



Reloading
Pages

RELOADING DATA FILE FOR RIFLE



*Reloading
Pages*

.17 Remington

Test Components:

Test barrel: 560 mm (22"), 1 in 16" twist

Primers: Vihtavuori No. 22

Cases: Remington, trim-to length 45.40 mm (1.787")

Reloading Data, Metric Units:

Bullet				Powder	Starting Load			Maximum Load		
Weight	Type	Mfg.	C.O.L	Type	Weight	Velocity	Weight	Velocity	Weight	Velocity
[g]	[grs]		[mm]		[g]	[grs]	[m/s]	[g]	[grs]	[m/s]
1.6	25	HP	Remington	54.5	N135			1.48	22.8	1230

NOTE! WHEN ONLY MAXIMUM LOADS ARE SHOWN IN THE TABLES ABOVE START LOADING WITH APPROXIMATELY 15% SMALLER POWDER CHARGE.

BOLD TEXT INDICATES MAXIMUM LOAD - USE WITH CAUTION!

LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.



*Reloading
Pages*

.220 Russian

Test Components:

Test barrel: 550 mm (22"), 1 in 14" twist

Primers: Vihtavuori No. 22

Cases: Sako, trim-to length 38.50 mm (1.519")

Reloading Data, Metric Units:

Bullet				Powder	Starting Load			Maximum Load			
Weight	Type	Mfg.	C.O.L	Type	Weight	Velocity	Weight	Velocity	Weight	Velocity	
[g]	[grs]		[mm]		[g]	[grs]	[g]	[grs]	[g]	[grs]	
2.8	43	FMJ	Sako	49.0	N120				1.33	20.5	1110

NOTE! WHEN ONLY MAXIMUM LOADS ARE SHOWN IN THE TABLES ABOVE START LOADING WITH APPROXIMATELY 15% SMALLER POWDER CHARGE.

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Reloading
Pages

.22-250 Remington

Test Components:

Test barrel: 580 mm (22"), 1 in 14" twist

Primers: Vihtavuori No. 68

Cases: Sako, trim-to length 48.30 mm (1.902")

Reloading Data, Metric Units:

Bullet				Powder	Starting Load			Maximum Load			
Weight		Type	Mfg.	C.O.L	Type	Weight		Velocity	Weight		Velocity
[g]	[grs]			[mm]		[g]	[grs]	[m/s]	[g]	[grs]	[m/s]
2.9	45	Spitzer	Speer	58.9	N130	2.03	31.3	1091	2.24	34.5	1184
					N135	2.24	34.6	1086	2.43	37.5	1184
					N140	2.37	36.6	1090	2.60	40.1	1201
3.2	50	Spitzer	Speer	59.6	N130	1.79	27.6	936	2.05	31.6	1074
					N135	1.96	30.3	963	2.23	34.4	1091
					N140	2.08	32.1	955	2.41	37.2	1094
					N150	2.14	33.0	956	2.48	38.3	1092
3.6	55	Spitzer	Speer	59.6	N135	2.01	31.0	959	2.23	34.4	1055
					N140	2.17	33.5	971	2.36	36.5	1062
					N150	2.23	34.4	972	2.47	38.1	1073
3.9	60	HP	Hornady	59.6	N140	2.05	31.7	913	2.29	35.3	1010
					N150	2.09	32.2	907	2.37	36.5	1011
4.5	69	HPBT	Sierra	59.6	N140	1.93	29.8	846	2.19	33.8	938
					N150	1.98	30.6	846	2.27	35.0	943

					N160	2.38	36.7	867	2.64	40.7	962
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NOTE! WHEN ONLY MAXIMUM LOADS ARE SHOWN IN THE TABLES ABOVE START LOADING WITH APPROXIMATELY 15% SMALLER POWDER CHARGE.

BOLD TEXT INDICATES MAXIMUM LOAD - USE WITH CAUTION!
LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.



Reloading
Pages

.222 Remington

Test Components:

Test barrel: 580 mm (23"), 1 in 14" twist

Primers: Vihtavuori No. 22

Cases: Remington, trim-to length 43.00 mm (1.693")

Reloading Data, Metric Units:

Bullet				Powder	Starting Load			Maximum Load			
Weight		Type	Mfg.	C.O.L	Type	Weight		Velocity	Weight		Velocity
[g]	[grs]			[mm]		[g]	[grs]	[m/s]	[g]	[grs]	[m/s]
2.6	40	Spire Point	Speer	53.0	N110	0.93	14.3	907	1.05	16.2	977
2.6	40	Hornet	Sierra	52.0	N120	1.30	20.1	991	1.35	20.8	1028
2.6	40	Spire Point	Speer	52.0	N120	1.29	19.9	973	1.38	21.3	1051
				52.5	N130	1.40	21.6	973	1.51	23.2	1047
				52.0	N133	1.48	22.9	984	1.63	25.2	1072
2.9	45	Spitzer	Speer	53.0	N110	0.88	13.6	848	1.00	15.4	917
				53.0	N120	1.25	19.3	925	1.34	20.7	993
2.9	45	Hornet	Hornady	53.6	N130	1.41	21.8	951	1.50	23.2	1018
2.9	45	Spitzer	Speer	53.0	N133	1.47	22.7	943	1.57	24.2	1015
3.2	50	SXSP	Hornady	53.8	N120	1.21	18.7	876	1.30	20.0	942
				53.8	N130	1.33	20.5	889	1.43	22.1	958
				53.8	N133	1.44	22.2	905	1.55	24.0	980
				53.8	N135	1.40	21.6	831	1.52	23.5	922
3.6	55	SP	Sako	54.2	N120	1.17	18.0	834	1.27	19.6	901

3.6	55	FMJBT	Hornady	53.8	N130	1.29	20.0	854	1.39	21.4	922
3.6	55	SP	Sako	54.2	N133	1.41	21.7	871	1.51	23.4	934
				54.2	N135	1.46	22.6	866	1.51	23.3	899
3.9	60	HP	Hornady	54.0	N120	1.11	17.1	779	1.23	18.9	850
				53.8	N130	1.25	19.2	805	1.37	21.1	877
				54.0	N133	1.35	20.8	820	1.46	22.6	892
				54.0	N135	1.40	21.6	836	1.52	23.5	868
4.5	69	HPBT	Sierra	54.0	N130	1.18	18.1	749	1.26	19.5	805
				54.0	N133	1.27	19.5	768	1.36	21.0	820
				54.0	N135	1.31	20.2	772	1.43	22.1	831
				54.0	N140	1.44	22.2	778	1.53	23.7	837

NOTE! WHEN ONLY MAXIMUM LOADS ARE SHOWN IN THE TABLES ABOVE START LOADING WITH APPROXIMATELY 15% SMALLER POWDER CHARGE.

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Reloading
Pages

.222 Remington Magnum

Test Components:

Test barrel: 580 mm (23"), 1 in 14" twist

Primers: Vihtavuori No. 82

Cases: Remington, trim-to length 46.80 mm (1.842")

Reloading Data, Metric Units:

Bullet				Powder	Starting Load			Maximum Load			
Weight	Type	Mfg.	C.O.L.	Type	Weight	Velocity	Weight	Velocity	Weight	Velocity	
[g]	[grs]		[mm]		[g]	[grs]	[m/s]	[g]	[grs]	[m/s]	
3.2	50	SXSP	Hornady	57.5	N120	1.42	21.9	950	1.52	23.5	1024
					N133	1.68	25.9	977	1.77	27.3	1056
3.6	55	SP	Sako	58.0	N120	1.39	21.4	903	1.49	23.0	977
					N133	1.63	25.2	933	1.71	26.4	1008
					N135	1.68	25.9	935	1.80	27.7	1002
3.9	60	HP	Hornady	57.9	N133	1.59	24.6	890	1.68	26.0	964
					N135	1.64	25.2	895	1.75	27.0	952
4.5	69	HPBT	Sierra	58.0	N133	1.48	22.9	824	1.58	24.4	887
					N135	1.52	23.5	837	1.64	25.4	900

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**Reloading
Pages**

.220 Swift

Test Components:

Test barrel: 610 mm (24"), 1 in 14" twist

Primers: Vihtavuori No. 68

Cases: Remington, trim-to length 55.80 mm (2.196")

Reloading Data, Metric Units:

Bullet				Powder	Starting Load			Maximum Load			
Weight		Type	Mfg.	C.O.L	Type	Weight		Velocity	Weight		Velocity
[g]	[grs]			[mm]		[g]	[grs]	[m/s]	[g]	[grs]	[m/s]
3.2	50	FMJ	Sako	68.0	N140				2.50	38.6	1190
3.6	55	SP	Sako	68.0	N140				2.40	37.0	990
3.6	55	SP	Norma	68.0	N160				2.79	43.1	1130

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Reloading
Pages

.223 Remington

Test Components:

Test barrel: 620 mm (25"), 1 in 12" twist

Primers: Vihtavuori No. 82

Cases: Remington, trim-to length 44.50 mm (1.752")

Reloading Data, Metric Units:

Bullet				Powder Type	Starting Load			Maximum Load			
Weight	Type	Mfg.	C.O.L		Weight	Velocity	Weight	Velocity			
[g]	[grs]		[mm]		[g]	[grs]	[m/s]	[g]	[grs]	[m/s]	
2.6	40	Spire Point	Speer	52.7	N120	1.45	22.4	1028	1.56	24.0	1109
					N130	1.58	24.4	1036	1.70	26.3	1123
					N133	1.62	25.0	1020	1.74	26.8	1102
2.9	45	Spitzer	Speer	54.0	N120	1.41	21.7	971	1.52	23.5	1055
					N130	1.52	23.5	986	1.66	25.6	1070
					N133	1.61	24.9	989	1.75	27.0	1086
					N135	1.65	25.5	971	1.74	26.9	1035
3.2	50	"TNT"-HP	Speer	57.0	N120	1.37	21.2	929	1.50	23.2	1010
					N130	1.49	23.0	944	1.61	24.9	1027
					N133	1.59	24.6	949	1.70	26.2	1036
					N135	1.62	25.0	938	1.72	26.5	1016
3.6	55	FMJBT	Hornady	57.0	N120	1.27	19.6	860	1.46	22.5	955
					N130	1.43	22.1	893	1.56	24.1	981
					N133	1.48	22.9	892	1.64	25.3	985

					N135	1.58	24.3	909	1.73	26.8	996
					N140	1.64	25.3	878	1.74	26.9	939
3.9	60	HP	Hornady	57.0	N130	1.38	21.4	852	1.54	23.7	934
					N133	1.45	22.4	845	1.62	25.0	938
					N135	1.55	23.9	872	1.68	25.9	937
					N140	1.61	24.8	841	1.72	26.5	900
4.5	69	HPBT	Sierra	57.0	N133	1.33	20.5	782	1.49	23.0	862
					N140	1.53	23.6	802	1.71	26.4	891

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Reloading
Pages

.22 Hornet

Test Components:

