



Armored Trains List

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Russian Armored Steam Engines

Engine PR-35						
Front			Side 1		Side 2	
10	Stack	.5	Boiler	2r	Cab	4
9	Boiler	1	Boiler	1.5r	Cab	4
8	Boiler	1	Boiler	1	Cab	4
7	Boiler	1	Boiler	1	Cab	4
6	Boiler	1	Boiler	1.5r	Cab	4
5	Boiler	1	Boiler	2r	Boiler	1.5
4	Hull	1	Hull	1.5	Hull	1.5
3	Chassis	3	Chassis	3	Chassis	3
2	Wheel	3	Wheel	3	Wheel	3
1	Wheel	3	Wheel	3	Wheel	3
	Top	1				
			size 4			
Speed 100...470			0-8-0 WDn=2			

Medium Engine						
Front			Side 1		Side 2	
10	Stack	3	Boiler	4r	Cab	7
9	Boiler	3	Boiler	4s ¹⁰	Cab	7
8	Boiler	3	Boiler	4s ¹⁰	Cab	7
7	Boiler	3	Boiler	4s ¹⁰	Cab	7
6	Boiler	3	Boiler	4s ¹⁰	Cab	7
5	Boiler	3	Boiler	4r	Boiler	4s ¹⁰
4	Hull	3	Hull	4	Hull	4
3	Chassis	4	Chassis	4	Chassis	4
2	Wheel	6	Wheel	6	Wheel	6
1	Wheel	3	Wheel	3	Wheel	3
	Top	2				
			size 4			
Speed 100...500			1-8-0 WDn=2			

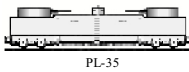
Engine OV						
Front			Side 1		Side 2	
10	Stack	.5	Boiler	6r	Cab	10
9	Boiler	5	Boiler	5s ¹⁰	Cab	10
8	Boiler	5	Boiler	5s ¹⁰	Cab	10
7	Boiler	5	Boiler	5s ¹⁰	Cab	10
6	Boiler	5	Boiler	5s ¹⁰	Cab	10
5	Boiler	5	Boiler	6r	Boiler	5s ¹⁰
4	Hull	4	Hull	4	Hull	4
3	Chassis	4	Chassis	4	Chassis	4
2	Wheel	5	Wheel	5	Wheel	5
1	Wheel	4	Wheel	4	Wheel	4
	Top	3				
			size 4			
Speed 100...570			0-10-0 WDn=3			



Armored Tender

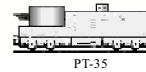
Armored Command Tender						
Front			Side 1		Rear	
7-10	Compartment	1.5	Compartment	1.5	Cupola	10
3-6	Compartment	1.5	Compartment	1.5	Compartment	2
2	Chassis	4	Chassis	4	Chassis	4
1	Wheel	3	Wheel	3	Wheel	3
	Top	2				
			size 3			
Speed [towed]			WDn=2		1 x 12.7mm MG AA	
Compartment: Coal/Oil & Water						

Russian Artillery Wagons



PL-35

PL-35 Light Artillery Wagon						
Front / Rear			Side 1		Side 2	
10	Tur		Cupola	4	Cupola	4
7-9	Tur		Tur1		Tur2	
3-6	SuperS	4	SuperS	4s ¹⁰	SuperS	4
2	Chassis	4	Chassis	4	Chassis	4
1	Wheel	3	Wheel	3	Wheel	3
	Top	1.5				
			size 3		3 x 7.62 MG	
Speed [towed]			WDn=1		variable AA	
Turrets: Light Artillery turret Cupola either CO and AA station						



PT-35

PT-35 Heavy Artillery Wagon						
Front			Side 1		Side 2	
10	Tur		Tur		Cupola	4
9	Tur		Tur		Cupola	4
5-8	Tur		Tur		Compartment	5
3-4	SuperS	5s ¹⁰	SuperS	5s ¹⁰	SuperS	5s ¹⁰
2	Chassis	4	Chassis	4	Chassis	4
1	Wheel	2	Wheel	2	Wheel	2
	Top	2				
			size 3			
Speed [towed]			WDn=1		variable AA in rear	
Turrets: Heavy Artillery or Heavy Casemate Cupola eitherCO or AA station						



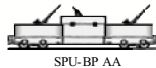
PL-42

PL-42 Artillery Wagon						
Front\Rear			Side 1		Side 2	
10	Tur		Cupola	<u>5</u>	Cupola	<u>5</u>
7-9	Tur		Tur 1		Tur 2	
3-6	SuperS	5	SuperS	5	SuperS	5
2	Chassis	4	Chassis	4	Chassis	4
1	Wheel	3	Wheel	3	Wheel	3
	Top	3				
			size 3			
Speed [towed]			WDn=1		4 x 7.62 MG	
Turrets: T-34or KV-1. Cup either Co or AA						

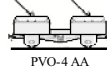


PL-43

PL-43 Artillery Wagon						
Front			Side		Rear	
8-10	Tur		Tur		Tur	
4-7	SuperS	5	SuperS	5	SuperS	5
3	Chassis	4	Chassis	4	Chassis	4
2	Wheel	4	Chassis	4	Wheel	4
1	Wheel	2	Wheel	2	Wheel	2
	Top	3				
			size 2			
Speed [towed]			WDn=1		2 x 76.2 MG	
Turret: T-34 Mod43						

