

**Early Russian Tank Designs**

Several sources describe experimental tank projects in Russia during, and possibly before, WWI. Details are sketchy at best and the sources are contradictory.

**Mendeleyev:** Crow & Icks (see bibliography) state this design is from 1898, but Fleischer lists it as a series from 1911 to 1916. Huge armoured box on tracks, looks like French St. Chamond only bigger. Up to 170 tons, up to 150mm of armour, 8 man crew, armed with 120mm naval gun. One prototype was probably started but not completed.

**"20-Ton Tank":** 1915, similar in size and shape to St. Chamond. Four man crew, 107mm gun, 10 to 12mm armour. Probably never built.

**Vesdechod:** Tiny eggshell-shaped vehicle, prototype built in 1915. Two man crew, armed with a single machinegun. The name apparently means either "attack driver" or "go anywhere".

**Lebedenko:** Very strange tricycle machine. Two huge 30-foot diameter spoked wheels in front, main hull looks a lot like a Napoleonic period artillery carriage with a roller in back. Domed turret in center. One apparently built and tested but probably not finished. No indication of what it was supposed to be armed with.

**Early Russian Armoured Cars**

The Putilov factory produced armoured cars from 1916 into the early 1920's. The early cars were based closely on British and French designs, particularly the Austin. Later cars were original Russian designs, introducing new features like halftracks and rollers to assist trench crossing. Armour was usually 8mm thick, armament was usually one or two 7.62mm machineguns, max speed 16 mph. At least 60 Putilov halftracks built during WWI.

**T-17**

**Soviet Union 1929**

Tiny one-man tankette armed with a single 7.62mm machinegun. Armour 10 to 14mm thick, weight 2 tons, top speed 10 mph. How the single crewman was expected to load, aim, and fire the weapon while driving is left up to the imagination of the reader. Only one built. The US and Britain experimented with similar designs.

**KS**

**Soviet Union 1921**

Gun: 37mm L21

Weight: 8 tons

MG: 1 x 7.62mm

Speed: 5 mph

Crew: 2

UpHullFr: 16/45°

TurFr: 16/15°

LowHullFr: 16/45°

GunMant: 16/20°

HullSide: 8/0°

TurSide: 16/15°

LowHull: 8/0°

TurRear: 16/15°

HullRoof: 6/75°

TurRoof: 6/85°

HullRear: 8/0°

Notes: Almost a direct copy of the Renault FT, many of which were sent to Russia during the Civil War. The first few vehicles were armed with either a 37mm cannon or 7.62mm but most were armed with both, unlike the original French version. Probably only 15 built. KS stands for Krasny-Sormovo, the name of the place they were made.

**BA-27**

**Soviet Union 1927**

Gun: 37mm

Weight: 10 tons

MG: 1 x 7.62mm

Speed: 30 mph

Crew: 4

UpHullFr: 7/45°

TurFr: 7/10°

LowHullFr: 7/45°

GunMant: 7/30°

HullSide: 7/0°

TurSide: 7/20°

LowHull: 7/0°

TurRear: 7/15°

HullRoof: 7/75°

TurRoof: 7/85°

HullRear: 7/0°

Notes: Four-wheeled armoured car, turret similar to MS-1. Over 300 built, some still in service during WWII.

**BA-27M:** Six-wheeled variant.

**BA-20:** Improved four-wheel variant.

**MS-1 (or T-18)**

**Soviet Union 1928**

Gun: 37mm

Weight: 5 tons

MG: 1 x 7.62mm

Speed: 10 mph

Crew: 2

UpHullFr: 16/45°

TurFr: 16/15°

LowHullFr: 16/45°

GunMant: 16/5°

HullSide: 8/0°

TurSide: 16/15°

LowHull: 8/0°

TurRear: 16/15°

HullRoof: 6/85°

TurRoof: 6/85°

HullRear: 8/45°

Notes: Looks very similar to Renault FT and NC but is entirely Russian design. The machinegun was not coaxial to the cannon, but stuck out in a ball mount on the right front corner of the turret. 37mm gun was longer than the L21 in KS and Renault FT. About 960 of all MS types were built.

**MS-2:** Minor improvements, better engine.

**MS-3:** Improved hull front armour layout, more powerful engine, two mg's in ball mounts in the turret, one on each side of the main gun.

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**TG** **Soviet Union 1930**  
 Very sleek heavy tank design, years ahead of its time. Long 75mm or 76.2mm cannon, four machineguns. Capable of running on roadwheels or tracks. Powerful engine, 25 mph speed, armour 10 to 50mm, weight 25 tons. Impressive but mechanically unreliable. Probably only one built. TG stands for Tank Grotte, or "Heavy Tank".

