

# French vehicles and guns in 1940

(by Luca Avogaro)

## Tanks

### Light tanks

**FT-17:** weight 7 tons, 2 men crew, armed with 1 MMG (Medium Machine Gun) or 1 37mm short gun in turret; the turret was in two versions: the turret produced by Renault had octagonal base; the turret produced by Berliet-Giraud had rounded base.

There was also a command tank version without weapons.

This tank was utilized since 1917 but still in use in 1940, either gun version or MMG version.

**R-35:** produced by Renault, weight 10 tons, 2 men crew, armed with 1 37mm short gun + 1 coaxial MMG in turret (a small number received the 37mm long gun).

**R-40:** derived from the R-35, this Renault tank had covered wheels and suspensions, like the Somua S-35 tank, and had a more powerful engine; weight 10 tons, 2 men crew, armed with 1 37mm long gun (a small number had the 37mm short gun yet) + 1 coaxial MMG in turret.

**H-35:** produced by Hotchkiss, weight 12 tons, 2 men crew, armed with 1 37mm short gun + 1 coaxial MMG in turret.

**H-39:** derived by the H-35, this tank had a bigger and taller engine box to contain a more powerful engine, weight 12 tons, 2 men crew, armed with 1 37mm long gun + 1 coaxial MMG in turret (some vehicles still had the 37mm short gun).

**FCM-36:** weight 13 tons, 2 men crew, armed with 1 37mm short gun + coaxial MMG in turret.

### Medium tanks

**Char-D1:** weight 14 tons, 3 men crew, armed with 1 47mm short gun + 1 coaxial MMG in turret and 1 MMG in the hull.

In 1940 this tank was considered obsolete so equipped only units in the colonies.

**Char-D2:** derived from the Char-D1, the Char-D2 was more armoured and faster than the predecessor, weight 20 tons, 3 men crew, armed with 1 47mm long gun + 1 coaxial MMG in turret and 1 MMG in the hull.

**S-35:** produced by Somua, maybe the best french tank in 1940, weight 20 tons, 3 men crew, armed with 1 47mm long gun + 1 coaxial MMG in turret.

### Heavy tanks

**Char-B1/bis:** weight 30 tons, 4 men crew, armed with 1 47mm long gun + 1 coaxial MMG in turret; in the hull had 1 75mm howitzer, without training gear, and another MMG.

**Char-2C:** the heaviest french tank in 1940, weight 70 tons, 13 men crew; this tank had 1 anterior turret with 1 75mm gun, 1 MMG in anterior side of the hull, 2 MMG in lateral casemates and 1 MMG in posterior turret.

In 1940 there was only 6 Char-2C forming the 51<sup>th</sup> autonomous BCC; all the 6 tanks was destroyed during the first days of the german attack by the Luftwaffe during the transport to the front by railway; during the WWII those tanks didn't fire any shot.

## Armoure Cars

### AMR (Auto-Mitrailleuses de Reconnaissance) (Recon Armoured Cars)

**AMR-33:** tracked vehicle, weight 5 tons, 2 men crew, armed with 1 MMG in turret.

**AMR-35:** tracked vehicle, weight 6 tons, 2 men crew, armed with 1 HMG (Heavy Machine Gun) or 1 MMG in turret (10 of those vehicles armed with a 25mm ATG).

### AMC (Auto-Mitrailleuses de Combat) (Battle Armoured Cars)

**AMC-35 AGC-1:** tracked vehicle, weight 15 tons, 3 men crew, armed with 47mm long gun + 1 coaxial MMG in turret.

At the beginning of the german invasion of France those vehicles didn't equipped first line units but was in reserve; only after 15<sup>th</sup> May some AMC-35 went to the front, 12 formed the 11<sup>th</sup> Cavalry Group and 5 formed the motorized Frank Corp.

**AMC-35 Schneider P-16:** half-tracked vehicle, weight 7 tons, 3 men crew, armed with 1 37mm short gun + 1 coaxial MMG in turret

### AMD (Auto-Mitrailleuses de Decouvert) (Discovery Armoured Cars)

**AMD Panhard P-178:** wheeled vehicle, weight 8 tons, 4 men crew, armed with 1 25mm ATG (Anti Tank Gun) + 1 coaxial MMG in turret.