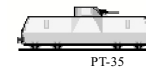


SPU-BP AA



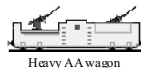
PVO-4 AA

Anti-Aircraft Wagons						
Front\Rear			Side 1		Side 2	
8-10	Tur	1.5	Tur 1	1.5	Tur 2	1.5
3-7	SuperS	1.5	SuperS	1.5	SuperS	1.5
2	Chassis	3	Chassis	3	Chassis	3
1	Wheel	3	Wheel	3	Wheel	3
	Top	0				
			size 2			
Speed [towed]			WDn=1			
SPU: 2 x 37mm AA+ Katusha/PVO: 2 x 37mm AA						



PT-35

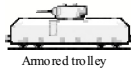
PB-35 Style Artillery Wagon						
Front\Rear			Side 1		Side 2	
8-10	Tur		Tur		Tur	
3-7	Compart	3	SuperS	5	Compart	2
2	Chassis	3	Chassis	3	Chassis	3
1	Wheel	2	Wheel	2	Wheel	2
	Top	2				
			size 3			
Speed [towed]			WDn=1			
Turret: Light Artillery Turret						



Heavy AA wagon

Heavy AA wagon						
Front/Rear			Side 1		Side 2	
9-10	Gun Shd	.5	Gun 1	0	Gun 2	0
7-8	SuperS	1	Side W/Gun	1	SuperS	1
3-6	SuperS	1.5	SuperS	1.5	SuperS	1.5
2	Chassis	3	Chassis	3	Chassis	3
1	Wheel	2	Wheel	2	Wheel	2
	Top	0/1/0				
			size 2			
Speed [towed]			Wdn= 1			
2 x 85mm AA (side wall 7-8 must be lowered to level fire.)						

Russian Armored Trolleys



Armored trolley

Armored Trolley						
Front/Rear			Side 1		Side 2	
10	Tur		Tur		Tur	
9	Tur		Tur		Tur	
8	Tur		SuperS	2	SuperS	2
6-7	SuperS	2	SuperS	2	SuperS	2
3-5	Hull	2	Hull	2	Hull	2
1-2	Wheel	3	Wheel	3	Wheel	3
	Top	2				
			size 3		4 x 76.2 MG	
Speed 150 .. 500			Wdn=1			
Turret: KV-1.						



Armored trolley

Armored Trolley						
Front/Rear			Side		Rear	
10	Tur		Tur		Tur	
9	Tur		Tur		Tur	
8	Tur		SuperS	1.5	Tur	
6-7	SuperS	1.5	SuperS	1.5	SuperS	1.5
3-5	Hull	1.5	Hull	2	Hull	1.5
1-2	Wheel	2	Wheel	2	Wheel	2
	Top	1.5				
45mm/L46			size 2		4 x 76.2 MG	
Speed 120 .. 400			Wdn=1			
Turret: T-26.						



BA-20ZhD

BA-20ZhD						
Front			Side		Rear	
9-10	Tur	1	Tur	1	Tur	1
7-8	Hull	2	Hull	1	Hull	1
3-6	Hull	1.5	Hull	1	Hull	1
2	Hull	.5	Hull	1	Hull	.5
1	Wheel	.5	Wheel	.5	Wheel	.5
	Top	.5				
7.62mm MG			size -1			
Speed 200 .. 750			Wdn= -1			

Turrets to Russian Armored Wagons

PL- Light Artillery Turret					PT- Heavy Artillery Turret				
Front	Side	Rear	Top		Front	Side	Rear	Top	
1-2	2	2	2	2	1-2	5	4	4	3
3-4	2	2	2		3-4	5	4	4	
5-6	2	2	2		5-6	5	4	4	
76.2mm/L23\L30.5 ROF:6					107mm/L38 ROF:5				

T-26 Turret					T-28 Turret				
Front	Side	Rear	Top		Front	Side	Rear	Top	
1-2	1.5	1.5	1.5	1.5	1-3	2r	2	3r	2
3-4	1.5r	1.5	1.5		4	2	2	3	
5-6	1.5	1.5	1.5		5-6	2	2	3	
45mm/L46 ROF:6					76.2mm/L23 ROF:4				

KV-1 Model '40 Turret					KV-1 Model '41 Turret				
Front	Side	Rear	Top		Front	Side	Rear	Top	
1-2	9r	8	8	6	1-2	9r	8	8	6
3-4	9r	8	8		3-4	9r	8	8	
5-6	9	8	8		5-6	9	8	8	
76.2mm/L30.5 ROF:4					76.2mm/L42 ROF:4				



MBV'38

MBV '38 Self-Propelled Car						
Front			Side 1		Side 2 / Rear	
10	Tur 1		Tur1		Cupola	2
9	Tur 1		Tur1		Tur3	
8	Tur1		Tur2		Tur3	
7	Tur2		Tur2		SuperS	1.5
5-6	Tur2		SuperS	1.5	SuperS	1.5
3-4	Hull	1.5	Hull	2	Hull	1.5
2	Wheel	3	Chassis	3	Chassis	3
1	Wheel	3	Wheel	3	Wheel	3
	Top	1.5				
			size 4		5 x 7.62 MG	
Speed 200...1200			4-0-6 WDN=2		4 x 7.62 MG AA	
Turrets: 3xT28 or 2xT28 (f) 1x T34'40 (r) Crew 40 1938						



Armored Trolley

Armored Trolley						
Front			Side		Rear	
10	Tur		Tur		Tur	
9	Tur		Tur		Tur	
8	Tur		SuperS	1	Tur	
6-7	SuperS	<u>3</u>	SuperS	1	SuperS	<u>3</u>
3-5	Hull	1.5	Hull	1.5	Hull	1.5
1-2	Wheel	2	Wheel	2	Wheel	2
	Top	T 1				
45mm/L46			size 2		3 x 76.2 MG	
Speed 120 .. 450			Wdn= 2			
Turret: T-26						