**BT-1** **Soviet Union 1931**  
 Gun: None (see notes) Weight: 10 tons  
 MG: 2 x 7.62mm  
 Speed: 69 mph Crew: 3  
 UpHullFr: 13/60° TurFr: 13/20°  
 LowHullFr: 13/60° GunMant: 13/20°  
 HullSide: 13/0° TurSide: 13/20°  
 LowHull: 13/0° TurRear: 13/20°  
 HullRoof: 4/90° TurRoof: 4/90°  
 HullRear: 13/30°

Notes: Began as a nearly identical copy of the Christie T3 but the series evolved into an original design and is the ancestor of the T-34. BT-1 was armed only with two machineguns. Max speed was 40 mph running on tracks, 69 mph running on roadwheels. In practice the tracks wore out quickly when the tank ran at high speeds and the system was highly prone to mechanical breakdowns. BT stands for Bystrij Tankov, or "Fast Tank".

**BT-2:** First major production version. Early versions had BT-1 turret but most had a new turret with long 37mm L45 gun and one mg. Improved suspension. Still in service in WWII and were encountered by the Germans.

**BT-3:** Improved suspension, 47mm L46 gun instead of 37mm.

**BT-4:** Twin turrets each armed with a single machinegun, as on T-26A. Only one built.

**T-27 Tankette** **Soviet Union 1931**  
 Gun: None Weight: 3 tons  
 MG: 1 x 7.62mm  
 Speed: 26 mph Crew: 2  
 UpHullFr: 10/15°  
 LowHullFr: 10/10°  
 HullSide: 6/0°  
 LowHull: 6/0°  
 HullRoof: 4/80°  
 HullRear: 6/0°

Notes: Licensed copy of the Carden-Loyd Mark VI machinegun carrier. Over 4000 built, still in use in WWII. Tiny vehicle with cramped interior. First armoured vehicle to be carried by air, under a Tupolev bomber.

**T-26** **Soviet Union 1931**  
 Gun: None (see notes) Weight: 9 tons  
 MG: 2 x 7.62mm  
 Speed: 22 mph Crew: 3  
 UpHullFr: 15/45° TurFr: 15/0°  
 LowHullFr: 15/10° GunMant: 15/30°  
 HullSide: 8/0° TurSide: 8/15°  
 LowHull: 6/0° TurRear: 8/15°  
 HullRoof: 6/85° TurRoof: 6/90°  
 HullRear: 6/0°

Notes: Light tank, license-built version of Vickers 6-Tonner. Original **T-26A** models had two turrets, one gun in each turret. Some armed with 12.7mm mg, 20mm cannon, 27mm cannon, or 37mm cannon in right turret and 7.62mm mg in left turret.

**T-26B:** Single large turret, almost identical to BT-5 turret. Introduced in 1933. First vehicles armed with long 37mm gun, most armed with 45mm L46 gun.

**T-26S:** 1938 redesign with 45mm L46 gun, 2 machineguns (one in ball mount in turret rear), 18 mph, 10 tons. Armour increased:  
 UpHullFr: 25/55° TurFr: 20/45°  
 LowHullFr: 25/25° GunMant: 25/45°  
 HullSide: 16/15° TurSide: 25/15°  
 LowHull: 16/0° TurRear: 25/15°  
 HullRoof: 10/85° TurRoof: 10/85°  
 HullRear: 16/0°

**OT-26, OT-130, OT-133:** Flamethrower armed versions of T-26A, T-26B, and T-26S respectively.

**T-46:** Experimental variant of T-26 using Christie suspension similar to BT series. Top speed 35 mph. Only a few built.

**SU-5:** Self-propelled gun built on T-26 chassis. Armament was short or long 76.2mm gun, or 122mm or 152mm howitzer. Around 15 built for testing purposes, probably not used operationally.

**T-37** **Soviet Union 1932**  
 Gun: None Weight: 4 tons  
 MG: 1 x 7.62mm  
 Speed: 22 mph Crew: 2  
 UpHullFr: 9/60° TurFr: 9/15°  
 LowHullFr: 9/50° GunMant: 9/10°  
 HullSide: 6/30° TurSide: 9/15°  
 LowHull: 6/0° TurRear: 9/15°  
 HullRoof: 4/80° TurRoof: 4/90°  
 HullRear: 4/10°

Notes: Amphibious light tank based on Carden-Loyd A4E11. Small turret carrying a single machinegun. About 1200 built.