Test barrel: 600 mm (23½"), 1 in 16" twist

Primers: Vihtavuori No. 22

Cases: Sako, trim-to length 35.40 mm (1.394")

Reloading Data, Metric Units:

Bullet				Powder	Starting Load			Maximum Load			
Weight		Type	Mfg.	C.O.L.	Type	Weight		Velocity	Weight		Velocity
[g]	[grs]			[mm]		[g]	[grs]	[m/s]	[g]	[grs]	[m/s]
2.6	40	Spire Point	Speer	43.5	N110	0.50	7.8	700	0.62	9.5	788
2.9	45	Spitzer	Speer	43.5	N110	0.46	7.2	642	0.57	8.8	723
3.2	50	Spitzer	Speer	43.5	N110	0.46	7.1	598	0.54	8.3	672
					N120	0.60	9.3	598	0.69	10.7	682
3.6	55	Spitzer	Speer	43.5	N110	0.40	6.2	551	0.50	7.7	623
					N120	0.57	8.8	561	0.66	10.3	653

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Reloading
Pages

.22 PPC - USA

Test Components:

Test barrel: 610 mm (24"), 1 in 14" twist

Primers: Vihtavuori No. 82

Cases: Sako, trim-to length 38.30 mm (1.508")

Reloading Data, Metric Units:

Bullet				Powder	Starting Load			Maximum Load			
Weight		Type	Mfg.	C.O.L.	Type	Weight		Velocity	Weight		Velocity
[g]	[grs]			[mm]		[g]	[grs]	[m/s]	[g]	[grs]	[m/s]
3.4	52	HPBT	Sierra	51.4	N120	1.42	21.9	966	1.47	22.7	992
					N130	1.41	21.8	922	1.57	24.3	1016
					N133	1.50	23.1	941	1.67	25.8	1032
					N135	1.62	25.1	954	1.80	27.8	1049
3.6	55	Spitzer	Speer	51.8	N130	1.41	21.8	898	1.58	24.3	976
					N133	1.48	22.8	913	1.65	25.4	985
					N135	1.65	25.5	942	1.83	28.3	1047

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Reloading
Pages

.243 Winchester

Test Components:

Test barrel: 580 mm (23"), 1 in 10" twist

Primers: Vihtavuori No. 68

Cases: Sako, trim-to length 51.80 mm (2.039")

Reloading Data, Metric Units:

Bullet				Powder	Starting Load			Maximum Load			
Weight		Type	Mfg.	C.O.L	Type	Weight		Velocity	Weight		Velocity
[g]	[grs]			[mm]		[g]	[grs]	[m/s]	[g]	[grs]	[m/s]
4.5	70	SXSP	Hornady	67.0	N133	2.16	33.4	940	2.39	36.8	981
					N135	2.36	36.4	901	2.62	40.5	1009
					N140	2.51	38.7	915	2.80	43.2	1033
					N150	2.57	39.7	920	2.86	44.1	1031
					N160	2.99	46.1	916	3.32	51.3	1052
5.2	80	FMJ	Hornady	67.0	N135	2.18	33.6	865	2.40	37.0	928
					N140	2.30	35.6	870	2.55	39.4	942
					N150	2.27	35.0	877	2.52	38.9	935
					N160	2.83	43.6	874	3.15	48.6	982
5.6	87	HPBT	Hornady	68.0	N140	2.22	34.2	835	2.48	38.3	907
					N150	2.19	33.7	840	2.46	37.9	898
					N160	2.72	41.9	836	3.02	46.6	940
					N560	2.80	43.2	881	3.11	48.0	960
6.5	100	SPBT	Hornady	67.3	N160	2.65	40.8	797	2.94	45.3	885

					N560	2.68	41.3	822	2.96	45.7	903
					N165	2.85	44.0	807	3.19	49.3	894
6.8	105	Spitzer	Speer	68.5	N160	2.28	35.2	744	2.54	39.2	803
					N560	2.28	35.2	758	2.52	38.8	829

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Reloading
Pages

.25-06 Remington

Test Components:

Test barrel: 580 mm (23"), 1 in 10" twist

Primers: Vihtavuori No. 68

Cases: Sako, trim-to length 63.10 mm (2.484")

Reloading Data, Metric Units:

Bullet				Powder	Starting Load			Maximum Load			
Weight	Type	Mfg.	C.O.L	Type	Weight	Velocity	Weight	Velocity	Weight	Velocity	
[g]	[grs]		[mm]		[g]	[grs]	[m/s]	[g]	[grs]	[m/s]	
5.6	87	Spitzer	Speer	79.3	N140	2.81	43.4	922	3.12	48.2	999
					N150	2.79	43.1	910	3.14	48.4	995
					N160	3.47	53.6	934	3.78	58.3	1025
					N165	3.63	56.0	918	4.02	62.0	1039
6.5	100	SPBT	Speer	81.2	N140	2.58	39.9	844	2.88	44.5	924
					N150	2.67	41.3	856	2.97	45.8	930
					N160	3.23	49.8	880	3.55	54.8	966
					N165	3.44	53.1	889	3.80	58.6	979
7.8	120	Spitzer	Speer	80.2	N150	2.31	35.6	738	2.60	40.2	807
					N160	2.95	45.5	799	3.27	50.5	871
					N165	2.98	46.0	785	3.34	51.5	863

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.25-20 Winchester

Test Components:

Test barrel: 550 mm (22"), 1 in 16" twist

Primers: Vihtavuori No. 22

Cases: Remington, trim-to length 33.60 mm (1.322")

Reloading Data, Metric Units:

Bullet				Powder	Starting Load			Maximum Load		
Weight	Type	Mfg.	C.O.L	Type	Weight	Velocity	Weight	Velocity		
[g]	[grs]		[mm]		[g]	[grs]	[g]	[grs]	[m/s]	
4.5	70	SP	Sako	40.4	N110		0.64	9.9	609	

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Reloading
Pages

.25-35 Winchester

Test Components:

Test barrel: 510 mm (20"), 1 in 8" twist

Primers: Vihtavuori No. 68

Cases: Remington, trim-to length 51.70 mm (2.035")

Reloading Data, Metric Units:

Bullet				Powder	Starting Load			Maximum Load		
Weight	Type	Mfg.	C.O.L	Type	Weight	Velocity	Weight	Velocity	Weight	Velocity
[g]	[grs]		[mm]		[g]	[grs]	[m/s]	[g]	[grs]	[m/s]
4.5	70	SP	Sako	58.5	N120			1.52	23.5	900
5.6	86	SP	Lapua	64.0	N120			1.47	22.7	790
6.0	93	SP	Sako	63.5	N110			0.99	15.3	670
7.6	117	SP	Winchester	66.0 *)	N140			1.76	27.2	720

Note *): The CIP maximum C.O.L is exceeded

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Reloading
Pages

.264 Winchester Magnum

Test Components:

Test barrel: 610 mm (24"), 1 in 9" twist

Primers: Vihtavuori No. 68

Cases: Remington, trim-to length 63.30 mm (2.492")

Reloading Data, Metric Units:

Bullet				Powder	Starting Load			Maximum Load			
Weight		Type	Mfg.	C.O.L	Type	Weight		Velocity	Weight		Velocity
[g]	[grs]			[mm]		[g]	[grs]	[m/s]	[g]	[grs]	[m/s]
5.5	85	HP	Sierra	78.7	N140				3.72	57.4	1080
					N160				4.35	67.1	1150
9.1	140	FMJ	Hornady	82.7	N140				3.10	47.8	920
					N160				3.70	57.1	910
10.4	160	FMJ	Norma	84.5	N160				3.65	56.3	820

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Reloading
Pages

.270 Winchester

Test Components:

Test barrel: 620 mm (24.5"), 1 in 10" twist

Primers: Vihtavuori No. 68

Cases: Remington, trim-to length 64.30 mm (2.531")

Reloading Data, Metric Units:

Bullet				Powder	Starting Load			Maximum Load			
Weight		Type	Mfg.	C.O.L	Type	Weight		Velocity	Weight		Velocity
[g]	[grs]			[mm]		[g]	[grs]	[m/s]	[g]	[grs]	[m/s]
6.5	100	Spitzer	Speer	80.0	N150	2.95	45.5	910	3.22	49.8	960
6.5	100	Spitzer	Speer	80.0	N160	3.68	56.8	927	4.09	63.1	1018
					N165	3.77	58.2	921	4.20	64.8	1005
8.4	130	SP	Remington	82.0	N160	3.34	51.6	847	3.60	55.5	905
					N560	3.56	54.9	856	3.85	59.7	925
8.4	130	SPBT	Speer	83.0	N165	3.48	53.8	838	3.84	59.3	907
9.7	150	Spitzer	Speer	82.0	N160	2.86	44.1	731	3.20	49.4	794
9.7	150	SP	Remington	82.0	N560	3.30	50.9	803	3.60	55.5	856
					N165	3.11	47.9	750	3.45	53.2	808
10.4	160	Partition	Nosler	84.6	N160	3.02	46.6	743	3.31	51.0	795
					N165	3.10	47.8	747	3.44	53.1	803

NOTE! WHEN ONLY MAXIMUM LOADS ARE SHOWN IN THE TABLES ABOVE START LOADING WITH APPROXIMATELY 15% SMALLER POWDER CHARGE.

BOLD TEXT INDICATES MAXIMUM LOAD - USE WITH CAUTION!

LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.