BA-6ZhD

BA-6ZhD						
Front			Side		Rear	
10	Tur	1.5	Tur	1.5	Tur	1.5
9	Tur	1.5r	Tur	1.5	Tur	1.5
8	Tur	1.5	Tur	1.5	Tur	1.5
6-7	Hull	1.5	Hull	1	Hull	1
3-5	Hull	1	Hull	1	Hull	1
1-2	Wheel	.5	Wheel	.5	Wheel	.5
	Top	T 1.5	D .5			
45mm/L46			size -1		3 x 76.2 MG	
Speed 150 .. 500			Wdn= -1			
Turret: T-26						

T34 Model '40 Turret					T34 Model '41 Turret				
Front	Side	Rear	Top		Front	Side	Rear	Top	
1-2	7r	5	4	2	1-2	7r	5	5	3
3-4	4r	5	4		3	5	5	5	
5-6	5r	5	4		4-6	5r	5	5	
76.2mm/L30.5 ROF:4					76.2mm/L42 ROF:4				

T34 Model '42 Turret					T34 Model '43 Turret				
Front	Side	Rear	Top		Front	Side	Rear	Top	
1-2	8r	6	5	3	1-2	7r	6	5	3
3	5	6	5		3	7rr	6	5	
4-6	6r	6	5		4-6	7	6	5	
76.2mm/L42 ROF:4					76.2mm/L42 ROF:5				

Russian Gun Tables

45mm/L46	D	S	Pen.	4	3	2								
AP BR-220	7	12	Range	100	500	800								
AP BR-220SP (1942)			Pen.	5	4	3								
	7	12	Range	125	500	800								
when RoF=6			To Hit	1 ^{·6.11}	2 ^{·7.12}	3 ^{·8.13}	4 ^{·9.14}	5 ^{·10.15}	6 ^{·11}	7 ^{·12}	8 ^{·13}	9 ^{·14}	10 ^{·15}	11
			Range	100	150	200	250	300	350	400	450	550	650	800

76.2mm/L23	D	S	Pen.	6	5	4								
APHE	6	10	Range	325	650	900								
when RoF=6			To Hit	1 ^{·6.11}	2 ^{·7.12}	3 ^{·8.13}	4 ^{·9.14}	5 ^{·10.15}	6 ^{·11}	7 ^{·12}	8 ^{·13}	9 ^{·14}	10 ^{·15}	11
			Range	100	225	275	325	375	425	475	550	650	750	900

76.2mm/L30.5	D	S	Pen.	7	6	5								
APHE BR-350	6	10	Range	100	500	900								
when RoF=6			To Hit	1 ^{·6.11}	2 ^{·7.12}	3 ^{·8.13}	4 ^{·9.14}	5 ^{·10.15}	6 ^{·11}	7 ^{·12}	8 ^{·13}	9 ^{·14}	10 ^{·15}	11
			Range	125	250	300	350	400	450	500	575	650	750	900

76.2mm/L42	D	S	Pen.	8	7	8								
APHE BR-350	6	10	Range	150	600	1000								
APHE BR-350A (5/1943)			Pen.	9	8	7	6							
	6	10	Range	25	225	650	1000							
APHE BR-350B (10/1943)			Pen.	9	8	7	6							
	6	10	Range	75	275	700	1000							
when RoF=4			To Hit	1 ^{·8.15}	2 ^{·9}	3 ^{·10}	4 ^{·11}	5 ^{·12}	6 ^{·13}	7 ^{·14}	8 ^{·15}	9	10	11
			Range	150	275	325	375	425	500	550	625	725	825	1000

107mm/L38	D	S	Pen.	12	11	10	9							
APHE	4	9	Range	125	425	750	1000							
when RoF=5			To Hit	1 ^{·7.13}	2 ^{·8}	3 ^{·9}	4 ^{·10}	5 ^{·11}	6 ^{·12}	7 ^{·13}	8 ^{·14}	9 ^{·15}	10	11
			Range	150	300	375	400	450	525	600	675	750	850	1000

Russian Anti-Aircraft Gun Tables

37mm/L67 M39	D	S	Pen.	5	4	3	2							
AP	7	13	Range	125	500	800	850							
when RoF=ac			To Hit	1 ^{·3.5}	2 ^{·4.6}	3 ^{·5.7}	4 ^{·6.8}	5 ^{·7.9}	6 ^{·8.10}	7 ^{·9.11}	8 ^{·10.12}	9 ^{·11.13}	10 ^{·12}	11 ^{·13}
			Range	150	275	325	375	425	475	525	600	650	725	850

76.2mm/L58	D	S	Pen.	9	8	7	6							
AP BR-361SP	7	10	Range	75	350	700	1000							
when RoF=8			To Hit	1 ^{·5.8}	2 ^{·6.9}	3 ^{·7.10}	4 ^{·8.11}	5 ^{·9.11}	6 ^{·10.12}	7 ^{·11.13}	8 ^{·12.14}	9 ^{·13.15}	10 ^{·14}	11 ^{·15}
(Model 1931 or 1938 AA)			Range	200	300	350	400	450	525	575	650	750	850	1000



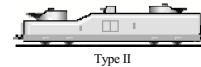
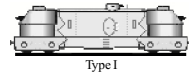
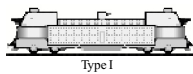
Polish Armored Engines

