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.

KS
Soviet Union 1921
Gun: 37mm L21
MG: 1 x 7.62mm
Speed: 5 mph
UpHullFr: 16/45º
LowHullFr: 16/45º
HullSide: 8/0º
LowHull: 8/0º
HullRoof: 6/75º
HullRear: 8/0º
Crew: 2
Gun: 37mm
Weight: 8 tons

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
MG: 1 x 7.62mm
Speed: 30 mph
UpHullFr: 7/45º
LowHullFr: 7/45º
HullSide: 7/0º
LowHull: 7/0º
HullRoof: 7/75º
HullRear: 7/0º
Crew: 4
Gun: 37mm
Weight: 10 tons

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
MG: 1 x 7.62mm
Speed: 10 mph
UpHullFr: 16/45º
LowHullFr: 16/45º
HullSide: 8/0º
LowHull: 8/0º
HullRoof: 6/85º
HullRear: 8/45º
Crew: 2
Gun: 37mm
Weight: 5 tons

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.

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.
<table>
<thead>
<tr>
<th>TG</th>
<th>Soviet Union 1930</th>
</tr>
</thead>
<tbody>
<tr>
<td>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”.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>T-26</th>
<th>Soviet Union 1931</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gun: None (see notes)</td>
<td>Weight: 9 tons</td>
</tr>
<tr>
<td>MG: 2 x 7.62mm</td>
<td></td>
</tr>
<tr>
<td>Speed: 22 mph</td>
<td>Crew: 3</td>
</tr>
<tr>
<td>UpHullFr: 15/45º</td>
<td>TurFr: 15/0º</td>
</tr>
<tr>
<td>LowHullFr: 15/10º</td>
<td>GunMant: 15/30º</td>
</tr>
<tr>
<td>HullSide: 8/0º</td>
<td>TurSide: 8/15º</td>
</tr>
<tr>
<td>LowHull: 6/0º</td>
<td>TurRear: 8/15º</td>
</tr>
<tr>
<td>HullRear: 6/0º</td>
<td></td>
</tr>
<tr>
<td>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.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BT-1</th>
<th>Soviet Union 1931</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gun: None (see notes)</td>
<td>Weight: 10 tons</td>
</tr>
<tr>
<td>MG: 2 x 7.62mm</td>
<td></td>
</tr>
<tr>
<td>Speed: 69 mph</td>
<td>Crew: 3</td>
</tr>
<tr>
<td>UpHullFr: 13/60º</td>
<td>TurFr: 13/20º</td>
</tr>
<tr>
<td>LowHullFr: 13/60º</td>
<td>GunMant: 13/20º</td>
</tr>
<tr>
<td>HullSide: 13/0º</td>
<td>TurSide: 13/20º</td>
</tr>
<tr>
<td>LowHull: 13/0º</td>
<td>TurRear: 13/20º</td>
</tr>
<tr>
<td>HullRoof: 4/90º</td>
<td>TurRoof: 4/90º</td>
</tr>
<tr>
<td>HullRear: 13/30º</td>
<td></td>
</tr>
<tr>
<td>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”.</td>
<td></td>
</tr>
</tbody>
</table>

| 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. |

<table>
<thead>
<tr>
<th>T-27 Tankette</th>
<th>Soviet Union 1931</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gun: None</td>
<td>Weight: 3 tons</td>
</tr>
<tr>
<td>MG: 1 x 7.62mm</td>
<td></td>
</tr>
<tr>
<td>Speed: 26 mph</td>
<td>Crew: 2</td>
</tr>
<tr>
<td>UpHullFr: 10/15º</td>
<td>TurFr: 10/15º</td>
</tr>
<tr>
<td>LowHullFr: 10/15º</td>
<td>GunMant: 10/15º</td>
</tr>
<tr>
<td>HullSide: 6/0º</td>
<td>TurSide: 6/0º</td>
</tr>
<tr>
<td>LowHull: 6/0º</td>
<td>TurRear: 6/0º</td>
</tr>
<tr>
<td>HullRoof: 4/80º</td>
<td>TurRoof: 4/80º</td>
</tr>
<tr>
<td>HullRear: 6/0º</td>
<td></td>
</tr>
<tr>
<td>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.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>T-37</th>
<th>Soviet Union 1932</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gun: None</td>
<td>Weight: 4 tons</td>
</tr>
<tr>
<td>MG: 1 x 7.62mm</td>
<td></td>
</tr>
<tr>
<td>Speed: 22 mph</td>
<td>Crew: 2</td>
</tr>
<tr>
<td>UpHullFr: 9/60º</td>
<td>TurFr: 9/15º</td>
</tr>
<tr>
<td>LowHullFr: 9/50º</td>
<td>GunMant: 9/10º</td>
</tr>
<tr>
<td>HullSide: 6/30º</td>
<td>TurSide: 9/15º</td>
</tr>
<tr>
<td>LowHull: 6/0º</td>
<td>TurRear: 9/15º</td>
</tr>
<tr>
<td>HullRoof: 4/80º</td>
<td>TurRoof: 4/80º</td>
</tr>
<tr>
<td>HullRear: 4/10º</td>
<td></td>
</tr>
</tbody>
</table>