**T-38:** 1936 upgrade with more powerful engine, many detail changes, speed 40 mph. A few armed with 20mm gun, unsuccessfully.

**T-32** **Soviet Union 1932**  
 Huge heavy tank design based very closely on the British Independent, also used design features from the TG. Only a few built but its improved version became the T-35. Five turrets: central turret with 76.2mm cannon, two wing turrets with 37mm anti-tank guns, two wing turrets with machineguns.

**T-24** **Soviet Union 1932**  
 Gun: 45mm L46 Weight: 21 tons  
 MG: 3 or 4 x 7.62mm  
 Speed: 14 mph Crew: 3  
 UpHullFr: 25/5° TurFr: 25/0°  
 LowHullFr: 25/15° GunMant: 20/30°  
 HullSide: 16/0° TurSide: 16/0°  
 LowHull: 16/0° TurRear: 16/0°  
 HullRoof: 8/90° TurRoof: 8/85°  
 HullRear: 10/0°  
 Notes: Medium tank designed as a replacement for the MS series, but only 25 produced due to mechanical difficulties. Advanced design for its day.

**T-28** **Soviet Union 1933**  
 Gun: 76.2mm L17 Weight: 29 tons  
 MG: 3 x 7.62mm  
 Speed: 23 mph Crew: 6  
 UpHullFr: 30/45° TurFr: 30/20°  
 LowHullFr: 30/35° GunMant: 30/25°  
 HullSide: 20/0° TurSide: 20/15°  
 LowHull: 15/0° TurRear: 20/15°  
 HullRoof: 10/85° TurRoof: 10/90°  
 HullRear: 10/20°  
 Notes: Medium tank inspired by the British A6. Central turret of prototype originally had 45mm gun, production versions had a 76.2mm gun. Two smaller turrets in front, each armed with a machinegun. On a few vehicles, the right front turret had a 45mm L46 gun in place of the machinegun. Later models had longer 76.2mm L26 or L30 gun. About 1850 built, totalling all models. An up-armoured version from 1940 is known in various sources as the B, C, or D model:  
 UpHullFr: 80/45° TurFr: 80/20°  
 LowHullFr: 80/35° GunMant: 80/10°  
 HullSide: 30/0° TurSide: 40/15°  
 LowHull: 25/0° TurRear: 30/15°  
 HullRoof: 20/85° TurRoof: 20/90°  
 HullRear: 20/20°  
**OT-28:** Flamethrower in place of the 76.2mm main gun.  
**T-29:** Experimental modification of T-28 with Christie suspension, capable of running on roadwheels or tracks.

### An Important Note on Russian Tank Nomenclature

Researching Russian vehicles is always an interesting adventure because the Russians sometimes used the same name for several different vehicles, and sometimes had several different names for the same vehicle. Compounding the challenge, the "T- numbers" were not issued sequentially, nor did the numbers follow any logical pattern I've ever been able to discern. Names assigned inconsistently by non-Russian sources muddy the waters further. I have not attempted to list every naming variant, as each reference source I have lists a different set of variant models for many of these vehicles. - DLF

**T-35** **Soviet Union 1933**  
 Gun: 1 x 76.2mm L21, 2 x 45mm L46  
 MG: 6 x 7.62mm Weight: 45 tons  
 Speed: 19 mph Crew: 10  
 UpHullFr: 30/45° TurFr: 20/20°  
 LowHullFr: 30/45° GunMant: 35/10°  
 HullSide: 20/0° TurSide: 20/15°  
 LowHull: 20/0° TurRear: 20/15°  
 HullRoof: 14/85° TurRoof: 11/90°  
 HullRear: 20/15°

Notes: Heavy tank developed from the T-32. Normally had five turrets, although some vehicles had one or more auxiliary turrets removed to reduce weight and improve mobility. Very difficult to steer due to poor length-to-width ratio. Only about 60 produced, but frequently photographed due to its monstrous size.  
**SU-14:** Experimental self-propelled guns on T-35 chassis, armed with 152mm howitzer, built in 1936. One version looked a bit like a German Elefant.

**BT-5** **Soviet Union 1934**  
 Gun: 47mm L46 Weight: 12 tons  
 MG: 1 x 7.62mm  
 Speed: 69 mph Crew: 3  
 UpHullFr: 13/60° TurFr: 13/15°  
 LowHullFr: 13/50° GunMant: 13/35°  
 HullSide: 10/15° TurSide: 13/15°  
 LowHull: 10/0° TurRear: 13/15°  
 HullRoof: 6/90° TurRoof: 6/90°  
 HullRear: 10/15°  
 Notes: Improved BT-4 with larger turret, improved suspension, more powerful engine. Infantry support version armed with 76.2mm L16 gun in place of the 45mm.  
**BT-5/OT:** Flamethrower version.  
**BT-6:** Experimental version with bow machinegun and pneumatic tires on roadwheels. Few built.