.30-06 Springfield

Test Components:

Test barrel: 620 mm (24"), 1 in 10" twist

Primers: Winchester WLR

Cases: Remington, trim-to length 63.10 mm (2.484")

Reloading Data, Metric Units:

Bullet				Powder	Starting Load			Maximum Load			
Weight		Type	Mfg.	C.O.L	Type	Weight		Velocity	Weight		Velocity
[g]	[grs]			[mm]		[g]	[grs]	[m/s]	[g]	[grs]	[m/s]
6.8	105	HP	LAPUA	81.0	N133	3.02	46.6	914	3.32	51.3	988
					N135	3.23	49.9	928	3.57	55.1	1010
					N140	3.46	53.4	932	3.83	59.1	1025
7.1	110	RN	Hornady	74.0	N133	3.15	48.6	873	3.48	53.7	983
					N135	3.14	48.5	864	3.47	53.5	964
					N140	3.38	52.1	881	3.74	57.8	977
					N150	3.57	55.1	905	3.94	60.8	1002
8.1	125	Ballistic Tip	Nosler	84.0	N135	3.10	47.8	865	3.40	52.4	935
					N140	3.31	51.1	878	3.64	56.1	958
					N540	3.49	53.8	880	3.91	60.3	994
					N150	3.44	53.2	882	3.81	58.7	966
					N550	3.70	57.1	895	3.91	60.4	950
9.7	150	Lock Base	LAPUA	84.0	N135	2.93	45.2	789	3.23	49.9	851
					N140	3.13	48.2	802	3.45	53.2	872

					N150	3.25	50.2	803	3.58	55.3	877
					N550	3.51	54.1	819	3.87	59.7	917
9.7	150	HPBT	Sierra	84.0	N140	3.08	47.5	798	3.42	52.8	871
					N540	3.27	50.4	809	3.64	56.1	906
					N150	3.29	50.7	807	3.65	56.3	895
					N550	3.54	54.7	833	3.87	59.7	916
10.1	156	SPBT	Sako	80.5	N135	2.97	45.8	776	3.29	50.8	851
					N140	3.10	47.8	775	3.42	52.7	859
					N150	3.18	49.1	781	3.53	54.5	863
10.9	167	Scenar	LAPUA	84.0	N140	2.95	45.5	737	3.25	50.2	812
					N150	3.06	47.2	748	3.38	52.1	821
					N550	3.22	49.6	779	3.57	55.0	855
11.7	180	Spitzer	Speer	84.0	N160	3.39	52.4	730	3.73	57.6	793
12.0	185	Mira	LAPUA	84.0	N140	2.78	42.8	684	3.05	47.1	750
					N540	2.94	45.4	704	3.26	50.3	793
					N150	2.87	44.4	693	3.17	48.9	757
					N550	2.97	45.9	683	3.50	54.1	816
					N160	3.49	53.8	723	3.84	59.2	804
					N560	3.68	56.9	740	4.10	63.3	832
12.3	190	HPBT	Sierra	84.0	N150	2.90	44.8	695	3.19	49.3	767
					N550	3.07	47.4	708	3.48	53.8	812
					N160	3.41	52.7	724	3.81	58.8	795
					N560	3.57	55.1	721	4.04	62.4	825
13.0	200	Partition	Nosler	84.0	N150	2.79	43.0	669	3.08	47.5	723
					N160	3.38	52.1	704	3.73	57.6	765
14.3	220	RN	Hornady	84.0	N160	3.29	50.7	654	3.63	56.0	722
					N560	3.47	53.5	672	3.97	61.3	767

NOTE! WHEN ONLY MAXIMUM LOADS ARE SHOWN IN THE TABLES ABOVE START LOADING WITH APPROXIMATELY 15% SMALLER POWDER CHARGE.

BOLD TEXT INDICATES MAXIMUM LOAD - USE WITH CAUTION!

LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.



*Reloading
Pages*

.300 Weatherby Magnum

Test Components:

Test barrel: 660 mm (26"), 1 in 10" twist

Primers: Remington 9½

Cases: Weatherby, trim-to length 71.50 mm (2.815")

Reloading Data, Metric Units:

Bullet				Powder	Starting Load			Maximum Load			
Weight		Type	Mfg.	C.O.L	Type	Weight		Velocity	Weight		Velocity
[g]	[grs]			[mm]		[g]	[grs]	[m/s]	[g]	[grs]	[m/s]
8.1	125	Ballistic Tip	Nosler	90.0	N160	5.20	80.3	969	5.75	88.8	1101
9.7	150	Ballistic Tip	Nosler	90.1	N160	4.90	75.7	895	5.42	83.6	1000
					N165	5.31	82.0	904	5.89	90.8	1006
10.7	165	SPBT	Speer	90.3	N160	4.85	74.8	859	5.37	82.9	973
					N165	5.24	80.9	860	5.80	89.6	980
11.7	180	SP	Hornady	90.3	N160	4.71	72.7	834	5.19	80.0	926
					N165	5.09	78.6	840	5.62	86.7	939
13.0	200	HPBT	Sierra	90.3	N165	4.85	74.8	805	5.38	83.1	899

NOTE! WHEN ONLY MAXIMUM LOADS ARE SHOWN IN THE TABLES ABOVE START LOADING WITH APPROXIMATELY 15% SMALLER POWDER CHARGE.

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Reloading
Pages

.300 Winchester Magnum

Test Components:

Test barrel: 620 mm (24"), 1 in 10" twist

Primers: Remington 9½

Cases: LAPUA, trim-to length 66.30 mm (2.610")

Reloading Data, Metric Units:

Bullet				Powder	Starting Load			Maximum Load			
Weight		Type	Mfg.	C.O.L	Type	Weight		Velocity	Weight		Velocity
[g]	[grs]			[mm]		[g]	[grs]	[m/s]	[g]	[grs]	[m/s]
7.1	110	SP	Hornady	83.0	N160	4.96	76.5	959	5.40	83.3	1063
8.5	130	HP	LAPUA	84.2	N160	4.61	71.1	881	5.14	79.3	997
9.7	150	Ballistic Tip	Nosler	84.8	N160	4.47	69.0	850	4.95	76.3	944
					N165	4.88	75.3	883	5.39	83.2	974
10.9	167	Scenar	LAPUA	84.8	N160	4.47	68.9	830	4.83	74.5	910
					N165	4.76	73.4	839	5.18	80.0	924
11.7	180	Partition	Nosler	84.8	N160	4.23	65.2	791	4.70	72.5	874
					N165	4.58	70.8	800	5.03	77.6	883
13.0	200	HPBT	Sierra	84.8	N160	4.09	63.1	748	4.53	69.8	825
					N165	4.41	68.1	769	4.86	75.0	839

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.30-30 Winchester

Test Components:

Test barrel: 510 mm (20"), 1 in 12" twist

Primers: Remington 9½

Cases: Remington, trim-to length 51.60 mm (2.031")

Reloading Data, Metric Units:

Bullet				Powder	Starting Load			Maximum Load			
Weight		Type	Mfg.	C.O.L	Type	Weight		Velocity	Weight		Velocity
[g]	[grs]			[mm]		[g]	[grs]	[m/s]	[g]	[grs]	[m/s]
6.8	105	HP	LAPUA	64.5	N120	1.66	25.6	729	1.86	28.8	794
					N130	1.90	29.4	742	2.11	32.5	813
					N133	2.11	32.6	775	2.35	36.3	843
8.5	130	FSP	Speer	64.7	N120	1.60	24.7	655	1.79	27.6	714
					N130	1.77	27.3	669	1.98	30.5	738
					N133	1.91	29.5	682	2.13	32.8	752
					N135	2.02	31.1	683	2.24	34.6	748
9.7	150	FSP	Speer	64.5	N120	1.42	21.9	556	1.57	24.2	605
					N130	1.60	24.7	583	1.78	27.5	641
					N133	1.66	25.7	590	1.85	28.6	645
					N135	1.90	29.4	610	2.10	32.4	669
					N140	2.04	31.5	613	2.25	34.7	683
11.0	170	FSP	Speer	64.5	N130	1.54	23.8	553	1.71	26.3	602
					N133	1.63	25.2	548	1.79	27.6	594

					N135	1.75	27.0	556	1.95	30.1	614
					N140	1.83	28.2	550	2.05	31.7	617

NOTE! WHEN ONLY MAXIMUM LOADS ARE SHOWN IN THE TABLES ABOVE START LOADING WITH APPROXIMATELY 15% SMALLER POWDER CHARGE.

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*Reloading
Pages*

.303 British

Test Components:

Test barrel: 610 mm (24"), 1 in 10" twist

Primers: Vihtavuori No 68

Cases: Remington, trim-to length 56.20 mm (2.212")

Reloading Data, Metric Units:

Bullet				Powder	Starting Load			Maximum Load				
Weight		Type	Mfg.	C.O.L	Type	Weight		Velocity		Weight	Velocity	
[g]	[grs]			[mm]		[g]	[grs]	[m/s]		[g]	[grs]	[m/s]
11.7	180	SP	Sako	73.6	N140					2.70	41.7	775

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*Reloading
Pages*

.308 Norma Magnum

Test Components:

Test barrel: 620 mm (24"), 1 in 10" twist

Primers: Vihtavuori No. 68

Cases: Norma, trim-to length 64.80 mm (2.551")

Reloading Data, Metric Units:

Bullet				Powder	Starting Load			Maximum Load				
Weight		Type	Mfg.	C.O.L	Type	Weight		Velocity		Weight	Velocity	
[g]	[grs]			[mm]		[g]	[grs]	[m/s]		[g]	[grs]	[m/s]
9.5	147	FMJ	Norma	85.0	N160					4.93	76.1	1040
10.0	155	SP	Sako	82.5	N160					4.72	72.8	945
11.7	180	SP	Sako	84.0	N160					4.58	70.7	930
13.0	200	SP	Sako	84.0	N160					4.30	66.4	855
14.3	220	RN	Hornady	85.3*)	N160					4.22	65.1	825

NOTE *): The CIP maximum cartridge overall length is exceeded.

NOTE! WHEN ONLY MAXIMUM LOADS ARE SHOWN IN THE TABLES ABOVE START LOADING WITH APPROXIMATELY 15% SMALLER POWDER CHARGE.

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Reloading
Pages

.308 Winchester

Test Components:

Test barrel: 610 mm (24"), 1 in 12" twist

Primers: Winchester WLR

Cases: Sako, trim-to length 51.00 mm (2.008")

Reloading Data, Metric Units:

Bullet				Powder	Starting Load			Maximum Load			
Weight		Type	Mfg.	C.O.L	Type	Weight		Velocity	Weight		Velocity
[g]	[grs]			[mm]		[g]	[grs]	[m/s]	[g]	[grs]	[m/s]
4.7	73	HP	LAPUA	68.5	N110	1.98	30.6	987	2.19	33.9	1063
					N120	2.57	39.7	1049	2.83	43.7	1133
					N130	2.83	43.7	1049	3.14	48.5	1156
					N133	3.03	46.8	1049	3.23	49.8	1101
6.8	105	HP	LAPUA	68.5	N110	1.83	28.3	819	2.01	31.0	875
					N120	2.35	36.3	869	2.59	40.0	953
					N130	2.60	40.1	895	2.80	43.2	985
					N133	2.86	44.2	924	3.07	47.4	1004
7.1	110	HP	Sako	67.5	N120	2.35	36.3	853	2.59	40.0	935
					N130	2.59	39.9	881	2.86	44.1	959
					N133	2.80	43.2	895	3.08	47.6	978
8.0	123	FMJ	Lapua	66.9	N130	2.30	35.4	793	2.66	41.1	891
					N135	2.75	42.4	837	2.98	46.0	900
8.1	125	Ballistic Tip	Nosler	70.0	N130	2.46	37.9	836	2.70	41.7	908