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

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### T-24  
**Soviet Union 1932**

Gun: 45mm L46  
MG: 3 or 4 x 7.62mm  
Speed: 14 mph  
Crew: 3  
Uphull: 25/5º  
Tur: 25/0º  
Lowhull: 25/15º  
Gunmant: 20/30º  
Hullside: 16/0º  
Turside: 16/0º  
Lowhull: 16/0º  
Turrear: 16/0º  
Hullroof: 8/90º  
Turroof: 8/85º  
Hullrear: 20/15º  

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-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  
Uphull: 30/45º  
Tur: 20/20º  
Lowhull: 30/45º  
Gunmant: 30/5º  
Hullside: 20/0º  
Turside: 20/15º  
Lowhull: 20/0º  
Turrear: 20/15º  
Hullroof: 14/85º  
Turroof: 11/90º  
Hullrear: 20/15º  

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.

---

### T-28  
**Soviet Union 1933**

Gun: 76.2mm L17  
MG: 3 x 7.62mm  
Speed: 23 mph  
Crew: 6  
Uphull: 30/45º  
Tur: 30/20º  
Lowhull: 30/35º  
Gunmant: 30/25º  
Hullside: 20/0º  
Turside: 20/15º  
Lowhull: 15/0º  
Turrear: 20/15º  
Hullroof: 10/85º  
Turroof: 10/90º  
Hullrear: 10/15º  

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:

- UpUphull: 80/45º  
- Tur: 80/20º  
- LowUphull: 80/35º  
- Gunmant: 80/10º  
- Hullside: 30/0º  
- Turside: 40/15º  
- Lowhull: 25/0º  
- Turrear: 30/15º  
- Hullroof: 20/85º  
- Turroof: 20/90º  
- Hullrear: 20/20º  

**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

---

### OT-28  
**Soviet Union 1940**

Gun: 45mm L46  
MG: 3 x 7.62mm  
Weight: 21 tons  
Speed: 14 mph  
Crew: 3  
Uphull: 25/5º  
Tur: 25/0º  
Lowhull: 25/15º  
Gunmant: 20/30º  
Hullside: 16/0º  
Turside: 16/0º  
Lowhull: 16/0º  
Turrear: 16/0º  
Hullroof: 8/90º  
Turroof: 8/85º  
Hullrear: 10/0º  

Notes: Medium tank designed as a replacement for the MS series, but only 25 produced due to mechanical difficulties. Advanced design for its day.

---

### OT-28  
**Soviet Union 1940**

Gun: 6 x 7.62mm  
Weight: 45 tons  
Speed: 19 mph  
Crew: 10  
Uphull: 30/45º  
Tur: 20/20º  
Lowhull: 30/45º  
Gunmant: 35/10º  
Hullside: 20/0º  
Turside: 20/15º  
Lowhull: 20/0º  
Turrear: 20/15º  
Hullroof: 14/85º  
Turroof: 11/90º  
Hullrear: 20/15º  

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  
MG: 1 x 7.62mm  
Weight: 12 tons  
Speed: 69 mph  
Crew: 3  
Uphull: 13/60º  
Tur: 13/15º  
Lowhull: 13/50º  
Gunmant: 13/35º  
Hullside: 10/15º  
Turside: 13/15º  
Lowhull: 10/0º  
Turrear: 13/15º  
Hullroof: 6/90º  
Turroof: 6/90º  
Hullrear: 10/15º  

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.

---

**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
### BT-7
**Soviet Union 1934**
- **Gun:** 47mm L46
- **Weight:** 14 tons
- **MG:** 2 x 7.62mm
- **Speed:** 45 mph
- **Crew:** 3
- **UpHullFr:** 22/60º
- **LowHullFr:** 13/15º
- **HullRoof:** 10/90º
- **HullRear:** 13/15º

**Notes:** Further improvement of BT-5 with new turret, thicker armour, and welded construction 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.