Engine Ti3 'Danuta'						
Front		Side 1		Side 2		
10	Stack	.5	Boiler	3r	Cab	1
9	Boiler	2	Boiler	2r	Cab	1
8	Boiler	2	Boiler	2	Cab	1.5
7	Boiler	2	Boiler	2	Cab	1.5
6	Boiler	2	Boiler	2r	Cab	1.5
5	Boiler	2	Boiler	3r	Boiler	2
4	Hull	1.5	Hull	2	Hull	2
3	Chassis	2	Chassis	2	Chassis	2
2	Wheel	2	Wheel	2	Wheel	2
1	Wheel	2	Wheel	2	Wheel	2
	Top	1				
		size 4				
Speed		100...470		2-6-2 WDN=2		

Engine G7						
Front		Side 1		Side 2		
10	Stack	.5	Boiler	3r	Cab	1
9	Boiler	1	Boiler	1.5r	Cab	1
8	Boiler	1	Boiler	1	Cab	1
7	Boiler	1	Boiler	1	Cab	1
6	Boiler	1	Boiler	1.5r	Cab	1
5	Boiler	1	Boiler	2r	Boiler	2
4	Hull	1.5	Hull	2	Hull	2
3	Chassis	2	Chassis	2	Chassis	2
2	Wheel	2	Wheel	2	Wheel	2
1	Wheel	2	Wheel	2	Wheel	2
	Top	1				
		size 4				
Speed		100...470		0-8-0 WDN=2		

Engine Tw-11						
Front		Front Side		Rear Side		
10	Stack	.5	Boiler	3r	Cab	1.5
9	Boiler	2	Boiler	2r	Cab	1.5
8	Boiler	2	Boiler	2	Cab	1.5
7	Boiler	2	Boiler	2	Cab	1.5
6	Boiler	2	Boiler	2r	Cab	1.5
5	Boiler	2	Boiler	3r	Boiler	2
4	Hull	1.5	Hull	2	Hull	2
3	Chassis	2	Chassis	2	Chassis	2
2	Wheel	2	Wheel	2	Wheel	2
1	Wheel	2	Wheel	2	Wheel	2
	Top	1.5				
		size 4				
Speed		100...500		0-10-0 WDN=3		

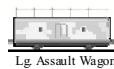
Engine G8						
Front		Side 1		Side 2		
10	Stack	.5	Boiler	3r	Cab	1.5
9	Boiler	2	Boiler	2r	Cab	1.5
8	Boiler	2	Boiler	2	Cab	1.5
7	Boiler	2	Boiler	2	Cab	1.5
6	Boiler	2	Boiler	2r	Cab	1.5
5	Boiler	2	Boiler	3r	Boiler	2
4	Hull	1.5	Hull	2	Hull	2
3	Chassis	2	Chassis	2	Chassis	2
2	Wheel	2	Wheel	2	Wheel	2
1	Wheel	2	Wheel	2	Wheel	2
	Top	1.5				
		size 4				
Speed		100...570		0-8-0 WDN=2		



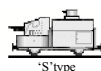
Polish Artillery Wagons

Type I Artillery Wagon (Russian design)						
Front / Rear			Side 1		Side 2	
10	Tur		Cupola	1	Cupola	1
7-9	Tur		Tur 1		Tur 2	
4-6	SuperS	2s ^b	SuperS	2s ^b	SuperS	2s ^b
3	Chassis	2	Chassis	2	Chassis	2
2	Wheel	2	Chassis	2	Wheel	2
1	Wheel	2	Wheel	2	Wheel	2
	Top	1.5				
			size 4		4 x 7.92mm	
Speed [towed]			WDn=1		7.92 MG AA	
Turrets:100mm(T1) & 75mm(T2) or 2 x 75mm						

Type II Artillery Wagon						
Front			Side 1		Side 2/Rear	
10	Cupola	1	Cupola	1.5	Tur2	
8-9	Tur1		Tur 1		Tur 2	
7	Tur1		Tur 1		SuperS	2
6	Tur1		SuperS	2	SuperS	2
5	SuperS	2s ^b	SuperS	3s ^b	SuperS	3 ^b
4	SuperS	2	SuperS	2	SuperS	2
3	Chassis	2	Chassis	2	Chassis	2
2	Wheel	2	Chassis	2	Wheel	2
1	Wheel	2	Wheel	2	Wheel	2
	Top	1.5				
			size 3		8 x 7.92mm	
Speed [towed]			WDn=1		7.92 MG AA	
Turrets:100mm(T1:lower) & 75mm(T2:upper)						



Assault Wagon						
Front		Side		Rear		
10	Compant	1.5	Compant	1.5	Compant	1.5
7-9	Compant	1	Compant	1	Compant	1
4-6	Compant	1.5	Compant	2s ⁵	Compant	1.5
3	Chassis	2	Chassis	2	Chassis	2
2	Wheel	2	Chassis	2	Wheel	2
1	Wheel	2	Wheel	2	Wheel	2
	Top	1.5				
		size 2		2 or 3 x squads		
Speed [towed]		WDN=1		4 x LMG		



'S' type

ex-Austro-Hungarian 'S' Type Artillery Wagon						
Front			Side		Rear	
10	Tur		Cupola	1.5	Cupola	1.5
7-9	Tur		Tur		Compart	1
4-6	SuperS	1.5	SuperS	1.5	Compart	1
3	Chassis	3	Chassis	3	Chassis	3
2	Wheel	3	Chassis	3	Wheel	3
1	Wheel	2	Wheel	2	Wheel	2
	Top	1				
			size 4		2 x 7.92mm	
Speed [towed]			WDn=1			
Turret: 75mm 'S' turret						