					N133	2.66	41.1	848	2.91	44.9	923
					N135	2.77	42.8	852	3.06	47.2	929
					N140	2.93	45.3	855	3.23	49.9	936
8.5	130	HP	Lapua	68.0	N135	2.61	40.3	792	2.92	45.1	878
					N140	2.78	42.9	795	3.06	47.3	876
9.7	150	SPBT	Sierra	70.0	N133	2.45	37.8	770	2.72	42.0	832
					N135	2.62	40.4	780	2.87	44.3	846
					N140	2.74	42.3	776	3.03	46.8	858
					N150	2.86	44.2	785	3.12	48.2	850
9.7	150	Lock Base	LAPUA	71.0	N540	2.78	42.9	780	3.07	47.3	864
9.7	150	HPBT	Sierra	71.0	N140	2.65	40.8	761	2.96	45.8	842
					N540	2.73	42.1	755	3.04	46.9	860
					N150	2.75	42.5	770	3.05	47.0	843
					N550	2.90	44.8	769	3.22	49.7	852
10.1	156	SPBT	Sako	68.2	N135	2.54	39.2	737	2.79	43.1	813
					N140	2.67	41.1	736	2.94	45.4	821
					N150	2.83	43.6	765	3.13	48.3	845
10.7	165	SPBT	Speer	71.0	N133	2.41	37.1	722	2.64	40.7	787
					N135	2.51	38.8	732	2.77	42.7	801
					N140	2.63	40.6	737	2.91	44.9	813
					N150	2.69	41.6	743	3.00	46.3	817
					N550	2.87	44.3	754	3.12	48.2	821
10.9	167	Scenar	LAPUA	71.0	N140	2.59	40.0	719	2.85	44.0	794
					N540	2.58	39.8	726	2.85	43.9	804
					N150	2.71	41.9	740	2.98	46.1	810
					N550	2.88	44.4	756	3.17	48.9	829
11.0	170	FMJBT	LAPUA	71.0	N135	2.45	37.9	717	2.70	41.6	784
					N140	2.59	39.9	723	2.86	44.1	797
					N540	2.63	40.6	714	2.91	44.8	810
					N150	2.68	41.3	737	2.97	45.9	807
					N550	2.81	43.4	732	3.14	48.5	845
11.7	180	SP	Hornady	71.0	N135	2.36	36.3	669	2.62	40.4	741
					N140	2.50	38.5	678	2.77	42.8	755
					N150	2.62	40.4	708	2.88	44.5	766

12.0	185	FMJBT	LAPUA	71.0	N135	2.33	36.0	667	2.58	39.9	739
					N140	2.47	38.2	683	2.74	42.2	754
					N540	2.56	39.5	706	2.77	42.8	765
12.0	185	Scenar	LAPUA	71.0	N150	2.54	39.2	690	2.82	43.5	750
					N550	2.74	42.3	702	3.01	46.4	773
12.3	190	HPBT	Sierra	71.0	N140	2.43	37.5	670	2.69	41.6	736
					N540	2.45	37.9	667	2.75	42.4	752
					N150	2.50	38.6	669	2.76	42.5	738
					N550	2.65	40.9	690	2.96	45.6	767
13.0	200	SP	Speer	71.0	N140	2.34	36.0	625	2.58	39.9	688
					N150	2.39	36.9	638	2.62	40.4	689

NOTE! WHEN ONLY MAXIMUM LOADS ARE SHOWN IN THE TABLES ABOVE START LOADING WITH APPROXIMATELY 15% SMALLER POWDER CHARGE.

BOLD TEXT INDICATES MAXIMUM LOAD - USE WITH CAUTION!

LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.



*Reloading
Pages*

.30 Carbine

Test Components:

Test barrel: 460 mm (18"), 1 in 10" twist

Primers: Vihtavuori No. 82

Cases: Federal, trim-to length 32.60 mm (1.283")

Reloading Data, Metric Units:

Bullet				Powder	Starting Load			Maximum Load			
Weight		Type	Mfg.	C.O.L.	Type	Weight		Velocity	Weight		Velocity
[g]	[grs]			[mm]		[g]	[grs]	[m/s]	[g]	[grs]	[m/s]
6.5	100	Plinker	Speer	42.5	N110	0.86	13.2	595	0.94	14.5	647
7.1	110	Spire Point	Speer	42.5	N110	0.77	11.9	537	0.86	13.3	582

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Reloading
Pages

.338 LAPUA Magnum

Test Components:

Test barrel: 700 mm (27½"), 1 in 10" twist

Primers: Remington 9½M

Cases: LAPUA, trim-to length 69.00 mm (2.714")

Reloading Data, Metric Units:

Bullet				Powder	Starting Load			Maximum Load			
Weight		Type	Mfg.	C.O.L	Type	Weight		Velocity	Weight		Velocity
[g]	[grs]			[mm]		[g]	[grs]	[m/s]	[g]	[grs]	[m/s]
13.0	200	SP	Hornady	91.0	N160	5.51	85.1	878	6.13	94.7	979
					N165	5.94	91.7	885	6.57	101.4	990
14.6	225	SP	Hornady	91.0	N160	4.83	74.5	800	5.80	89.5	920
					N165	5.13	79.2	807	6.19	95.6	936
16.2	250	Lock Base	LAPUA	91.5	N165	4.75	73.4	769	5.79	89.4	877

NOTE! WHEN ONLY MAXIMUM LOADS ARE SHOWN IN THE TABLES ABOVE START LOADING WITH APPROXIMATELY 15% SMALLER POWDER CHARGE.

BOLD TEXT INDICATES MAXIMUM LOAD - USE WITH CAUTION!

LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.



Reloading
Pages

.338 Winchester Magnum

Test Components:

Test barrel: 620 mm (24"), 1 in 10" twist

Primers: Vihtavuori No. 68

Cases: Sako, trim-to length 63.30 mm (2.492")

Reloading Data, Metric Units:

Bullet				Powder	Starting Load			Maximum Load			
Weight		Type	Mfg.	C.O.L	Type	Weight		Velocity	Weight		Velocity
[g]	[grs]			[mm]		[g]	[grs]	[m/s]	[g]	[grs]	[m/s]
13.0	200	SP	Hornady	85.0*)	N160	4.71	72.8	802	5.23	80.8	905
14.6	225	SP	Hornady	84.0	N160	4.50	69.5	765	5.02	77.4	848
16.2	250	Grand Slam	Speer	83.8	N160	4.18	64.5	701	4.66	72.0	781
					N165	4.50	69.4	718	5.00	77.2	794
17.8	275	SP	Speer	85.0*)	N165	4.35	67.1	690	4.82	74.4	758

NOTE *): The CIP maximum cartridge overall length is exceeded.

NOTE! WHEN ONLY MAXIMUM LOADS ARE SHOWN IN THE TABLES ABOVE START LOADING WITH APPROXIMATELY 15% SMALLER POWDER CHARGE.

BOLD TEXT INDICATES MAXIMUM LOAD - USE WITH CAUTION!

LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.



*Reloading
Pages*

.358 Norma Magnum

Test Components:

Test barrel: 610 mm (24"), 1 in 12" twist

Primers: Vihtavuori No. 68

Cases: Norma, trim-to length 63.80 mm (2.512")

Reloading Data, Metric Units:

Bullet				Powder	Starting Load			Maximum Load			
Weight		Type	Mfg.	C.O.L	Type	Weight		Velocity		Weight	Velocity
[g]	[grs]			[mm]		[g]	[grs]	[m/s]	[g]	[grs]	[m/s]
16.2	250	SP	Norma	82.0	N160				5.20	80.2	850

NOTE! WHEN ONLY MAXIMUM LOADS ARE SHOWN IN THE TABLES ABOVE START LOADING WITH APPROXIMATELY 15% SMALLER POWDER CHARGE.

BOLD TEXT INDICATES MAXIMUM LOAD - USE WITH CAUTION!

LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.



Reloading
Pages

.444 Marlin

Test Components:

Test barrel: 560 mm (22"), 1 in 38" twist

Primers: Vihtavuori No. 68

Cases: Remington, trim-to length 56.30 mm (2.216")

Reloading Data, Metric Units:

Bullet				Powder	Starting Load			Maximum Load			
Weight		Type	Mfg.	C.O.L	Type	Weight		Velocity	Weight		Velocity
[g]	[grs]			[mm]		[g]	[grs]	[m/s]	[g]	[grs]	[m/s]
13.0	200	HP/XTP	Hornady	64.4	N110	2.66	41.1	720	2.92	45.0	771
					N120	3.25	50.2	777	3.59	55.4	840
15.6	240	JTC-SIL	Hornady	64.5	N120	2.94	45.4	689	3.26	50.3	748
					N130	3.28	50.7	706	3.53	54.4	752
17.2	265	FP	Hornady	65.0	N120	2.82	43.5	649	3.12	48.1	707
					N130	3.03	46.8	645	3.33	51.3	707

NOTE! WHEN ONLY MAXIMUM LOADS ARE SHOWN IN THE TABLES ABOVE START LOADING WITH APPROXIMATELY 15% SMALLER POWDER CHARGE.

BOLD TEXT INDICATES MAXIMUM LOAD - USE WITH CAUTION!

LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.



Reloading
Pages

.45-70 Government

Test Components:

Test barrel: 560 mm (22"), 1 in 20" twist

Primers: Vihtavuori No. 68

Cases: Remington, trim-to length 53.30 mm (2.098")

WARNING: These loads are to be used only in modern rifles like Ruger #1 or .45-70's chambered on Mauser type bolt actions. They must NOT be used in old rifles with weaker actions like Trapdoor and Marlin mod. 1895. The listed maximum loads do not exceed 195 MPa.

Reloading Data, Metric Units:

Bullet				Powder	Starting Load			Maximum Load			
Weight		Type	Mfg.	C.O.L	Type	Weight		Velocity	Weight		Velocity
[g]	[grs]			[mm]		[g]	[grs]	[m/s]	[g]	[grs]	[m/s]
19.4	300	HP	Hornady	64.5	N120	2.63	40.6	568	2.92	45.0	618
					N130	3.16	48.8	594	3.38	52.1	637
					N133	3.81	58.7	624	4.10	63.2	683
19.4	300	HP	Sierra	64.1	N120	2.52	38.9	558	3.01	46.5	624
					N133	3.74	57.6	627	3.89	60.0	667
					N135	3.80	58.6	604	4.00	61.7	650
25.9	400	SP	Speer	64.7	N120	2.06	31.7	444	2.32	35.8	489
					N133	3.02	46.6	517	3.33	51.4	565
					N135	3.02	46.6	490	3.34	51.6	543

NOTE! WHEN ONLY MAXIMUM LOADS ARE SHOWN IN THE TABLES ABOVE START LOADING WITH APPROXIMATELY 15% SMALLER POWDER CHARGE.

BOLD TEXT INDICATES MAXIMUM LOAD - USE WITH CAUTION!
LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.



Reloading
Pages

.458 Winchester Magnum

Test Components:

Test barrel: 635 mm (25"), 1 in 14" twist

Primers: Vihtavuori No. 68

Cases: Remington, trim-to length 63.30 mm (2.492")

Reloading Data, Metric Units:

Bullet				Powder	Starting Load			Maximum Load			
Weight		Type	Mfg.	C.O.L.	Type	Weight		Velocity	Weight		Velocity
[g]	[grs]			[mm]		[g]	[grs]	[m/s]	[g]	[grs]	[m/s]
19.4	300	HP	Sierra	74.5	N120	4.19	64.7	740	4.54	70.0	792
22.7	350	SP	Speer	78.5	N120	4.12	63.5	697	4.48	69.1	751
					N130	4.47	69.0	723	4.78	73.7	767
32.4	500	RN	Hornady	84.5	N135	4.24	65.5	588	4.56	70.4	628
32.4	500	AGS	Speer	84.5	N135	4.38	67.5	585	4.70	72.5	626
32.4	500	RN	Hornady	84.5	N140	4.54	70.1	604	4.83	74.5	640

NOTE! WHEN ONLY MAXIMUM LOADS ARE SHOWN IN THE TABLES ABOVE START LOADING WITH APPROXIMATELY 15% SMALLER POWDER CHARGE.