### BA-10
**Soviet Union 1937**
- **Gun:** 37mm L45 or 45mm L46
- **Weight:** 6 tons
- **MG:** 2 x 7.62mm
- **Speed:** 34 mph
- **Crew:** 4
- **UpHullFr:** 15/55º
- **LowHullFr:** 10/0º
- **HullRoof:** 6/80º
- **HullRear:** 10/35º

**Notes:** Six-wheeled armoured car. Later versions are sometimes known as the BA-32. Over 1200 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. Capable of running on either tracks or roadwheels.**
- **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-1
**Soviet Union 1939**
- **Gun:** 76.2mm L40
- **Weight:** 46 tons
- **MG:** 3 x 7.62mm
- **Speed:** 22 mph
- **Crew:** 5
- **UpHullFr:** 110/40º
- **LowHullFr:** 60/0º
- **HullRoof:** 25/85º
- **HullRear:** 75/25º

**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.

### A-20
**Soviet Union 1937**
- **Medium tank development of the BT series, forerunner of the T-34.**
- **UpHullFr:** 106/32º
- **LowHullFr:** 96/25º
- **HullRoof:** 42/90º
- **HullRear:** 75/25º

**Notes:** Medium tank development of the BT series, forerunner of the T-34. Armored with 45mm gun and two mg, 20 tons, crew 4, armoured up to 25mm, maximum speed 40 mph. Capable of driving on roadwheels or tracks. Only one 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 powerful engine, 22 mph.**

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

Soviet Union 1939

Gun: None

MG: 1 x 7.62mm

Weight: 1 ton

Speed: 25 mph

Crew: 2

- UpHullFr: 16/15º
- LowHullFr: 12/45º
- HullSide: 12/25º
- LowHull: 6/0º
- HullRoof: Open
- HullRear: 6/0º

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 Komsomoletz with original gun shield.

**SU-76M**: 76.2mm anti-tank gun on open mount on Komsomolets.

---

**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. Indentifiable 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: 45/60º
- TurFr: 45/30º
- LowHullFr: 45/55º
- GunMant: 45/25º
- HullSide: 45/30º
- TurSide: 45/20º
- LowHull: 45/0º
- TurRear: 45/20º
- HullRoof: 14/86º
- TurRoof: 14/90º
- HullRear: 45/50º

---

**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-34/76C, 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.

- Gun: 76.2mm L30 or L40
- MG: 2 x 7.62mm
- Weight: 26 tons
- Speed: 31 mph
- Crew: 4
- UpHullFr: 45/60º
- TurFr: 45/30º
- LowHullFr: 45/55º
- GunMant: 45/25º
- HullSide: 45/30º
- TurSide: 45/20º
- LowHull: 45/0º
- TurRear: 45/20º
- HullRoof: 14/86º
- TurRoof: 14/90º
- HullRear: 45/50º

---

**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.

---

**KV-2**

Soviet Union 1940

Gun: 152mm L24

Weight: 52 tons

MG: 2 x 7.62mm

Speed: 16 mph

Crew: 6

- UpHullFr: 95/40º
- LowHullFr: 95/30º
- HullSide: 60/0º
- LowHull: 50/0º
- HullRoof: 35/85º
- HullRear: 40/25º

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: 13/60º
- LowHullFr: 13/35º
- HullSide: 8/20º
- LowHull: 6/0º
- HullRoof: 6/75º
- HullRear: 6/45º

Notes: Minor improvements to T-30. Some had 20mm cannon in place of 12.7mm machinegun. About 220 built.
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**BA-64**  
**Light Armoured Car**  
*1942*  
**Soviet Union**  
**Weight: 3 tons**  
**Gun: None**  
**MG: 1 x 7.62mm**  
**Crew: 2**  
**Speed: 50 mph**  
**UpHullFr: 6/40°**  
**TurFr: 10/25°**  
**LowHullFr: 10/80°**  
**GunMant: Open**  
**TurSide: 10/25°**  
**GunMant: Open**  
**LowHull: 8/30°**  
**TurRear: 10/25°**  
**HullRoof: 6/80°**  
**TurRoof: 10/85°**  
**HullRear: 8/30°**  

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

---

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

Notes: Slightly larger turret with thicker armour, up to 60mm.

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

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

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**T-60**  
*1940*  
**Soviet Union**  
**Weight: 6 tons**  
**Gun: 20mm L62**  
**MG: 1 x 7.62mm**  
**Crew: 2**  
**Speed: 27 mph**  
**UpHullFr: 20/60°**  
**TurFr: 15/45°**  
**LowHullFr: 20/45°**  
**GunMant: 20/0°**  
**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.