Tatra draineine

Tatra draineine						
Front			Side		Rear	
9-10	Turret	1r	Turret	1r	Turret	1r
7-8	SuperS	1	SuperS	1	SuperS	1
4-6	SuperS	1	SuperS	1	SuperS	1
3	Chassis	1	Chassis	1	Chassis	1
2	Wheel	1.5	Chassis	1	Wheel	1.5
1	Wheel	1.5	Wheel	1.5	Wheel	1.5
	Top	.5				
			size 0			
Speed 100 .. 400			WDn=0		2 x 7.92mm MG	



FT-17 draineine



TKS draineine

Tank draine						
Front			Side		Rear	
5-10	Tank		Tank		Tank	
3-4	Chassis	1.5	Chassis	1	Chassis	1.5
2	Wheel	2	Chassis	2	Wheel	2
1	Wheel	2	Wheel	2	Wheel	2
	Top	.5				
			size: +2 to tank size			
Speed 100 .. 400			WDn=0			
Tanks: either FT-17 or TKS tankette. Tank engine drives wagon.						

Turrets For Polish Artillery Wagons

75mm Turret					100mm Turret				
Front	Side	Rear	Top		Front	Side	Rear	Top	
3r	2	2	1		4r	3	3	2	
75mm wz.06/26 ROF:6					100mm wz.16/19 ROF:5				

75mm Turret 'S' wagon					100mm Turret (open)				
Front	Side	Rear	Top		Front	Side	Rear	Top	
2r	1.5	1	.5		4r	3	-	-	
75mm wz.06/26 ROF:6					100mm wz.16/19 ROF:5				

Polish Artillery Tables

75 wz. 02/26	D	S	Pen.	7	6	5							
APHE	6	10	Range	75	500	900							
when RoF=6			To Hit	1 ^{6.11}	2 ^{7.12}	3 ^{8.13}	4 ^{9.14}	5 ^{10.15}	6 ¹¹	7 ¹²	8 ¹³	9 ¹⁴	10 ¹⁵
			Range	125	200	300	350	400	450	500	575	650	750

100 wz. 14/19	D	S	Pen.	5	4	3.5	3	2.5					
HE	3	8	Range	200	375	550	725	900					
when RoF=5			To Hit	1 ^{7.13}	2 ^{8.14}	3 ^{9.15}	4 ¹⁰	5 ¹¹	6 ¹²	7 ¹³	8 ¹⁴	9 ¹⁵	10
			Range	50	125	200	275	350	400	450	525	600	750



German Armored Engines

"O" Type (ex-Russian)						
Front			Side 1		Side 2	
10	Stack	.5	Boiler	3r	Cab	1
9	Boiler	1	Boiler	1.5r	Cab	1
7-8	Boiler	1	Boiler	1	Cab	1
6	Boiler	5	Boiler	5s ¹⁰	Cab	10
5	Boiler	5	Boiler	6r	Boiler	5s ¹⁰
4	Hull	4	Hull	4	Hull	4
3	Chassis	4	Chassis	4	Chassis	4
2	Wheel	5	Wheel	5	Wheel	5
1	Wheel	4	Wheel	4	Wheel	4
	Top	3				
			size 4			
Speed 100...570			0-10-0 WDn=3			

Panzerlok BR 93						
Front			Side 1		Side 2	
10	Boiler	3	Boiler	4r	Cab	3
9	Boiler	3	Boiler	4s ¹⁰	Cab	3
7-8	Boiler	3	Boiler	4s ¹⁰	Cab	3
6	Boiler	3	Boiler	4s ¹⁰	Cab	3
5	Boiler	4	Boiler	4r	Boiler	4s ¹⁰
4	Hull	2	Hull	4s ¹⁰	Hull	4s ¹⁰
3	Chassis	4	Chassis	4	Chassis	4
2	Wheel	4	Wheel	4	Wheel	4
1	Wheel	4	Wheel	4	Wheel	4
	Top	2				
			size 4			
Speed 100...570			2-8-2 WDn=3			

Panzerlok BR 57						
Front			Side 1		Side 2	
10	Stack	1	Boiler	4r	Cab	2
9	Boiler	3	Boiler	4s ¹⁰	Cab	2
7-8	Boiler	3	Boiler	4s ¹⁰	Cab	2
6	Boiler	3	Boiler	4s ¹⁰	Cab	2
5	Boiler	3	Boiler	4r	Boiler	4s ¹⁰
4	Hull	3	Hull	4s ¹⁰	Hull	4s ¹⁰
3	Chassis	4	Chassis	4	Chassis	4
2	Wheel	4	Wheel	4	Wheel	4
1	Wheel	3	Wheel	3	Wheel	3
	Top	1				
			size 4			
Speed 100...570			0-10-0 WDn=3			



Cannon Car

Armored wagons

Geschützswagen							
Front		Side 1		Side 2		Rear	
10	Tur	Cupola	1.5	Cupola	1.5	Cupola	1.5
8-9	Tur	Tur		Compartment	3	Compartment	3
7	Tur	SuperS	3	Compartment	3	Compartment	3
3-6	SuperS	3	SuperS	3	Compartment	3	Compartment
2	Chassis	3	Chassis	3	Chassis	3	Chassis
1	Wheel	3	Wheel	3		Wheel	3
	Top	2					
		size 3					
Speed [towed]		WDn=1				7.92 MG AA	