BOLD TEXT INDICATES MAXIMUM LOAD - USE WITH CAUTION!

LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.



Reloading
Pages

.50 BMG

Test Components:

Test barrel: 1140 mm (45"), rifle twist 16½".

Primers: CCI35

Cases: HXP, trim-to length 99.00 mm (3.890")

Reloading Data, Metric Units:

Bullet				Powder	Starting Load			Maximum Load			
Weight		Type	Mfg.	C.O.L	Type	Weight		Velocity	Weight		Velocity
[g]	[grs]			[mm]		[g]	[grs]	[m/s]	[g]	[grs]	[m/s]
41.9	647	FMJBT	Speer	137.8	24N41	14.16	218.5	825	15.59	240.6	902
41.9	647	FMJBT	Speer	137.5	20N29 *)	15.49	239.1	844	16.99	262.2	920

*) TZZ cases, trim-to length 99.10 mm (3.902")

This cartridge is not supported by CIP or by SAAMI. The maximum loads do not exceed 335 MPa.

NOTE! WHEN ONLY MAXIMUM LOADS ARE SHOWN IN THE TABLES ABOVE START LOADING WITH APPROXIMATELY 15% SMALLER POWDER CHARGE.

BOLD TEXT INDICATES MAXIMUM LOAD - USE WITH CAUTION!
LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.



Reloading
Pages

5.6 x 50 Magnum

Test Components:

Test barrel: 600 mm (23½"), 1 in 13" twist

Primers: Vihtavuori No. 22

Cases: RWS, trim-to length 49.80 mm (1.958")

Reloading Data, Metric Units:

Bullet				Powder	Starting Load			Maximum Load			
Weight		Type	Mfg.	C.O.L	Type	Weight		Velocity	Weight		Velocity
[g]	[grs]			[mm]		[g]	[grs]	[m/s]	[g]	[grs]	[m/s]
2.9	45	FMJ	Sako	61.0	N135				1.86	28.7	1075
3.2	50	SP	Sako	61.2	N135				1.83	28.2	1035
					N140				1.85	28.5	1160
3.6	55	SP	Sako	61.2	N140				1.81	27.9	1020
4.5	70	SP	Speer	61.3	N140				1.67	25.8	900

NOTE! WHEN ONLY MAXIMUM LOADS ARE SHOWN IN THE TABLES ABOVE START LOADING WITH APPROXIMATELY 15% SMALLER POWDER CHARGE.

BOLD TEXT INDICATES MAXIMUM LOAD - USE WITH CAUTION!

LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.



Reloading
Pages

5.6 x 50R Magnum

Test Components:

Test barrel: 580 mm (23"), 1 in 13½" twist

Primers: Vihtavuori No. 22

Cases: RWS, trim-to length 49.80 mm (1.958")

Reloading Data, Metric Units:

Bullet				Powder	Starting Load			Maximum Load				
Weight		Type	Mfg.	C.O.L	Type	Weight		Velocity		Weight	Velocity	
[g]	[grs]			[mm]		[g]	[grs]	[m/s]		[g]	[grs]	[m/s]
3.2	50	FMJ	Sako	61.0	N133					1.73	26.7	1010
3.6	55	SP	Sierra	61.0	N135					1.68	25.9	975
					N140					1.77	27.3	960
3.9	60	SP	Hornady	61.0	N140					1.69	26.1	930
4.1	63	SP	Sierra	61.0	N140					1.68	25.9	900
4.5	70	SP	Speer	61.0	N140					1.59	24.5	860

NOTE! WHEN ONLY MAXIMUM LOADS ARE SHOWN IN THE TABLES ABOVE START LOADING WITH APPROXIMATELY 15% SMALLER POWDER CHARGE.

BOLD TEXT INDICATES MAXIMUM LOAD - USE WITH CAUTION!

LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.



Reloading
Pages

5.6 x 52R

Test Components:

Test barrel: 600 mm (23½"), 1 in 10½" twist

Primers: Vihtavuori No. 68

Cases: Norma, trim-to length 51.80 mm (2.037")

Reloading Data, Metric Units:

Bullet				Powder	Starting Load			Maximum Load			
Weight		Type	Mfg.	C.O.L	Type	Weight		Velocity	Weight		Velocity
[g]	[grs]			[mm]		[g]	[grs]	[m/s]	[g]	[grs]	[m/s]
4.6	71	SP	RWS	63.3	N135				1.54	23.8	835
					N140				1.66	25.6	865
					N160				1.96	30.2	830

NOTE! WHEN ONLY MAXIMUM LOADS ARE SHOWN IN THE TABLES ABOVE START LOADING WITH APPROXIMATELY 15% SMALLER POWDER CHARGE.

BOLD TEXT INDICATES MAXIMUM LOAD - USE WITH CAUTION!

LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.



**Reloading
Pages**

5.6 x 57

Test Components:

Test barrel: 600 mm (23½"), 1 in 10" twist

Primers: Vihtavuori No. 68

Cases: RWS, trim-to length 56.50 mm (2.222")

Reloading Data, Metric Units:

Bullet				Powder	Starting Load			Maximum Load			
Weight		Type	Mfg.	C.O.L	Type	Weight		Velocity	Weight		Velocity
[g]	[grs]			[mm]		[g]	[grs]	[m/s]	[g]	[grs]	[m/s]
3.2	50	SP	Sierra	67.0	N140				2.58	39.8	1160
3.6	55	SP	Sako	67.0	N140				2.49	38.4	1110
4.8	74	FMJ	RWS	67.7	N160				2.64	40.7	995

NOTE! WHEN ONLY MAXIMUM LOADS ARE SHOWN IN THE TABLES ABOVE START LOADING WITH APPROXIMATELY 15% SMALLER POWDER CHARGE.

BOLD TEXT INDICATES MAXIMUM LOAD - USE WITH CAUTION!

LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.



Reloading
Pages

6.3x53R Finnish

Test Components:

Test barrel: 610 mm (24"), 1 in 10" twist.

Primers: Vihtavuori No. 68

Cases: Reformed Sako 7.62 x 53R, trim-to length 53.10 mm (2.090")

Reloading Data, Metric Units:

Bullet				Powder	Starting Load			Maximum Load		
Weight	Type	Mfg.	C.O.L	Type	Weight	Velocity	Weight	Velocity	Weight	Velocity
[g]	[grs]		[mm]		[g]	[grs]	[m/s]	[g]	[grs]	[m/s]
4.5	70	FMJ	Sako	60.0	N110			1.65	25.5	895
5.4	83	SP	Sako	60.0	N140			2.61	40.3	915
6.0	93	SP	Sako	61.0	N140			2.38	36.7	900

This cartridge is not supported by CIP or by SAAMI. The maximum loads do not exceed 340 MPa.

NOTE! WHEN ONLY MAXIMUM LOADS ARE SHOWN IN THE TABLES ABOVE START LOADING WITH APPROXIMATELY 15% SMALLER POWDER CHARGE.

BOLD TEXT INDICATES MAXIMUM LOAD - USE WITH CAUTION!

LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.



Reloading
Pages

6.5 x 55 Swedish Mauser

Test Components:

Test barrel: 630 mm (26½"), 1 in 8½" twist

Primers: Winchester WLR

Cases: LAPUA, trim-to length 54.80 mm (2.157")

Reloading Data, Metric Units:

Bullet				Powder	Starting Load			Maximum Load			
Weight		Type	Mfg.	C.O.L	Type	Weight		Velocity	Weight		Velocity
[g]	[grs]			[mm]		[g]	[grs]	[m/s]	[g]	[grs]	[m/s]
5.0	77	SP	Norma	66.5	N133				2.75	42.4	1030
					N135				2.86	44.1	1030
					N140				2.92	45.1	1035
5.2	80	FMJ	Norma	66.5	N140				2.88	44.4	1000
5.5	85	HP	Sierra	71.1	N150	2.84	43.9	915	2.99	46.1	991
6.5	100	HP	Sierra	72.4	N140	2.59	40.0	839	2.74	42.3	890
					N540	2.58	39.8	823	2.82	43.5	908
					N150	2.64	40.7	832	2.81	43.4	891
					N550	2.76	42.6	850	2.99	46.1	932
					N160	3.07	47.3	850	3.28	50.6	916
6.5	100	FMJ	LAPUA	70.0	N160	2.99	46.1	838	3.30	51.0	922
7.0	108	Scenar	Lapua	78.0	N140	2.37	36.6	771	2.59	39.9	849
					N540	2.43	37.5	797	2.65	40.9	877
7.0	108	Scenar	LAPUA	72.6	N150	2.56	39.5	830	2.73	42.1	881

					N550	2.66	41.0	829	2.88	44.4	912
					N160	3.04	47.0	849	3.20	49.3	903
					N560	3.12	48.1	846	3.35	51.6	918
					N165	3.16	48.7	860	3.32	51.2	914
7.8	120	HPBT-Match	Sierra	76.8	N140	2.26	34.9	716	2.56	39.5	800
					N540	2.38	36.7	754	2.64	40.7	833
					N150	2.35	36.3	729	2.63	40.6	809
				76.2	N550	2.56	39.5	775	2.81	43.4	863
					N160	2.89	44.7	795	3.14	48.4	860
					N560	3.03	46.8	792	3.20	49.3	854
8.4	130	HPBT	Norma	80.0	N140	2.19	33.8	698	2.47	38.1	775
					N540	2.24	34.5	718	2.52	38.9	795
					N150	2.19	33.7	691	2.51	38.8	772
					N550	2.46	37.9	733	2.74	42.3	820
					N160	2.70	41.7	730	2.99	46.2	811
					N560	2.94	45.4	770	3.20	49.4	850
9.0	139	HPBT	Norma	78.0	N150	2.19	33.8	665	2.49	38.5	749
					N550	2.45	37.8	715	2.66	41.1	787
					N160	2.65	40.9	707	2.90	44.7	782
					N560	2.79	43.0	716	3.10	47.8	812
					N165	2.93	45.2	734	3.18	49.0	806
9.0	139	Scenar	Lapua	79.4	N150	2.07	32.0	641	2.40	37.0	720
					N550	2.38	36.8	693	2.60	40.1	767
					N160*)	2.67	41.2	720	2.88	44.5	785
					N560*)	2.80	43.2	735	3.04	46.9	809
					N165*)	2.88	44.4	731	3.15	48.6	803
9.1	140	HPBT	Sierra	78.5	N150	2.15	33.2	664	2.45	37.9	737
					N550	2.41	37.1	700	2.65	40.8	776
					N160	2.74	42.3	730	2.96	45.7	794
					N560	2.86	44.2	748	3.08	47.6	818
					N165*)	2.92	45.0	735	3.18	49.1	807
9.3	144	FMJBT	LAPUA	79.0	N150	2.08	32.1	670	2.24	34.6	713
					N160	2.68	41.3	727	2.86	44.1	769
					N560	2.80	43.2	725	3.08	47.5	807

					N165	2.75	42.5	731	2.94	45.4	775
10.0	155	HPBT	Sierra	76.0	N150	2.02	31.2	624	2.27	35.0	684
					N550	2.28	35.2	658	2.54	39.2	727
					N160	2.54	39.1	666	2.82	43.5	740
				79.0	N560	2.57	39.7	668	2.86	44.1	749
					N165	2.65	40.9	657	3.00	46.2	739
10.1	156	Mega	Lapua	73.0	N165	2.62	40.5	655	3.05	47.0	733
					N560	2.61	40.3	660	3.00	46.3	748
10.4	160	RN	Hornady	77.1	N140				2.39	36.9	715
					N160				2.91	44.9	765

NOTE *): CCI250 primers

NOTE! WHEN ONLY MAXIMUM LOADS ARE SHOWN IN THE TABLES ABOVE START LOADING WITH APPROXIMATELY 15% SMALLER POWDER CHARGE.