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**BT-7** **Soviet Union 1934**  
 Gun: 47mm L46 Weight: 14 tons  
 MG: 2 x 7.62mm  
 Speed: 45 mph Crew: 3  
 UpHullFr: 22/60° TurFr: 15/15°  
 LowHullFr: 22/50° GunMant: 22/35°  
 HullSide: 13/15° TurSide: 15/15°  
 LowHull: 13/0° TurRear: 15/15°  
 HullRoof: 10/90° TurRoof: 10/90°  
 HullRear: 13/15°

Notes: Further improvement of BT-5 with new turret, thicker armour, welded instead of riveted construction. Infantry support version armed with 76.2mm L16 gun in place of the 45mm. Capable of running on tracks only. Over 6000 BT of all types produced.

**BT-7M**: Final production version from 1938, also known as the **BT-8**. Diesel engine, redesigned front armour layout.

**BT-IS**: Experimental variant of BT-5/BT-7 with well-sloped armour. Used in the development of the T-34. Only five built.

**SMK** **Soviet Union 1937**  
 Large heavy tank designed as a replacement for the T-35. Two large turrets: a central turret on a towering superstructure carrying a 76.2mm L30 gun, and a smaller turret in front mounting a 45mm L46 gun. Armour up to 60mm, max speed 20 mph, 45 tons, crew 7. Few built, but some used unsuccessfully in combat in Finland in 1940.

**T-100**: Developed concurrently and almost identical to the SMK. Speed 19 mph, 56 tons. Few built, also used unsuccessfully in combat in Finland.

**SU-100U**: Self-propelled 130mm gun in fixed superstructure on T-100 hull. Armour up to 80mm. Probably only one built.

**A-20** **Soviet Union 1937**  
 Medium tank development of the BT series, forerunner of the T-34. Same basic shape as the T-34. Armed with 45mm gun and two mg, 20 tons, crew 4, armour up to 25mm, max speed 40 mph. Capable of driving on roadwheels or tracks. Only one built.  
**A-30**: A-20 with 76.2mm L21 gun in place of the 45mm. Discarded ability to run on roadwheels, could only drive on tracks.  
**A-32**: Later renamed **T-32**. Improved armour layout, armour increased to 60mm, more powerful engine, 38 mph. Immediate predecessor of the T-34. Ran on tracks only.

**BA-10** **Soviet Union 1937**  
 Gun: 37mm L45 or 45mm L46 Weight: 6 tons  
 MG: 2 x 7.62mm Crew: 4  
 Speed: 34 mph Crew: 4  
 UpHullFr: 15/55° TurFr: 15/15°  
 LowHullFr: 15/20° GunMant: 15/15°  
 HullSide: 10/0° TurSide: 10/15°  
 LowHull: 10/0° TurRear: 10/10°  
 HullRoof: 6/80° TurRoof: 6/85°  
 HullRear: 10/35°

Notes: Six-wheeled armoured car. Later versions are sometimes known as the **BA-32**. Over 1200 built.

**KV-1** **Soviet Union 1939**  
 Gun: 76.2mm L40 Weight: 46 tons  
 MG: 3 x 7.62mm  
 Speed: 22 mph Crew: 5  
 UpHullFr: 110/40° TurFr: 110/15°  
 LowHullFr: 95/30° GunMant: 100/45°  
 HullSide: 60/0° TurSide: 75/15°  
 LowHull: 50/0° TurRear: 75/15°  
 HullRoof: 25/85° TurRoof: 35/90°  
 HullRear: 75/25°

Notes: Heavy tank design based on lessons learned from experience with T-100 and SMK. Early vehicles had shorter 76.2mm L30 gun. Welded turret, cast mantlet. Very successful design. Over 13,500 KV tanks of all types were built.