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**SU-45**  
*1942*  
**Soviet Union**  
**Weight: 3 tons**  
**Gun: 45mm anti-tank gun on T-60 chassis.**

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**KT**  
*1941*  
**Soviet Union**  
**Weight: 3 tons**  
**Gun: None**  
**MG: 1 x 7.62mm**  
**Crew: 2**  
**Speed: 32 mph**  
**UpHullFr: 35/45°**  
**TurFr: 40/45°**  
**LowHullFr: 45/40°**  
**GunMant: 50/30°**  
**TurSide: 35/40°**  
**LowHull: 16/0°**  
**TurRear: 35/40°**  
**HullRoof: 10/80°**  
**TurRoof: 10/85°**  
**HullRear: 25/45°**

Notes: 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.

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**SU-37**  
*1941*  
**Soviet Union**  
**Weight: 6 tons**  
**Gun: None**  
**MG: 1 x 7.62mm**  
**Crew: 2**  
**Speed: 27 mph**  
**UpHullFr: 20/60°**  
**TurFr: 15/45°**  
**LowHullFr: 20/45°**  
**GunMant: 20/0°**  
**TurSide: 12/35°**  
**LowHull: 7/0°**  
**TurRear: 12/35°**  
**HullRoof: 7/85°**  
**TurRoof: 7/90°**  
**HullRear: 7/35°**

Notes: 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.

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**T-50**  
*1940*  
**Soviet Union**  
**Weight: 13 tons**  
**Gun: 45mm L46**  
**MG: 2 x 7.62mm**  
**Crew: 4**  
**Speed: 32 mph**  
**UpHullFr: 37/60°**  
**TurFr: 37/30°**  
**LowHullFr: 37/45°**  
**GunMant: 37/30°**  
**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.

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**T-34 Model 1941 (later version)**

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**T-34 Model 1941 (later version)**

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

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

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**BA-64 Light Armoured Car**
SU-76
Soviet Union 1942
Gun: 76.2mm
Weight: 12 tons
MG: None
Speed: 28 mph
Crew: 4
UpHullFr: 35/50°
LowHullFr: 30/45°
HullSide: 16/0°
LowHull: 16/0°
HullRoof: 10/90°
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-85
Soviet Union 1943
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°
HullRear: 20/50°
SupRoof: 20/90°

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.

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

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.
**Table of Contents**

- **KV-85**
  - Soviet Union, 1943
  - Gun: 85mm L52
  - Weight: 46 tons
  - Speed: 22 mph
  - Crew: 4
  - UpHullFr: 75/30°
  - LowHullFr: 60/25°
  - HullSide: 60/0°
  - LowHull: 60/0°
  - HullRoof: 30/85°
  - HullRear: 60/25°
  - Notes: Upgunned 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.

- **SU-152**
  - Soviet Union, 1943
  - Gun: 152mm L28
  - Weight: 46 tons
  - Speed: 27 mph
  - Crew: 5
  - Superstructure Front: 75/55°
  - LowHullFr: 75/55°
  - Superstructure Side: 40/13°
  - LowHull: 30/0°
  - HullRoof: 20/87°
  - HullRear: 20/50°
  - Notes: Self-propelled gun built to counter the Tiger. Large boxy fixed superstructure on a KV-1S chassis. Over 700 built.

- **SU-100**
  - Soviet Union, 1944
  - Gun: 100mm L56
  - Weight: 35 tons
  - Speed: 30 mph
  - Crew: 4
  - Superstructure Front: 100/55°
  - LowHullFr: 100/55°
  - Superstructure Side: 40/13°
  - LowHull: 30/0°
  - HullRoof: 20/87°
  - 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.

- **IS-1 Stalin**
  - Soviet Union, 1943
  - Gun: (see notes)
  - Weight: 44 tons
  - MG: 1 x 12.7mm, 3 x 7.62mm
  - Speed: 23 mph
  - Crew: 4
  - UpHullFr: 120/35°
  - LowHullFr: 120/30°
  - HullSide: 75/15°
  - LowHull: 65/0°
  - HullRoof: 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.

- **SU-100 Self-Propelled Gun**

- **T-44**
  - Soviet Union, 1944
  - Gun: 100mm L56
  - Weight: 34 tons
  - MG: 2 x 7.62mm
  - Speed: 30 mph
  - Crew: 4
  - UpHullFr: 100/55°
  - LowHullFr: 100/55°
  - HullSide: 60/0°
  - LowHull: 60/0°
  - HullRoof: 15/86°
  - 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.