BOLD TEXT INDICATES MAXIMUM LOAD - USE WITH CAUTION!

LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.



Reloading
Pages

6.5 x 57

Test Components:

Test barrel: 600 mm (23½"), 1 in 8" twist

Primers: Vihtavuori No. 68

Cases: RWS, trim-to length 56.50 mm (2.224")

Reloading Data, Metric Units:

Bullet				Powder	Starting Load			Maximum Load			
Weight		Type	Mfg.	C.O.L	Type	Weight		Velocity	Weight		Velocity
[g]	[grs]			[mm]		[g]	[grs]	[m/s]	[g]	[grs]	[m/s]
5.5	85	HP	Sierra	73.0	N135				2.80	43.2	1025
6.5	100	SP	Hornady	76.6	N135				2.70	41.7	950
8.1	125	Partition	Nosler	81.0	N140				2.67	41.2	840
9.1	140	SP	Speer	81.5	N140				2.64	40.7	820
10.1	156	SP	Norma	81.5	N160				2.89	44.6	780
10.4	160	RN	Hornady	78.1	N160				2.85	44.0	730

NOTE! WHEN ONLY MAXIMUM LOADS ARE SHOWN IN THE TABLES ABOVE START LOADING WITH APPROXIMATELY 15% SMALLER POWDER CHARGE.

BOLD TEXT INDICATES MAXIMUM LOAD - USE WITH CAUTION!

LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.



Reloading
Pages

6.5 x 57R

Test Components:

Test barrel: 600 mm (23½"), 1 in 8" twist

Primers: Vihtavuori No. 68

Cases: RWS, trim-to length 56.50 mm (2.224")

Reloading Data, Metric Units:

Bullet				Powder	Starting Load			Maximum Load			
Weight		Type	Mfg.	C.O.L	Type	Weight		Velocity	Weight		Velocity
[g]	[grs]			[mm]		[g]	[grs]	[m/s]	[g]	[grs]	[m/s]
5.5	85	HP	Sierra	73.0	N135				2.69	41.5	955
6.5	100	SP	Hornady	76.6	N135				2.62	40.4	880
8.1	125	Partition	Nosler	81.0	N140				2.53	39.0	800
9.1	140	Spitzer	Speer	81.5	N140				2.49	38.4	765
10.1	156	SP	Norma	81.5	N160				2.79	43.1	730

NOTE! WHEN ONLY MAXIMUM LOADS ARE SHOWN IN THE TABLES ABOVE START LOADING WITH APPROXIMATELY 15% SMALLER POWDER CHARGE.

BOLD TEXT INDICATES MAXIMUM LOAD - USE WITH CAUTION!

LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.



*Reloading
Pages*

6.5 x 68

Test Components:

Test barrel: 650 mm (25½"), 1 in 9½" twist

Primers: Vihtavuori No. 68

Cases: RWS, trim-to length 67.30 mm (2.648")

Reloading Data, Metric Units:

Bullet				Powder	Starting Load			Maximum Load			
Weight		Type	Mfg.	C.O.L.	Type	Weight		Velocity	Weight		Velocity
[g]	[grs]			[mm]		[g]	[grs]	[m/s]	[g]	[grs]	[m/s]
6.8	105	SP	Nosler	82.5	N160				4.34	67.0	1020
8.1	125	Partition	Nosler	86.5	N160				4.15	64.0	955

NOTE! WHEN ONLY MAXIMUM LOADS ARE SHOWN IN THE TABLES ABOVE START LOADING WITH APPROXIMATELY 15% SMALLER POWDER CHARGE.

BOLD TEXT INDICATES MAXIMUM LOAD - USE WITH CAUTION!

LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.



*Reloading
Pages*

6 PPC - USA

Test Components:

Test barrel: 580 mm (23"), 1 in 14" twist

Primers: Vihtavuori No. 82

Cases: Sako, trim-to length 38.30 mm (1.508")

Reloading Data, Metric Units:

Bullet				Powder	Starting Load			Maximum Load			
Weight		Type	Mfg.	C.O.L	Type	Weight		Velocity	Weight		Velocity
[g]	[grs]			[mm]		[g]	[grs]	[m/s]	[g]	[grs]	[m/s]
4.5	70	HPBT	Sierra	53.6	N120	1.39	21.5	809	1.55	23.9	901
					N130	1.52	23.5	836	1.69	26.1	925

NOTE! WHEN ONLY MAXIMUM LOADS ARE SHOWN IN THE TABLES ABOVE START LOADING WITH APPROXIMATELY 15% SMALLER POWDER CHARGE.

BOLD TEXT INDICATES MAXIMUM LOAD - USE WITH CAUTION!
LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.



6mm Remington

Test Components:

Test barrel: 570 mm (22½"), 1 in 9" twist

Primers: Vihtavuori No. 68

Cases: Remington, trim-to length 56.50 mm (2.224")

Reloading Data, Metric Units:

Bullet				Powder	Starting Load			Maximum Load			
Weight		Type	Mfg.	C.O.L	Type	Weight		Velocity	Weight		Velocity
[g]	[grs]			[mm]		[g]	[grs]	[m/s]	[g]	[grs]	[m/s]
4.5	70	HPBT	Sierra	71.4	N135	2.37	36.6	944	2.62	40.4	1012
					N140	2.57	39.6	960	2.81	43.3	1036
					N150	2.54	39.1	959	2.81	43.4	1029
					N160	3.06	47.3	951	3.39	52.4	1073
5.2	80	FMJ	Hornady	71.5	N135	2.12	32.7	852	2.33	35.9	904
					N140	2.30	35.5	889	2.54	39.2	941
					N150	2.22	34.2	869	2.46	37.9	925
					N160	2.86	44.1	924	3.17	48.9	989
5.6	87	SP	Hornady	71.5	N140	2.23	34.5	836	2.46	38.0	889
					N150	2.20	33.9	836	2.42	37.3	882
					N160	2.88	44.4	877	3.18	49.1	957
					N165	3.08	47.5	899	3.41	52.7	948
6.5	100	SPBT	Hornady	71.5	N160	2.70	41.7	832	2.97	45.8	892
					N165	2.81	43.4	837	3.12	48.1	896

6.8	105	Spitzer	Speer	71.5	N165	2.74	42.3	831	3.01	46.5	880
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NOTE! WHEN ONLY MAXIMUM LOADS ARE SHOWN IN THE TABLES ABOVE START LOADING WITH APPROXIMATELY 15% SMALLER POWDER CHARGE.

BOLD TEXT INDICATES MAXIMUM LOAD - USE WITH CAUTION!
LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.



7mm-08 Remington

Test Components:

Test barrel: 610 mm (24"), 1 in 9½" twist

Primers: Vihtavuori No. 68

Cases: Remington, trim-to length 51.50 mm (2.028")

Reloading Data, Metric Units:

Bullet				Powder	Starting Load			Maximum Load			
Weight		Type	Mfg.	C.O.L	Type	Weight		Velocity	Weight		Velocity
[g]	[grs]			[mm]		[g]	[grs]	[m/s]	[g]	[grs]	[m/s]
6.5	100	HP	Hornady	69.0	N130	2.40	37.1	870	2.64	40.8	945
					N133	2.53	39.0	886	2.80	43.2	955
					N135	2.68	41.4	877	2.95	45.6	971
					N140	2.75	42.4	869	3.06	47.2	971
					N150	2.88	44.4	890	3.20	49.4	982
7.8	120	Spitzer	Sierra	69.6	N135	2.51	38.7	798	2.77	42.7	882
					N140	2.66	41.1	807	2.94	45.4	897
					N150	2.73	42.2	818	3.04	46.9	904
9.1	140	Ballistic Tip	Nosler	69.6	N135	2.30	35.5	707	2.53	39.1	781
					N140	2.50	38.5	734	2.76	42.7	810
					N150	2.54	39.2	737	2.82	43.6	808
10.4	160	SPBT	Sierra	71.0	N140	2.36	36.5	690	2.61	40.3	753
					N150	2.38	36.8	691	2.64	40.7	747
					N160	2.97	45.8	738	3.25	50.2	813

11.3	175	Mag-Tip	Speer	71.0	N140	2.13	32.8	615	2.35	36.2	669
					N150	2.07	32.0	595	2.28	35.2	647
					N160	2.55	39.4	640	2.79	43.1	700

NOTE! WHEN ONLY MAXIMUM LOADS ARE SHOWN IN THE TABLES ABOVE START LOADING WITH APPROXIMATELY 15% SMALLER POWDER CHARGE.

BOLD TEXT INDICATES MAXIMUM LOAD - USE WITH CAUTION!

LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.



*Reloading
Pages*

7.62 x 39

Test Components:

Test barrel: 415 mm (16½"), 1 in 9½" twist

Primers: Vihtavuori No. 68

Cases: LAPUA, trim-to length 38.50 mm (1.515")

Reloading Data, Metric Units:

Bullet				Powder	Starting Load			Maximum Load		
Weight	Type	Mfg.	C.O.L	Type	Weight	Velocity	Weight	Velocity	Weight	Velocity
[g]	[grs]		[mm]		[g]	[grs]	[m/s]	[g]	[grs]	[m/s]
8.0	123	FMJ	Sako	55.7	N120			1.72	26.5	740
8.0	123	SP	Sako	54.2	N120			1.73	26.7	720

NOTE! WHEN ONLY MAXIMUM LOADS ARE SHOWN IN THE TABLES ABOVE START LOADING WITH APPROXIMATELY 15% SMALLER POWDER CHARGE.

