------------------------|----------------|-------------------------|
| | Weight, grs | Muzzle Velocity, ft/sec | Weight, grs | Muzzle Velocity, ft/sec |
| Reloder 22 | 43.0 | 2579 | 45.0 | 2655 |
| Reloder 19 | 43.0 | 2529 | 45.0 | 2616 |
| H4831SC | 41.0 | 2464 | 43.0 | 2558 |
| IMR 4831 | 39.0 | 2467 | 41.0 | 2551 |
| IMR 4350 | 39.0 | 2462 | 41.0 | 2545 |
| H4350 | 38.0 | 2444 | 40.0 | 2531 |
| Varget | 35.0 | 2390 | 37.0 | 2498 |
| IMR 4064 | 34.0 | 2351 | 36.0 | 2462 |

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