**KV-1A**: Minor improvements, welded mantlet.

**KV-1B**: Additional applique armour up to 35mm added to front and sides. 1941, 21mph.

**KV-1C**: Upgrade in 1942 with thicker armour, cast turret, more power engine, 22 mph.

UpHullFr: 106/32° TurFr: 82/15°  
 LowHullFr: 96/25° GunMant: 120/35°  
 HullSide: 77/0° TurSide: 100/15°  
 LowHull: 60/0° TurRear: 97/15°  
 HullRoof: 42/90° TurRoof: 30/90°  
 HullRear: 75/25° Type:

**KV-1S**: Lighter, faster version in 1942 with 60mm max armour, speed 25 mph, 42 tons.



*KV-1C Heavy Tank*

**Komsomolets STZ**      **Soviet Union 1939**  
 Gun: None      Weight: 1 ton  
 MG: 1 x 7.62mm  
 Speed: 25 mph      Crew: 2  
   UpHullFr: 16/15°  
   LowHullFr: 12/45°  
   HullSide: 12/25°  
   LowHull: 6/0°  
   HullRoof: Open  
   HullRear: 6/0°  
 Notes: Small light tractor used primarily for towing artillery. Seats for six passengers behind armoured cab.  
**SU-45:** Komsomolets with built-up superstructure on rear of vehicle armed with 45mm anti-tank gun.  
**SU-57:** 57mm anti-tank gun on open mount on Komsomolets with original gun shield.  
**SU-76M:** 76.2mm anti-tank gun on open mount on Komsomolets.

**KV-2**      **Soviet Union 1940**  
 Gun: 152mm L24      Weight: 52 tons  
 MG: 2 x 7.62mm  
 Speed: 16 mph      Crew: 6  
   UpHullFr: 95/40°      TurFr: 100/0°  
   LowHullFr: 95/30°      GunMant: 110/30°  
   HullSide: 60/0°      TurSide: 60/20°  
   LowHull: 50/0°      TurRear: 45/0°  
   HullRoof: 35/85°      TurRoof: 35/90°  
   HullRear: 40/25°  
 Notes: Direct fire support tank with huge boxy turret on early KV-1 hull. Too top heavy, poor mobility. A few of the early vehicles were armed with a 122mm gun.  
**KV-2B:** Redesigned turret, wider tracks, weight 57 tons.

**T-30**      **Soviet Union 1940**  
 Light amphibious tank intended to replace T-37 and T-38, armed with 20mm gun and one mg. Only one built.  
**T-40**  
 Gun: None (see notes)      Weight: 6 tons  
 MG: 1 x 12.7mm, 1 x 7.62mm  
 Speed: 28 mph      Crew: 2  
   UpHullFr: 13/60°      TurFr: 10/45°  
   LowHullFr: 13/35°      GunMant: 10/30°  
   HullSide: 8/20°      TurSide: 10/45°  
   LowHull: 6/0°      TurRear: 10/45°  
   HullRoof: 6/75°      TurRoof: 6/90°  
   HullRear: 6/45°  
 Notes: Minor improvements to T-30. Some had 20mm cannon in place of 12.7mm machinegun. About 220 built.

**T-34**      **Soviet Union 1939**  
 Notes: One of the most influential tank designs in history, considered by many to be the finest tank of the Second World War. Long overhanging gun and well-sloped armour were considered to be radical at the time. After the appearance of the T-34/85, the 76.2mm-armed version became known as the T-34/76. Nearly 35,000 T-34/76's were built. Originally the T-34 was supposed to have been armed with a 57mm gun.  
**T-34/76A, or Model 1940:** First production version. Identifiable from later versions by the small rounded "diamond" shape on the gun mantlet over the main gun barrel. Most had the short L30 gun, later vehicles had the longer L40 gun. Single large turret hatch.  
 Gun: 76.2mm L30 or L40  
 MG: 2 x 7.62mm      Weight: 26 tons  
 Speed: 31 mph      Crew: 4  
   UpHullFr: 45/60°      TurFr: 45/30°  
   LowHullFr: 45/55°      GunMant: 45/25°  
   HullSide: 45/40°      TurSide: 45/30°  
   LowHull: 45/0°      TurRear: 45/20°  
   HullRoof: 14/86°      TurRoof: 14/90°  
   HullRear: 45/50°  
**T-34/76B, or Model 1941:** L40 gun, front hull armour increased to 60mm. Welded, rolled plate turret on some, cast turret on some. Weight 28 tons.



*T-34 Model 1941 (earlier version)*

**T-34/76C, or Model 1942:** Enlarged turret, two round "mouse ears" hatches on turret roof instead of a large single hatch. Weight 30 tons, max speed 30 mph.  
   UpHullFr: 60/60°      TurFr: 60/30°  
   LowHullFr: 60/55°      GunMant: 60/25°  
   HullSide: 45/40°      TurSide: 45/30°  
   LowHull: 45/0°      TurRear: 45/20°  
   HullRoof: 18/86°      TurRoof: 18/90°  
   HullRear: 45/50°  
**T-34/76D, or Model 1943:** New hexagonal turret. Front turret armour increased to 70mm. 31 tons, max speed 31 mph.  
**T-34/76E and T-34/76F:** Minor detail improvements to Model 1943. Few F's built.