BOLD TEXT INDICATES MAXIMUM LOAD - USE WITH CAUTION!
LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.



Reloading
Pages

7.62 x 53R (7.62 Russian)

Test Components:

Test barrel: 660 mm (26"), 1 in 10" twist

Primers: CCI200

Cases: LAPUA, trim-to length 53.30 mm (2.098")

Reloading Data, Metric Units:

Bullet				Powder	Starting Load			Maximum Load			
Weight		Type	Mfg.	C.O.L	Type	Weight		Velocity	Weight		Velocity
[g]	[grs]			[mm]		[g]	[grs]	[m/s]	[g]	[grs]	[m/s]
8.0	123	FMJ	LAPUA	68.5	N130	2.72	41.9	863	3.03	46.8	932
					N133	2.99	46.2	882	3.27	50.4	946
					N135	3.04	46.9	862	3.37	51.9	950
10.1	156	SPBT	Sako	70.5	N135	2.76	42.6	753	3.06	47.2	834
					N140	2.87	44.2	757	3.19	49.2	845
					N150	3.02	46.6	771	3.33	51.4	857
10.9	167	Scenar	LAPUA	75.0	N140	2.88	44.5	752	3.18	49.1	830
					N150	2.97	45.8	745	3.27	50.5	834
12.0	185	Scenar	LAPUA	75.0	N135	2.59	40.0	686	2.88	44.5	767
					N140	2.71	41.8	698	3.03	46.8	783
					N150	2.82	43.5	699	3.13	48.2	785

NOTE! WHEN ONLY MAXIMUM LOADS ARE SHOWN IN THE TABLES ABOVE START LOADING WITH APPROXIMATELY 15% SMALLER POWDER CHARGE.

BOLD TEXT INDICATES MAXIMUM LOAD - USE WITH CAUTION!

LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.



Reloading
Pages

7mm Remington Magnum

Test Components:

Test barrel: 610 mm (24"), 1 in 9" twist

Primers: Vihtavuori No. 68

Cases: LAPUA, trim-to length 63.30 mm (2.492")

Reloading Data, Metric Units:

Bullet				Powder	Starting Load			Maximum Load			
Weight		Type	Mfg.	C.O.L	Type	Weight		Velocity	Weight		Velocity
[g]	[grs]			[mm]		[g]	[grs]	[m/s]	[g]	[grs]	[m/s]
6.5	100	HP	Hornady	81.0	N160	4.44	68.5	995	4.86	75.0	1088
7.8	120	Spitzer	Sierra	83.0	N160	4.22	65.1	916	4.64	71.5	1004
					N165	4.48	69.2	909	4.94	76.3	1005
9.4	145	SPBT	Speer	83.0	N160	3.64	56.2	809	4.06	62.6	884
					N560	3.80	58.6	850	4.22	65.2	931
					N165	3.98	61.4	827	4.39	67.7	902
10.4	160	Grand Slam	Speer	82.0	N160	3.32	51.3	751	3.65	56.3	806
					N560	3.43	53.0	794	3.81	58.8	860
					N165	3.57	55.1	767	3.93	60.7	825

NOTE! WHEN ONLY MAXIMUM LOADS ARE SHOWN IN THE TABLES ABOVE START LOADING WITH APPROXIMATELY 15% SMALLER POWDER CHARGE.

BOLD TEXT INDICATES MAXIMUM LOAD - USE WITH CAUTION!

LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.



**Reloading
Pages**

7 x 33 SAKO

Test Components:

Test barrel: 550 mm (20"), 1 in 16" twist

Primers: Vihtavuori No. 22

Cases: Sako, trim-to length 33.10 mm (1.301")

Reloading Data, Metric Units:

Bullet				Powder	Starting Load			Maximum Load		
Weight	Type	Mfg.	C.O.L	Type	Weight	Velocity	Weight	Velocity	Weight	Velocity
[g]	[grs]		[mm]		[g]	[grs]	[m/s]	[g]	[grs]	[m/s]
5.1	79	FMJ	Sako	44.2	N110			1.05	16.2	720
5.1	79	SP	Sako	43.5	N120			1.36	21.0	800

This cartridge is not supported by CIP or by SAAMI. The maximum loads do not exceed 300 MPa.

NOTE! WHEN ONLY MAXIMUM LOADS ARE SHOWN IN THE TABLES ABOVE START LOADING WITH APPROXIMATELY 15% SMALLER POWDER CHARGE.

**BOLD TEXT INDICATES MAXIMUM LOAD - USE WITH CAUTION!
LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.**



Reloading
Pages

7 x 54 Finnish

Test Components:

Test barrel: 660 mm (26"), 1 in 10" twist

Primers: Vihtavuori No. 68

Cases: Reformed LAPUA 6.5 x 55, trim-to length 53.80 mm (2.116")

Reloading Data, Metric Units:

Bullet				Powder	Starting Load			Maximum Load				
Weight		Type	Mfg.	C.O.L	Type	Weight		Velocity		Weight	Velocity	
[g]	[grs]			[mm]		[g]	[grs]	[m/s]		[g]	[grs]	[m/s]
5.1	79	FMJ	Sako	65.4	N110					1.86	28.7	905
					N120					2.49	38.4	1005
7.5	115	SP	Sako	67.0	N120					2.11	32.6	815
7.8	120	SP	Hornady	73.2	N135					2.70	41.7	880
10.0	155	SP	Sako	72.0	N140					2.48	38.3	740

This cartridge is not supported by CIP or by SAAMI. The maximum loads do not exceed 330 MPa.

NOTE! WHEN ONLY MAXIMUM LOADS ARE SHOWN IN THE TABLES ABOVE START LOADING WITH APPROXIMATELY 15% SMALLER POWDER CHARGE.

BOLD TEXT INDICATES MAXIMUM LOAD - USE WITH CAUTION!

LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.



Reloading Pages

7 x 57

Test Components:

Test barrel: 550 mm (22"), 1 in 9½" twist

Primers: Vihtavuori No. 68

Cases: Sako, trim-to length 56.80 mm (2.236")

Reloading Data, Metric Units:

Bullet				Powder	Starting Load			Maximum Load			
Weight		Type	Mfg.	C.O.L	Type	Weight		Velocity	Weight		Velocity
[g]	[grs]			[mm]		[g]	[grs]	[m/s]	[g]	[grs]	[m/s]
7.8	120	Spitzer	Sierra	76.5	N135	2.55	39.4	776	2.81	43.4	861
					N140	2.72	42.0	793	2.99	46.1	876
					N150	2.75	42.4	798	3.02	46.6	878
9.1	140	Ballistic Tip	Nosler	77.5	N140	2.47	38.2	708	2.75	42.5	783
					N150	2.58	39.8	729	2.83	43.6	792
10.4	160	SPBT	Sierra	77.5	N150	2.43	37.5	673	2.69	41.4	736
					N160	2.92	45.1	687	3.20	49.4	774
11.3	175	Mag-Tip	Speer	77.0	N160	2.63	40.6	630	2.97	45.9	707
					N165	2.89	44.6	655	3.21	49.5	719

NOTE! WHEN ONLY MAXIMUM LOADS ARE SHOWN IN THE TABLES ABOVE START LOADING WITH APPROXIMATELY 15% SMALLER POWDER CHARGE.

BOLD TEXT INDICATES MAXIMUM LOAD - USE WITH CAUTION!

LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.



7 x 57R

Test Components:

Test barrel: 550 mm (22"), 1 in 9½" twist

Primers: Vihtavuori No. 68

Cases: RWS, trim-to length 56.80 mm (2.236")

Reloading Data, Metric Units:

Bullet				Powder	Starting Load			Maximum Load			
Weight		Type	Mfg.	C.O.L	Type	Weight		Velocity	Weight		Velocity
[g]	[grs]			[mm]		[g]	[grs]	[m/s]	[g]	[grs]	[m/s]
7.8	120	Spitzer	Sierra	76.5	N135	2.45	37.8	743	2.70	41.7	826
					N140	2.57	39.6	745	2.86	44.2	836
					N150	2.63	40.6	764	2.89	44.6	840
9.1	140	Ballistic Tip	Nosler	77.5	N140	2.39	37.0	687	2.62	40.4	747
					N150	2.41	37.2	688	2.69	41.5	757
10.4	160	SPBT	Sierra	77.5	N150	2.31	35.7	642	2.54	39.3	701
					N160	2.78	42.9	646	3.08	47.6	739
11.3	175	Mag-Tip	Speer	77.0	N160	2.54	39.2	609	2.81	43.4	670
					N165	2.72	42.0	620	3.00	46.3	677

NOTE! WHEN ONLY MAXIMUM LOADS ARE SHOWN IN THE TABLES ABOVE START LOADING WITH APPROXIMATELY 15% SMALLER POWDER CHARGE.

BOLD TEXT INDICATES MAXIMUM LOAD - USE WITH CAUTION!

LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.



Reloading
Pages

7 x 64

Test Components:

Test barrel: 610 mm (24"), 1 in 10" twist

Primers: Vihtavuori No. 68

Cases: Sako, trim-to length 63.80 mm (2.510")

Reloading Data, Metric Units:

Bullet				Powder	Starting Load			Maximum Load			
Weight		Type	Mfg.	C.O.L	Type	Weight		Velocity	Weight		Velocity
[g]	[grs]			[mm]		[g]	[grs]	[m/s]	[g]	[grs]	[m/s]
5.1	79	SP	Sako	75.4	N120				2.70	41.7	1050
7.8	120	SP	Hornady	82.8	N140				3.31	51.1	970
					N160				3.88	59.9	985
8.0	123	SP	RWS	80.4	N140				3.30	50.9	950
					N160				3.85	59.4	935
9.0	139	SP	Hornady	84.0	N140				3.15	48.6	880
10.0	155	SP	Hornady	83.8	N160				3.76	58.0	880
10.4	160	SP	Nosler	84.0	N160				3.71	57.3	885
11.0	170	SP	Sako	84.0	N160				3.66	56.5	860
11.3	175	SP	Hornady	82.8	N160				3.68	56.8	840

NOTE! WHEN ONLY MAXIMUM LOADS ARE SHOWN IN THE TABLES ABOVE START LOADING WITH APPROXIMATELY 15% SMALLER POWDER CHARGE.

BOLD TEXT INDICATES MAXIMUM LOAD - USE WITH CAUTION!

LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.



Reloading
Pages

8.2 x 53R Finnish

Test Components:

Test barrel: 610 mm (24"), 1 in 9½" twist

Primers: Vihtavuori No 68

Cases: LAPUA, trim-to length 53.30 mm (2.096")

Reloading Data, Metric Units:

Bullet				Powder	Starting Load			Maximum Load			
Weight		Type	Mfg.	C.O.L	Type	Weight		Velocity	Weight		Velocity
[g]	[grs]			[mm]		[g]	[grs]	[m/s]	[g]	[grs]	[m/s]
8.2	127	FMJ	Sako	71.0	N140				3.28	50.6	900
13.0	200	SP	Sako	71.8	N140				3.00	46.3	770

This cartridge is not supported by CIP or by SAAMI. The maximum loads do not exceed 360 MPa.