Turret: 10 sided w/ 75mm, 76.2mm or 105mm guns



Panzerjägerwagen T34

Panzerjägerwagen T34/76							
Front		Side		Rear			
10	Tur		Tur		Tur		
8-9	Tur		Tur		Tur		
5-7	SuperS	9	SuperS	6	SuperS	6	
3-4	Chassis	4	Chassis	4	Chassis	4	
2	Wheel	3	Chassis	3	Wheel	3	
1	Wheel	3	Wheel	3	Wheel	3	
	Top	2					
		size 0					
Speed 50..200/towed		WDn=1				1 x 7.92 MG	

Turret: T-34/76 (Can run on own power)



Cannon and Flak Car

Kanonen und Flakwagen							
Front		Side 1		Side 2		Rear	
10	Tur	Cupola	1.5	Cupola	1.5	Flak	0
8-9	Tur	Tur		Flak	.5	Flak	.5
7	Tur	SuperS	3	Compartment	3	Compartment	3
3-6	SuperS	3	SuperS	3	Compartment	3	Compartment
2	Chassis	3	Chassis	3	Chassis	3	Chassis
1	Wheel	3	Wheel	3		Wheel	3
	Top	2					
		size 3					
Speed [towed]		WDn=1					

Turret 1: 10-sided 75mm/ Turret 2: 4x 20mm AA



Panzerjägerwagen Mk IV

Panzerjägerwagen Mk IVH							
Front		Side		Rear			
10	Tur		Tur		Tur		
8-9	Tur		Tur		Tur		
5-7	SuperS	5	SuperS	5	SuperS	5	
3-4	Chassis	4	Chassis	4	Chassis	4	
2	Wheel	3	Chassis	3	Wheel	3	
1	Wheel	3	Wheel	3	Wheel	3	
	Top	2					
		size 0		C8r			
Speed 50..200/towed		WDn=1				1 x 7.92 MG	

Turret: Mk IVH or I (Can run on own power)



Tank Carrier Car

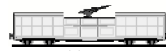
Tank Carrier							
Front		Side		Rear			
7-10	Tank		Tank		Tank		
5-6	Tank	+3	Tank	+3	Tank		
3-4	Chassis	1	Chassis	2	Chassis	1	
2	Wheel	1.5	Chassis	1.5	Wheel	1.5	
1	Wheel	1.5	Wheel	1.5	Wheel	1.5	
	Top	1					
		size: +2 to tank size					
Speed [towed]		WDn=0					

Hits on Tank: Roll location on tank 1-4 is hull down behind protective armor.



Command Car

Kommandowagen							
Front		Side		Rear			
10	Cupola	2	Cupola	2	Cupola	2	
5-9	Compartment	2	Compartment	2	SuperS	2	
3-4	Compartment	2	Compartment	2	SuperS	2	
2	Chassis	3	Chassis	3	Chassis	3	
1	Wheel	2	Wheel	2	Wheel	2	
	Top	1.5					
		size 3		2 x squads			
Speed [towed]		WDn=1				4 x 7.92 MG	



Flak 88 Car

88mm Flakwagen							
Front		Side 1		Rear			
10	Gun Sld	.5	Gun	0	Gun	0	
7-9	SuperS	1.5	Side W/Gun	1	SuperS	1.5	
4-7	SuperS	1.5	SuperS	1.5	SuperS	1.5	
3	Chassis	2	Chassis	2	Chassis	2	
1-2	Wheel	1.5	Wheel	1.5	Wheel	1.5	
	Top	1/0/1					
88mm/L56		size 3					
Speed (towed)		WDn=1					

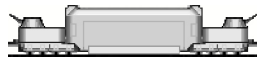
Flak 88mm (Side wall 7-9 must be lower to fire level.)

Armored
Railcars



Geschütz Triebwagen

Geschütztriebswagen (Ansaldo)						
Front/Rear			Side 1		Side 2	
10	Tur		Cupola	3r	Cupola	3r
9	Tur		Tur		Tur	
8	Tur		Tur		Tur	
3-7	SuperS	2	Hull	2	SuperS	2
2	Chassis	3	Chassis	3	Chassis	3
1	Wheel	3	Wheel	3	Wheel	3
	Top	2				
			size 4			
Speed 100..500			WDn=2			
Turrets: M13/40						



Panzertriebswagen Nr. 16

Panzertriebwagen Nr. 16								
Front/Rear			Side1		Side 2		Side 3	
10	Cupola	5	Cupola	5	Hull	5r	Cupola	5
7-9	Tur		Tur		Cab	11	Tur	
5-6	SuperS	5r	SuperS	5r	Hull	11	SuperS	5r
3-4	SuperS	5	SuperS	5	Hull	11	SuperS	5
2	Chassis	5	Chassis	5	Chassis	6	Chassis	5
1	Wheel	5	Wheel	5	Wheel	5	Wheel	5
	Top	4	(end car)		(center unit)		(end car)	
			size 4		1943			
Speed 80 .. 500			WDn=3					
Turrets: 10 sided w/ 75mm 06/26								



Panzerjäger F



Panzerjäger J

Armored
Trolleys

Panzerjäger Draisine mit MK IV turm						
Front			Side		Rear	
10	Tur		Tur		Tur	
8-9	Tur		Tur		Tur	
4-7	SuperS	2	SuperS	2	SuperS	2
3	Chassis	3	Hull	2	Chassis	3
2	Wheel	3	Chassis	3	Wheel	3
1	Wheel	3	Wheel	3	Wheel	3
	Top	2				
75mm/L24 or L48			size 2			
Speed 100 .. 400			WDn=0		3 x 7.92 MG	
Turret: Mk IIIN or Mk IVF1 or Mk IVH						