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*T-34 Model 1941 (later version)*



**SU-45:** 45mm anti-tank gun on T-60 chassis.  
**KT:** T-60 light tank with a biplane glider built around it. Tank driver acted as glider pilot, was supposed to pull a string upon landing which would pop off the wing and tail assemblies. Didn't work, project abandoned.

|                   |                          |
|-------------------|--------------------------|
| <b>T-70</b>       | <b>Soviet Union 1941</b> |
| Gun: 45mm L46     | Weight: 9 tons           |
| MG: 1 x 7.62mm    |                          |
| Speed: 32 mph     | Crew: 2                  |
| UpHullFr: 35/45°  | TurFr: 40/45°            |
| LowHullFr: 45/40° | GunMant: 50/30°          |
| HullSide: 20/0°   | TurSide: 35/40°          |
| LowHull: 16/0°    | TurRear: 35/40°          |
| HullRoof: 10/80°  | TurRoof: 10/85°          |
| HullRear: 25/45°  |                          |

Notes: Light tank based on T-60 with thicker armour, more powerful engine, larger turret. About 8225 built.

**T-70A:** Slightly larger turret with thicker armour, up to 60mm.

**SU-37:** One of the very few Soviet purpose-built anti-aircraft tanks. Single or twin 37mm L39 or L63 AA gun on T-70 chassis. Some had fixed open superstructure, some had open-topped rotating turret.

**T-80:** Very similar to T-70, thicker armour and larger turret. Only about 120 built.

|                   |                          |
|-------------------|--------------------------|
| <b>T-50</b>       | <b>Soviet Union 1940</b> |
| Gun: 45mm L46     | Weight: 13 tons          |
| MG: 2 x 7.62mm    |                          |
| Speed: 32 mph     | Crew: 4                  |
| UpHullFr: 37/60°  | TurFr: 37/30°            |
| LowHullFr: 37/45° | GunMant: 37/30°          |
| HullSide: 37/0°   | TurSide: 15/35°          |
| LowHull: 25/0°    | TurRear: 15/35°          |
| HullRoof: 15/85°  | TurRoof: 12/85°          |
| HullRear: 25/35°  |                          |

Notes: Light tank intended to replace T-26. Sloped armour, looks like a miniature T-34. Too complex mechanically, only 65 built.

|                   |                          |
|-------------------|--------------------------|
| <b>T-60</b>       | <b>Soviet Union 1940</b> |
| Gun: 20mm L62     | Weight: 6 tons           |
| MG: 1 x 7.62mm    |                          |
| Speed: 27 mph     | Crew: 2                  |
| UpHullFr: 20/60°  | TurFr: 15/45°            |
| LowHullFr: 20/45° | GunMant: 20/0°           |
| HullSide: 10/0°   | TurSide: 12/35°          |
| LowHull: 7/0°     | TurRear: 12/35°          |
| HullRoof: 7/85°   | TurRoof: 7/90°           |
| HullRear: 7/35°   |                          |

Notes: Light tank based on T-40. Not amphibious. Over 6000 built.

**T-60A:** Front armour increased to 35mm, solid road wheels.

|                   |                          |
|-------------------|--------------------------|
| <b>BA64</b>       | <b>Soviet Union 1942</b> |
| Gun: None         | Weight: 3 tons           |
| MG: 1 x 7.62mm    |                          |
| Speed: 50 mph     | Crew: 2                  |
| UpHullFr: 6/40°   | TurFr: 10/25°            |
| LowHullFr: 10/40° | GunMant: Open            |
| HullSide: 8/25°   | TurSide: 10/25°          |
| LowHull: 8/30°    | TurRear: 10/25°          |
| HullRoof: 6/80°   | TurRoof: Open            |
| HullRear: 8/30°   |                          |

Notes: Small four-wheeled armoured car. Used in Korea, some still in service in parts of the world.