NOTE! WHEN ONLY MAXIMUM LOADS ARE SHOWN IN THE TABLES ABOVE START LOADING WITH APPROXIMATELY 15% SMALLER POWDER CHARGE.

BOLD TEXT INDICATES MAXIMUM LOAD - USE WITH CAUTION!

LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.



Reloading
Pages

8 x 57 JRS

Test Components:

Test barrel: 610 mm (24"), 1 in 9½" twist

Primers: Vihtavuori No. 68

Cases: RWS, trim-to length 56.80 mm (2.236")

Reloading Data, Metric Units:

Bullet				Powder	Starting Load			Maximum Load			
Weight		Type	Mfg.	C.O.L	Type	Weight		Velocity	Weight		Velocity
[g]	[grs]			[mm]		[g]	[grs]	[m/s]	[g]	[grs]	[m/s]
9.7	150	Spitzer	Speer	72.5	N140				3.46	53.4	870
11.0	170	SP	RWS	73.5	N140				3.18	49.1	810
11.7	180	KS	RWS	73.5	N140				3.28	50.6	800
12.1	187	HMK	RWS	77.2	N140				3.15	48.6	795

NOTE! WHEN ONLY MAXIMUM LOADS ARE SHOWN IN THE TABLES ABOVE START LOADING WITH APPROXIMATELY 15% SMALLER POWDER CHARGE.

BOLD TEXT INDICATES MAXIMUM LOAD - USE WITH CAUTION!

LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.



8mm Mauser (8 x 57 JS)

Test Components:

Test barrel: 620 mm (24"), 1 in 9½" twist

Primers: Vihtavuori No. 68

Cases: LAPUA, trim-to length 56.80 mm (2.236")

Reloading Data, Metric Units:

Bullet				Powder	Starting Load			Maximum Load			
Weight		Type	Mfg.	C.O.L	Type	Weight		Velocity	Weight		Velocity
[g]	[grs]			[mm]		[g]	[grs]	[m/s]	[g]	[grs]	[m/s]
8.1	125	SP	Hornady	74.0	N130	2.80	43.2	874	3.12	48.2	950
					N133	3.14	48.5	883	3.50	53.9	979
					N135	3.22	49.6	882	3.57	55.1	974
9.7	150	Spitzer	Speer	76.0	N135	2.97	45.9	801	3.31	51.1	880
					N140	3.13	48.3	799	3.49	53.9	892
11.0	170	SP	Speer	77.0	N135	2.86	44.1	748	3.18	49.0	829
					N140	2.99	46.1	747	3.33	51.4	838
					N150	3.13	48.4	761	3.48	53.7	853
13.0	200	Spitzer	Speer	79.5	N140	2.77	42.8	661	3.08	47.5	759
					N150	2.86	44.1	680	3.19	49.3	763
13.0	200	Partition	Nosler	81.0	N160	3.27	50.5	681	3.64	56.2	785

NOTE! WHEN ONLY MAXIMUM LOADS ARE SHOWN IN THE TABLES ABOVE START LOADING WITH APPROXIMATELY 15% SMALLER POWDER CHARGE.

BOLD TEXT INDICATES MAXIMUM LOAD - USE WITH CAUTION!

LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.



*Reloading
Pages*

8 x 68 S

Test Components:

Test barrel: 650 mm (25½"), 1 in 11" twist

Primers: Vihtavuori No. 68

Cases: RWS, trim-to length 67.30 mm (2.647")

Reloading Data, Metric Units:

Bullet				Powder	Starting Load			Maximum Load			
Weight		Type	Mfg.	C.O.L	Type	Weight		Velocity	Weight		Velocity
[g]	[grs]			[mm]		[g]	[grs]	[m/s]	[g]	[grs]	[m/s]
12.1	187	SG	RWS	86.0	N160				5.05	77.9	935
12.7	196	TMR	RWS	86.4	N160				5.00	77.2	925
13.0	200	Spitzer	Speer	86.5	N160				4.68	72.2	880

NOTE! WHEN ONLY MAXIMUM LOADS ARE SHOWN IN THE TABLES ABOVE START LOADING WITH APPROXIMATELY 15% SMALLER POWDER CHARGE.

BOLD TEXT INDICATES MAXIMUM LOAD - USE WITH CAUTION!

LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.



*Reloading
Pages*

8 x 72R

Test Components:

Test barrel: 610 mm (24"), 1 in 9½" twist

Primers: Vihtavuori No 68

Cases: Reformed RWS 9.3 x 72R, trim-to length 71.80 mm (2.824")

Reloading Data, Metric Units:

Bullet				Powder	Starting Load			Maximum Load			
Weight		Type	Mfg.	C.O.L	Type	Weight		Velocity	Weight		Velocity
[g]	[grs]			[mm]		[g]	[grs]	[m/s]	[g]	[grs]	[m/s]
12.7	196	SP	RWS	90.4	N140				2.68	41.4	700

NOTE! WHEN ONLY MAXIMUM LOADS ARE SHOWN IN THE TABLES ABOVE START LOADING WITH APPROXIMATELY 15% SMALLER POWDER CHARGE.

BOLD TEXT INDICATES MAXIMUM LOAD - USE WITH CAUTION!

LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.



Reloading
Pages

9.3 x 53R Finnish

Test Components:

Test barrel: 610 mm (24"), 1 in 14" twist

Primers: Vihtavuori No. 68

Cases: Sako, trim-to length 53.30 mm (2.098")

Reloading Data, Metric Units:

Bullet				Powder	Starting Load			Maximum Load			
Weight		Type	Mfg.	C.O.L	Type	Weight		Velocity	Weight		Velocity
[g]	[grs]			[mm]		[g]	[grs]	[m/s]	[g]	[grs]	[m/s]
16.5	255	SP	Sako	71.0	N140				3.31	51.1	710

This cartridge is not supported by CIP or by SAAMI. The maximum load does not exceed 320 MPa.

NOTE! WHEN ONLY MAXIMUM LOADS ARE SHOWN IN THE TABLES ABOVE START LOADING WITH APPROXIMATELY 15% SMALLER POWDER CHARGE.

BOLD TEXT INDICATES MAXIMUM LOAD - USE WITH CAUTION!
LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.



Reloading
Pages

9.3 x 57

Test Components:

Test barrel: 610 mm (24"), 1 in 14" twist

Primers: Vihtavuori No. 68

Cases: Norma, trim-to length 56.60 mm (2.230")

Reloading Data, Metric Units:

Bullet				Powder	Starting Load			Maximum Load			
Weight		Type	Mfg.	C.O.L	Type	Weight		Velocity	Weight		Velocity
[g]	[grs]			[mm]		[g]	[grs]	[m/s]	[g]	[grs]	[m/s]
16.5	255	SP	Sako	74.3	N140				3.30	50.9	690

This cartridge is not supported by CIP or by SAAMI. The maximum load does not exceed 280 MPa.

NOTE! WHEN ONLY MAXIMUM LOADS ARE SHOWN IN THE TABLES ABOVE START LOADING WITH APPROXIMATELY 15% SMALLER POWDER CHARGE.

BOLD TEXT INDICATES MAXIMUM LOAD - USE WITH CAUTION!
LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.



**Reloading
Pages**

9.3 x 62

Test Components:

Test barrel: 610 mm (24"), 1 in 14" twist

Primers: Vihtavuori No. 68

Cases: LAPUA, trim-to length 61.80 mm (2.433")

Reloading Data, Metric Units:

Bullet				Powder	Starting Load			Maximum Load			
Weight		Type	Mfg.	C.O.L	Type	Weight		Velocity	Weight		Velocity
[g]	[grs]			[mm]		[g]	[grs]	[m/s]	[g]	[grs]	[m/s]
16.7	258	HMK	RWS	81.7	N135				3.73	57.6	765
18.5	285	TMR	RWS	82.1	N135				3.53	54.5	710

NOTE! WHEN ONLY MAXIMUM LOADS ARE SHOWN IN THE TABLES ABOVE START LOADING WITH APPROXIMATELY 15% SMALLER POWDER CHARGE.

BOLD TEXT INDICATES MAXIMUM LOAD - USE WITH CAUTION!

LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.



**Reloading
Pages**

9.3 x 64

Test Components:

Test barrel: 650 mm (25½"), 1 in 14" twist

Primers: Vihtavuori No. 68

Cases: RWS, trim-to length 63.80 mm (2.512")

Reloading Data, Metric Units:

Bullet				Powder	Starting Load			Maximum Load			
Weight		Type	Mfg.	C.O.L	Type	Weight		Velocity	Weight		Velocity
[g]	[grs]			[mm]		[g]	[grs]	[m/s]	[g]	[grs]	[m/s]
16.7	258	HMK	RWS	85.5	N140				4.40	67.9	815
18.5	285	TMR	RWS	84.5	N140				4.34	67.0	770
19.0	293	TUG	RWS	85.5	N160				4.92	75.9	777

NOTE! WHEN ONLY MAXIMUM LOADS ARE SHOWN IN THE TABLES ABOVE START LOADING WITH APPROXIMATELY 15% SMALLER POWDER CHARGE.

BOLD TEXT INDICATES MAXIMUM LOAD - USE WITH CAUTION!

LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.



Reloading
Pages

9.3 x 74R

Test Components:

Test barrel: 610 mm (24"), 1 in 14" twist

Primers: CCI200

Cases: RWS, trim-to length 74.50 mm (2.933")

Reloading Data, Metric Units:

Bullet				Powder	Starting Load			Maximum Load			
Weight		Type	Mfg.	C.O.L	Type	Weight		Velocity	Weight		Velocity
[g]	[grs]			[mm]		[g]	[grs]	[m/s]	[g]	[grs]	[m/s]
15.0	231	SP	Norma	92.1	N140	3.72	57.4	718	4.10	63.3	779
16.5	256	SP	Sako	92.2	N140	3.50	54.1	654	3.86	59.6	723
18.5	285	Mega	LAPUA	92.2	N140	3.22	49.6	614	3.57	55.0	669
18.5	285	"X"	Barnes	97.6*)	N140	3.11	47.9	614	3.42	52.8	660
19.0	293	TUG	RWS	95.5*)	N140	3.24	50.0	603	3.59	55.5	670

NOTE *): The CIP maximum cartridge overall length is exceeded

NOTE! WHEN ONLY MAXIMUM LOADS ARE SHOWN IN THE TABLES ABOVE START LOADING WITH APPROXIMATELY 15% SMALLER POWDER CHARGE.

BOLD TEXT INDICATES MAXIMUM LOAD - USE WITH CAUTION!

LOADS LESS THAN MINIMUM CHARGES SHOWN ARE NOT RECOMMENDED.