Assault Draisine

Command/Infantry Draisine						
Front			Side		Rear	
9-10	Cupola	2	Cupola	2	Cupola	2
4-8	Hull	2	Compant	2	Hull	2
3	Chassis	2	Hull	2	Chassis	2
2	Wheel	2	Chassis	3	Wheel	3
1	Wheel	2	Wheel	2	Wheel	3
	Top	1.5				
			size 2		½ squad	
Speed 100 .. 400			WDn=0		4 x 7.92mm MG	



Geschütz Triebwagen

Geschütztriebswagen (ex-Russian)						
Front/Rear			Side 1		Side 2	
10	Tur		Cupola	5	Cupola	5
9	Tur		Tur		Tur	
8	Tur		Tur		Tur	
3-7	SuperS	4	Hull	4	SuperS	4
2	Chassis	5	Chassis	5	Chassis	5
1	Wheel	2	Wheel	2	Wheel	2
	Top	1.5				
			size 4			
Speed 100..500			WDn=2			
Turret: round design 75mm or 100mm howitzer						



Panzerjägertriebswagen

Panzerjägertriebwagen						
Front/Rear			Side 1		Side 2	
10	Tur		Cupola		Cupola	
8-9	Tur		Tur		Tur	
3-7	SuperS	3	Hull	3	SuperS	3
2	Chassis	3	Chassis	3	Chassis	3
1	Wheel	3	Wheel	3	Wheel	3
	Top	2				
			size 3		built 45	
Speed 125..600			WDn=2			
Turrets: 2 x Mk IVH						



AA Draisine

Flak Draisine						
Front			Side		Rear	
8-10	Tur	.5	Tur	0	Tur	0
6-7	SuperS	2	SuperS	2	SuperS	2
4-5	Hull	2	Hull	2	Hull	2
3	Chassis	2	Hull	2	Chassis	3
2	Wheel	2	Chassis	3	Wheel	3
1	Wheel	2	Wheel	2	Wheel	3
	Top	2/0/2				
4 x 20mm AC			size 2			
Speed 100 .. 400			WDn=0		2 x 7.92mm MG	
Turret: 2x or 4 x 20mm AA						



Scout car

Panzer Spähwagen						
Front			Side		Rear	
10	Cupola	1.5	Cupola	1.5	Cupola	1.5
4-8	Hull	1.5	Hull	1.5	Hull	1.5
3	Chassis	1.5	Hull	1.5	Chassis	1.5
2	Wheel	1.5	Chassis	1.5	Wheel	1.5
1	Wheel	1.5	Wheel	1.5	Wheel	1.5
	Top	1				
			size 1		½ squad	
Speed 200 .. 700			WDn=0		4 x 7.92mm MG	



Pz Sp Wg (Fu) Panhard 178-P204f						
Front			Side		Rear	
8-10	Turret	3	Turret	1.5	Turret	1.5
6-7	Hull	2	Hull	1.5	Hull	1.5
4-5	Hull	2	Hull	1.5	Hull	1.5
3	Hull	2	Hull	1.5	Hull	1.5
1-2	Wheel	1.5	Wheel	1.5	Wheel	1.5
	Top	1				
25/L72			size 0			
Speed 200 .. 700			WDn=-1			

Turrets for armored railcars

10-sided BP42 75mm				10-sided BP42 100mm			
Front	Side	Rear	Top	Front	Side	Rear	Top
2r	2r	2r	2	2r	2r	2r	2
75mm 06/26P ROF:6				100mm 14/19P ROF:5			

Round design				Round design			
Front	Side	Rear	Top	Front	Side	Rear	Top
2r	2r	2r	1.5	2r	2r	2r	1.5
76.2mm/L30.5 ROF:6				100mm 14/19P ROF:5			

T34 Model '42 Turret					T34 Model '43 Turret				
Front	Side	Rear	Top		Front	Side	Rear	Top	
1-2	8r	6	5	3	1-2	7r	6	5	3
3	5	6	5		3	7rr	6	5	
4-6	6r	6	5		4-6	7	6	5	
76.2mm/L42 ROF:4					76.2mm/L42 ROF:5				

10-sided BP44 75mm				10-sided BP44 105mm			
Front	Side	Rear	Top	Front	Side	Rear	Top
2r	2r	2r	2	2r	2r	2r	2
75mm/L24 ROF:8				105mm/L28 leFH18 ROF:6			

MK IIIN					M13/40				
Front	Side	Rear	Top		Front	Side	Rear	Top	
1-2	6	3	3	1.5	1-2	4r	3	3	2
3-6	5	3	3s ⁸		3-6	4	3	3	
75mm/L24 ROF:8 C 5r					47mm/32 (It) ROF:8				

MK IVF ₁					MK IVH				
Front	Side	Rear	Top		Front	Side	Rear	Top	
1-2	5r	3	3	1.5	1-2	5r	3s ⁸	3s ⁸	2
3-6	5	3	3s ⁸		3-6	5	3s ⁸	3s ⁸	
75mm/L24 ROF:8 C 9r					75mm/L48 ROF:8 C 10r				

German Gun Tables

47mm /L32 (lt)	D	S	Pen.	7	6	5	4	3						
AP	7	12	Range	25	175	300	450	750						
when RoF=8			To Hit	1 ^{·5.8}	2 ^{·6.9}	3 ^{·7.10}	4 ^{·8.11}	5 ^{·9.12}	6 ^{·10.13}	7 ^{·11.14}	8 ^{·12.15}	9 ^{·13}	10 ^{·14}	11 ^{·15}
			Range	100	200	300	350	400	450	500	550	600	750	900