*BA-64 Light Armoured Car*

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|                   |                          |
|-------------------|--------------------------|
| <b>SU-76</b>      | <b>Soviet Union 1942</b> |
| Gun: 76.2mm       | Weight: 12 tons          |
| MG: None          |                          |
| Speed: 28 mph     | Crew: 4                  |
| UpHullFr: 35/50°  | SupFr: 25/30°            |
| LowHullFr: 30/45° | GunMant: 14/35°          |
| HullSide: 16/0°   | SupSide: 12/15°          |
| LowHull: 16/0°    | SupRear: 12/15°          |
| HullRoof: 10/90°  | SupRoof: Open            |
| HullRear: 16/10°  |                          |

Notes: Self-propelled 76.2mm field gun on a lengthened T-70 chassis. Fixed rear superstructure with no roof armour and only a small portion of the lower rear armoured. Used for infantry support through the end of WWII and the Korean War. Over 12,600 built counting all variants.

**SU-76M:** More powerful engines, roof armour for superstructure.

**ZSU-37:** Anti-aircraft version with 37mm gun introduced in 1945.



*SU-76 Self-Propelled Gun*

|  |                          |
|--|--------------------------|
| <b>SU-76i</b>  | <b>Soviet Union 1942</b> |
| Self-propelled gun with 76.2mm gun (same mount and mantlet as T-34) on modified captured PzKpfw III or StuG III hulls. Armour on raised superstructure was 30mm. Unclear how many were actually built. |                          |

|                    |                          |
|--------------------|--------------------------|
| <b>T-43</b>        | <b>Soviet Union 1942</b> |
| Gun: 76.2mm L40    | Weight: 32 tons          |
| MG: 2 x 7.62mm     |                          |
| Speed: 31 mph      | Crew: 4                  |
| UpHullFr: 110/60°  | TurFr: 110/30°           |
| LowHullFr: 110/55° | GunMant: 110/25°         |
| HullSide: 45/40°   | TurSide: 45/30°          |
| LowHull: 45/0°     | TurRear: 45/20°          |
| HullRoof: 22/86°   | TurRoof: 22/90°          |
| HullRear: 45/50°   |                          |

Notes: Improved version of T-34D with thicker armour. Few produced, project dropped in order to concentrate production on the T-34/85.

|                              |                          |
|------------------------------|--------------------------|
| <b>SU-85</b>                 | <b>Soviet Union 1943</b> |
| Gun: 85mm L52                | Weight: 30 tons          |
| MG: None                     |                          |
| Speed: 31 mph                | Crew: 4                  |
| Superstructure Front: 75/55° |                          |
| LowHullFr: 75/55°            | GunMant: 75/40°          |
| Superstructure Side: 40/13°  |                          |
| LowHull: 30/0°               |                          |
| HullRoof: 20/87°             | SupRoof: 20/90°          |
| HullRear: 20/50°             |                          |

Notes: Self-propelled gun based on the T-34 chassis, designed to counter Tiger and Panther tanks. About 2050 built.

**SU-122:** Very similar to the SU-85 but armed with 122mm howitzer. About 1125 built.

|                   |                          |
|-------------------|--------------------------|
| <b>T-34/85</b>    | <b>Soviet Union 1943</b> |
| Gun: 85mm L52     | Weight: 32 tons          |
| MG: 2 x 7.62mm    |                          |
| Speed: 31 mph     | Crew: 5                  |
| UpHullFr: 70/60°  | TurFr: 75/45°            |
| LowHullFr: 70/55° | GunMant: 75/45°          |
| HullSide: 45/40°  | TurSide: 75/20°          |
| LowHull: 45/0°    | TurRear: 75/10°          |
| HullRoof: 20/86°  | TurRoof: 20/90°          |
| HullRear: 45/50°  | Type:                    |

Notes: Improved version of the T-34 with new large three-man turret based on KV-85. Available only in small numbers until the end of 1943. About 31,000 T-34/85's were built.

Later models remained in production as late as 1964 and many are still operational today.

**T-34/85-II:** Post-WWII version with improved fire control, transmission, and ventilation.



*T-34/85*



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|                   |                          |
|-------------------|--------------------------|
| <b>KV-85</b>      | <b>Soviet Union 1943</b> |
| Gun: 85mm L52     | Weight: 46 tons          |
| MG: 3 x 7.62mm    |                          |
| Speed: 22 mph     | Crew: 4                  |
| UpHullFr: 75/30°  | TurFr: 110/30°           |
| LowHullFr: 60/25° | GunMant: 95/45°          |
| HullSide: 60/0°   | TurSide: 110/20°         |
| LowHull: 60/0°    | TurRear: 100/25°         |
| HullRoof: 30/85°  | TurRoof: 30/85°          |
| HullRear: 60/25°  |                          |