**AMD Laffly White 80M:** wheeled vehicle, weight 6 tons, 4 men crew, armed with 1 HMG in turret + 1 MMG in the back of the turret; obsolete vehicle in 1940 equipped only units in the colonies.

**AMD Laffly White 50M:** wheeled vehicle, weight 6 tons, 4 men crew, armed with 1 37mm short gun in turret + 1 MMG in the back of the turret.

**AMD Laffly S15TOE:** wheeled vehicle, weight 4 tons, 3 men crew, armed with 1 MMG in turret; in 1940 this vehicle equipped only units in North Africa.

## Tankettes

**Renault UE:** tracked vehicle, weight 2,5 tons, 2 men crew, without weapons; with apposite trailer was utilized to transport infantry munitions and/or mortars; without trailer sometimes was utilized to tow the standard anti tank weapon of the infantry battalion: the 25mm ATG.

**Lorraine 37L:** tracked vehicle, weight 6 tons, 2 men crew, without weapons; with apposite trailer was utilized for the supplying of munitions in the tanks units; without trailer sometimes was utilized

to tow light artillery like 75mm field gun with pneumatic tyres. Also existed a short variant.

**Lorraine 38L:** tracked vehicle, weight 6 tons, 2 men crew, without weapons; in the rear has a light armoured box to transport 4 soldiers; with apposite light armoured trailer this vehicle could transport 6 soldier more; was utilized to carry dragoons or chasseurs.

## Unarmoured vehicles

### Half-tracks

**Citroen P-17:** half-track with Kегresse suspensions; developed in the '20s and '30s but still fully used in 1940 either in artillery tractor version or engineers carrier version.

**Citroen P-19:** half-track with Kегresse suspensions, very similar to the P-17; existed in staff carrier version, in dragoons carrier version or in tanks hunter version with a 25mm ATG over mounted.

**UNIC P-107:** half-track with Kегresse suspensions, vehicle similar but more modern and more powerful than the Citroen P-17 and P-19; existed in troops carrier version, artillery tractor version or engineers carrier version.

**UNIC TU-1:** little half-track utilized to tow the 25mm ATG or, with apposite trailer (like the trailer used with the Renault UE tankette), utilized to transport munitions in infantry units.

**Somua MCG:** class of big half-tracks utilized as artillery tractors; MCG4 model didn't have the posterior caisson and was used to tow the 155mm M1917 howitzers with pneumatic tyres; MCG5 model, with the posterior caisson was used to tow the 105mm M1936L gun with pneumatic tyres; also existed a version for tanks and vehicles recovery.

**Somua MCL:** class of big half-tracks, similar to the MCGs, utilized as artillery tractors, for munitions transport or for tanks and vehicles recovery.

### Motor-cycles

A lot of motor-cycles models, produced by various factories, was utilized in 1940; here we point out those vehicles:

**Gnome Rhone AX2:** motor-cycles with sidecar.

**Indian 340B:** motor-cycles with sidecar.

**Peugeot P112:** solo motor-cycles.

### Cars

A lot of french cars models, produced by various factories, was utilized in 1940; here we point out those vehicles:

**Citroen:** 7CV, 11CV and 15CV utilized as staff cars.

**Latil:** M7T1 4x4 personnel car.

**Matford:** F82 staff car.

## Trucks and wheeled artillery tractors

A lot of french trucks and tractors models, produced by various factories, was utilized in 1940; here we point out those vehicles:

**Berliet:** CBA truck (also used in WWI); GDLS truck or artillery tractor.

**Citroen:** type 23 and type 45 trucks (very diffused in 1940).

**Dedion-Bouton:** truck that carried, mounted on AA carriage, a 75mm M1897 field gun (utilized especially during the WWI).

**Laffly:** 4 wheels vehicles (4x4) or 6 wheels vehicles (6x6); every model moreover had 4 extra little wheels for the overcoming of obstacles.

4x4 vehicles: V15R (personnel carrier); V15T (artillery tractor).