75mm 02/26 (p)	D	S	Pen.	7	6	5								
APHE	6	10	Range	75	500	900								
when RoF=6			To Hit	1 ^{·6.11}	2 ^{·7.12}	3 ^{·8.13}	4 ^{·9.14}	5 ^{·10.15}	6 ^{·11}	7 ^{·12}	8 ^{·13}	9 ^{·14}	10 ^{·15}	11
			Range	125	200	300	350	400	450	500	575	650	750	900

75mm/L24	D	S	Pen.	6	5	4	3							
APHE	6	10	Range	75	400	850	1000							
When RoF is 8			To Hit	1 ^{·5.8}	2 ^{·6.9}	3 ^{·7.10}	4 ^{·8.11}	5 ^{·9.12}	6 ^{·10.13}	7 ^{·11.14}	8 ^{·12.15}	9 ^{·13}	10 ^{·14}	11 ^{·15}
			Range	100	250	300	350	400	450	500	575	650	800	1000
HEAT (6/1940)	D	S	Pen.	5	Gr. 38 HL									
HEAT (1941)				8	Gr. 38 HL/A									
	7	10	Range	all										
When RoF is 8			To Hit	1 ^{·5.8}	2 ^{·6.9}	3 ^{·7.10}	4 ^{·8.11}	5 ^{·9.12}	6 ^{·10.13}	7 ^{·11.14}	8 ^{·12.15}	9 ^{·13}	10 ^{·14}	11 ^{·15}
			Range	50	225	275	325	350	400	450	500	600	750	900

75mm/L48	D	S	Pen.	13	12	11	10	9	8	7				
APHE	6	10	Range	100	275	475	650	875	1075	1200				
When RoF is 8			To Hit	1 ^{·5.8}	2 ^{·6.9}	3 ^{·7.10}	4 ^{·8.11}	5 ^{·9.12}	6 ^{·10.13}	7 ^{·11.14}	8 ^{·12.15}	9 ^{·13}	10 ^{·14}	11 ^{·15}
			Range	300	350	425	450	500	550	600	675	750	900	1200

7.62cm/L30 (r)	D	S	Pen.	7	6	5								
APHE BR-350	6	10	Range	100	500	900								
when RoF=6			To Hit	1 ^{·6.11}	2 ^{·7.12}	3 ^{·8.13}	4 ^{·9.14}	5 ^{·10}	6 ^{·11}	7 ^{·12}	8 ^{·13}	9 ^{·14}	10 ^{·15}	11
			Range	125	250	300	350	400	450	500	575	650	800	1000

7.62cm/L42 (r)	D	S	Pen.	8	7	8								
APHE BR-350	6	10	Range	150	600	1000								
when RoF=4			To Hit	1 ^{·8.15}	2 ^{·9}	3 ^{·10}	4 ^{·11}	5 ^{·12}	6 ^{·13}	7 ^{·14}	8 ^{·15}	9	10	11
			Range	150	275	325	375	425	500	550	625	725	825	1000

100mm 14/19 (p)	D	S	Pen.	5	4	3.5	3	2.5						
HE	3	8	Range	200	375	550	725	900						
when RoF=5			To Hit	1 ^{·7.13}	2 ^{·8.14}	3 ^{·9.15}	4 ^{·10}	5 ^{·11}	6 ^{·12}	7 ^{·13}	8 ^{·14}	9 ^{·15}	10	11
			Range	50	125	200	275	350	400	450	525	600	750	900

105mm/L28	D	S	Pen.	5	4	3	2.5	2						
HE	3	8	Range	200	375	550	725	900						
HEAT (1943)				12	Gr. 39 H1/C									
	5	8	Range	all										
when RoF=6			To Hit	1 ^{·6.11}	2 ^{·7.12}	3 ^{·8.13}	4 ^{·9.14}	5 ^{·10}	6 ^{·11}	7 ^{·12}	8 ^{·13}	9 ^{·14}	10 ^{·15}	
			Range	50	100	200	275	350	425	450	525	600	900	
105mm/L28	D	S	Pen.	8	7	6	5	4						
APHE	4	9	Range	100	300	600	900	1100						
when RoF=6			To Hit	1 ^{·6.11}	2 ^{·7.12}	3 ^{·8.13}	4 ^{·9.14}	5 ^{·10}	6 ^{·11}	7 ^{·12}	8 ^{·13}	9 ^{·14}	10 ^{·15}	11
			Range	100	225	300	350	400	450	500	600	700	900	1100

Miscellaneous cars



Tender						
Front			Side		Rear	
9-10	Compart	1	Compart/AA	1	AA gun	1
3-8	Compart	1.5	Compart	1.5	Compart	1.5
3	Chassis	2	Chassis	2	Chassis	2
2	Wheel	2	Chassis	2	Wheel	1.5
1	Wheel	1.5	Wheel	1.5	Wheel	1.5
	Top	.5				
			size: 3		AA MG	
Speed [towed]			WDn=2			



Flat car						
Front			Side		Rear	
5-10	Chassis	1	Chassis	1	Chassis	1
3-4	Wheel	1.5	Chassis	1.5	Wheel	1.5
1-2	Wheel	1.5	Wheel	1.5	Wheel	1.5
	Top	.5				
			size: -1			
Speed [towed]			WDn=0			
Troops, cargo, tanks can be carried on these.						