Notes: Uppunned version of the KV-1S with new turret, 85mm gun. Modified version of this turret was used on the T-34/85. No bow machinegun. Only about 130 built.

|                              |                          |
|------------------------------|--------------------------|
| <b>SU-152</b>                | <b>Soviet Union 1943</b> |
| Gun: 152mm L28               | Weight: 46 tons          |
| MG: None                     |                          |
| Speed: 27 mph                | Crew: 5                  |
| Superstructure Front: 75/55° |                          |
| LowHullFr: 75/55°            | GunMant: 75/40°          |
| Superstructure Side: 40/13°  |                          |
| LowHull: 30/0°               |                          |
| HullRoof: 20/87°             | SupRoof: 20/90°          |
| HullRear: 20/50°             |                          |

Notes: Self-propelled gun built to counter the Tiger. Large boxy fixed superstructure on a KV-1S chassis. Over 700 built.

|                            |                          |
|----------------------------|--------------------------|
| <b>IS-1 Stalin</b>         | <b>Soviet Union 1943</b> |
| Gun: (see notes)           | Weight: 44 tons          |
| MG: 1 x 12.7mm, 3 x 7.62mm |                          |
| Speed: 23 mph              | Crew: 4                  |
| UpHullFr: 120/35°          | TurFr: 120/30°           |
| LowHullFr: 120/30°         | GunMant: 120/35°         |
| HullSide: 75/15°           | TurSide: 100/15°         |
| LowHull: 65/0°             | TurRear: 85/15°          |
| HullRoof: 19/90°           | TurRoof: 19/90°          |
| HullRear: 40/45°           |                          |

Notes: Heavy tank design based on the KV series. The earliest vehicles (also known as the IS-85) were armed with an 85mm L52 gun, some (aka IS-100) were armed with a 100mm L56 gun, some (aka IS-122) were armed with a 122mm L43 gun. **IS** stands for Iosef Stalin, so the series of vehicles is often listed in western sources as **JS**. The 122mm-armed versions are sometimes confusingly referred to as IS-2. Probably only about 100 IS-1's built.

**IS-2:** Improved armour layout in the front, improved turret, thicker armour on sides. This was the main production model during WWII. About 2250 built.

**KV Series Prototypes:** Various experimental models based on the KV chassis. In all cases except the KV-8, only one or two prototypes were built.

**KV-2-1:** KV-2 with 85mm gun.

**KV-2-2:** KV-2 with 122 gun.

**KV-3:** Based on KV-2. New turret, heavier armour, 107mm gun.

**KV-7:** Self-propelled gun with one 76.2mm and two 45mm guns, 1941.

**KV-8:** KV-1C with flamethrower and 45mm gun, 1942, saw service in small numbers.

**KV-9:** Twin 76.2mm guns or 122mm howitzer.

**KV-12:** 203mm howitzer.

**KV-13:** Improved armour layout, used to test hull shape for the IS-1.

**KV-14:** Prototype of the SU-152.

|                               |                          |
|-------------------------------|--------------------------|
| <b>SU-100</b>                 | <b>Soviet Union 1944</b> |
| Gun: 100mm L56                | Weight: 35 tons          |
| MG: None                      |                          |
| Speed: 30 mph                 | Crew: 4                  |
| Superstructure Front: 100/55° |                          |
| LowHullFr: 100/55°            | GunMant: 100/40°         |
| Superstructure Side: 40/13°   |                          |
| LowHull: 30/0°                |                          |
| HullRoof: 20/87°              | SupRoof: 20/90°          |
| HullRear: 20/50°              |                          |

Notes: Self-propelled gun on T-34 chassis, very similar to SU-85. Prominent commander's cupola on right side of hull.



*SU-100 Self-Propelled Gun*

|                    |                          |
|--------------------|--------------------------|
| <b>T-44</b>        | <b>Soviet Union 1944</b> |
| Gun: 100mm L56     | Weight: 34 tons          |
| MG: 2 x 7.62mm     |                          |
| Speed: 30 mph      | Crew: 4                  |
| UpHullFr: 100/55°  | TurFr: 120/45°           |
| LowHullFr: 100/55° | GunMant: 120/45°         |
| HullSide: 60/0°    | TurSide: 75/20°          |
| LowHull: 60/0°     | TurRear: 50/10°          |
| HullRoof: 15/86°   | TurRoof: 15/90°          |
| HullRear: 40/30°   |                          |

Notes: Medium tank intended to replace T-34/85. About 200 built in WWII but withheld from service due to reliability problems. Saw service after WWII, later replaced by T-54. Early vehicles armed with 85mm L52 gun.