6x6 vehicles: W15T (artillery tractor); W15TCC (tanks hunter with 1 ATG 47mm on the back; of this vehicle existed also a prototype completely armoured; S15R (personnel carrier); S15T (artillery tractor); S20TL (dragoons carrier version, command vehicles version with radio aerial, tanks hunter version with 1 25mm ATG over mounted; S25T, S35T e S45T (heavier vehicles utilized as artillery tractor to tow heavy artillery or as recovery vehicles).

**Latil:** KTL4 (artillery tractor); TARH (heavy artillery tractor); M2TZ (heavy artillery tractor or recovery vehicle); M7Z1 (artillery tractor); GPB truck; M1B truck; M2B truck; M2TL truck.

**Licorne:** wheeled vehicle 4x4 identical to Laffly V15T.

**Matford:** F917-WF refuelling vehicle, F917-WF GS truck.

**Panhard-levassor:** K113 truck; K125 truck.

**Peugeot:** DK5J truck; DMA truck.

**Renault:** ADH (also command version with radio aerial), ADK, ADR, AGC, AGK, AGR, AHN and AHS trucks.

**Saurer:** 3CT1-M1 truck.

## Artillery

### Field guns and howitzers

**37mm infantry gun:** used a lot during the WWI, in 1940, even if obsolete, was still the standard battalion gun in some infantry divisions; towed by horses.

**70mm mountain gun:** used during the WWI but obsolete in the WWII; towed by horses.

**75mm M1912 field gun:** used during the WWI, in 1940 was completely replaced by the M1897 field gun in the first line units; towed by horses.

**75mm M1897 field gun:** horse tow if wooden wheels, with pneumatic tyres or with extra rubberized little wheels (train rouser) towed by wheeled vehicles (Laffly S15T), half-tracks (Citroen P-17, UNIC P-107) or fully tracked vehicles (Lorraine 37L).

**105mm M1913 field gun:** horse tow if wooden wheels, with pneumatic tyres towed by wheeled vehicles (Latil KTL4) or half-tracks (UNIC P-107).

**105mm M1935 B howitzer:** horse tow if solid armoured wheels, with extra rubberized little wheels (train rouser) towed by wheeled vehicles (Laffly S15T) or half-tracks (UNIC P-107).

**105mm M1934 S howitzer:** similar to the 105mm M1935 B howitzer but with different carriage, with pneumatic tyres and towed by wheeled vehicles or half-tracks.

**105mm M1936 L field gun:** only pneumatic tyres, towed by wheeled vehicles (Laffly S25T, Laffly S35T) or half-tracks (Somua MCG5).

**155mm M1917 CS howitzer:** horse tow if wooden wheels, with pneumatic tyres towed by wheeled vehicles (Latil TARH) or half-tracks (Somua MCG4).

**155mm GPF M1916 gun:** with steel wheels, towed by horses.

**155mm GPF Touzard gun:** GPF M1916 gun with Touzard carriage with pneumatic tyres, towed by wheeled vehicles (Latil TARH) or half-tracks (Somua MCL).

**220mm M1916 Schneider Creusot mortar:** heavy mortar utilized especially during the WWI).

## **Anti Tank Guns (ATG)**

**25 mm Hotchkiss ATG:** towed by horses, wheeled vehicles (Laffly V15T), half-tracks (UNIC TU-1) or fully tracked vehicles (Renault UE); sometimes mounted over a Citroen P-19 half-track, Laffly S20TL or truck to create a tanks hunter vehicle.

**25mm Puteaux ATG:** towed by horses, wheeled vehicles or half-tracks.

**47mm ATG:** trainato da cavalli o da veicoli ruotati (Laffly W15T) o semi-cingolati (Citroen P-17).

## **Anti Aircraft (AA)**

**20mm AA Oerlikon:** imported from Switzerland but used a lot by the Frenchs.

**25 mm AA:** towed by horses, wheeled vehicles (Laffly W15T) or half-tracks (Citroen P-17).

**75mm M1897 AA:** 75mm M1897 field gun mounted on apposite AA carriage; sometimes mounted over a Dedion-Bouton truck (utilized especially during the WWI).

**75mm AA M1917/34.**

**75mm AA M1932-36:** usually towed by wheeled vehicles (Berliet GDLS, Latil TARH).