

SHOTSHELL RELOADING DATA

(12 GAUGE HUNTING)



Compiled By Uncle Dave's Enterprise

Updated 09/10/2007

Lead Shot Pellet Velocity & Energy				
		Energy in ft/lbs. At		
	Muzzle Velocity	20 Yds.	40 Yds.	60 Yds.
#2	1330	11.8	8	5.8
76 Pellets-7/8oz	1315	11.6	7.9	5.7
87 Pellets-1oz	1295	11.3	7.7	5.6
97 Pellets-1 1/8oz	1240	10.6	7.3	5.4
108 Pellets-1 1/4oz	1220	10.3	7.2	5.2
119 Pellets-1 3/8oz				
130 Pellets-1 1/2oz				
Shot Size	Muzzle Velocity	20 Yds.	40 Yds.	60 Yds.
#4	1330	7.3	4.8	3.4
118 Pellets-7/8oz	1315	7.3	4.7	3.3
135 Pellets-1oz	1295	7.1	4.6	3.3
151 Pellets-1 1/8oz	1255	6.7	4.5	3.2
168 Pellets-1 1/4oz	1240	6.6	4.4	3.2
185 pellets-1 3/8oz	1220	6.4	4.3	3.1
202 pellets-1 1/2oz	1200	6.3	4.2	3
Shot Size	Muzzle Velocity	20 Yds.	40 Yds.	60 Yds.
#5	1330	5.6	3.6	2.5
150 Pellets-7/8oz	1315	5.5	3.5	2.5
171 Pellets-1oz	1295	5.4	3.5	2.4
192 Pellets-1 1/8oz	1255	5.2	3.3	2.4
213 pellets-1 1/4oz	1240	5	3.3	2.3
234 Pellets-1 3/8oz	1220	4.9	3.3	2.3
256 pellets-1 1/2oz	1200	4.8	3.1	2.2
Shot Size	Muzzle Velocity	20 Yds.	40 Yds.	60 Yds.
#6	1500	4.6	2.8	1.9
174 Pellets-7/8oz	1475	4.5	2.8	1.9
222 Pellets-1oz	1380	4.2	2.6	1.8
249 Pellets-1 1/8oz	1330	4.1	2.5	1.7
277 Pellets-1 1/4oz	1315	4	2.5	1.7
305 pellets-1 3/8oz	1295	3.9	2.4	1.7
333 Pellets-1 1/2oz	1255	3.7	2.4	1.7
	1240	3.7	2.3	1.6
	1220	3.6	2.5	1.6
	1200	3.5	2.2	1.6

1 - From Lyman 5th Edition Shotgun Reloading Handbook

2 3/4" Lead Shot Loads

Winchester HS or Compression Formed Case (Double AA)

7/8oz. Lead Loads

Powder	Charge (grs)	Primer	Wad Column	Velocity (fps)	Pressure (psi)	
Titewad	21.4	Win. 209	WAA12L	1400	10,800	2
WST	23.5	Win. 209	WAA12L	1400	8,200	2
WST	23.5	CCI 209	WAA12L	1355	7,200	2
WST	23.5	Fed. 209A	WAA12L	1355	7,400	2

Winchester HS or Compression Formed Case (Double AA)

1oz. Lead Loads

Powder	Charge (grs)	Primer	Wad Column	Velocity (fps)	Pressure (psi)	
Titegroup	18.9	Win. 209	WAA12SL	1290	10,100	2
Titegroup	20.1	Win. 209	WAA12SL	1345	11,400	2

Winchester HS or Compression Formed Case (Double AA)

1 1/8oz. Lead Loads

Powder	Charge (grs)	Primer	Wad Column	Velocity (fps)	Pressure (psi)	
SR 4756	31.0	Fed 209A	Rem. SP12	1380	10,300	1
Longshot	33.0	Win 209	Win WAA12	1474	9,200	1
Longshot	35.9	Win. 209	Rem. R12L	1530	10,200	2
Longshot	37.1	Win. 209	Rem. R12L	1585	11,100	2

Winchester HS or Compression Formed Case (Double AA)

1 1/4oz. Lead Loads

Powder	Charge (grs)	Primer	Wad Column	Velocity (fps)	Pressure (psi)	
Longshot	32.0	Win 209	Rem. SP12	1400	11,200	1
Longshot	31.0	CCI 209M	Rem. SP12	1423	11,000	1
Longshot	33	Win. 209	Rem. SP12	1440	10,400	2
Longshot	32.1	CCI 209M	Rem. SP12	1440	10,800	2
Longshot	30.7	CCI 209M	Rem. SP12	1385	9,900	2

Winchester HS or Compression Formed Case (Double AA)

1 3/8oz. Lead Loads

Powder	Charge (grs)	Primer	Wad Column	Velocity (fps)	Pressure (psi)	
Longshot	25.3	Fed. 209A	Rem. RP12	1240	10,700	2
Longshot	25.2	Fed. 209A	WAA12R	1240	10,900	2
Longshot	23.5	Rem. 209P	Rem. RP12	1185	9,500	2
Longshot	25.6	Rem. 209P	Rem. RP12	1240	10,200	2
Longshot	27.5	Rem. 209P	Rem. RP12	1295	11,100	2
Longshot	27	Rem. 209P	WAA12R	1295	11,500	2
Longshot	28.3	Win. 209	Rem. RP12	1295	10,800	2
Longshot	28.1	Win. 209	WAA12R	1295	10,900	2

Winchester HS or Compression Formed Case (Double AA)

1 1/2oz. Lead Loads

Powder	Charge (grs)	Primer	Wad Column	Velocity (fps)	Pressure (psi)	
Longshot	28	Win. 209	WAA12R	1260	11,500	2
Longshot	28	Win. 209	Rem. RP12	1260	11,400	2
Longshot	27	Win. 209	Rem. RP12	1205	9,900	2
Longshot	26	Rem. 209P	WAA12R	1205	10,800	2

1 - From Lyman 5th Edition Shotgun Reloading Handbook

2 - From Hodgdon/IMR Powder Company Internet Site.

Steel Pellet Count And Weight Versus Lead

Pellet Size	# of Pellets Per Oz STEEL.	# of Pellets Per Oz LEAD.	Wt. Of Pellets in Grains STEEL	Wt. Of Pellets in Grains LEAD
FF	35	24	12.5	18.2
F (TT)	39	27	11.0	16.2
TT	45	32	9.7	13.7
T	53	37	8.3	11.8
BBB	61	43	7.2	10.2
BB	72	50	6.1	8.8
B	86	60	5.1	7.3
1	103	72	4.3	6.1
2	125	87	3.5	5.0
3	154	108	2.9	4.1
4	192	135	2.3	3.2
5	243	171	1.8	2.6
6	317	222	1.4	2.0

2 3/4" Steel Shot Loads

Winchester HS or Compression Formed 2 3/4" Case (Double AA)

1 oz. Steel Loads

Powder	Charge (grs)	Primer	Wad Column	Velocity (fps)	Pressure (psi)	
Blue Dot	34.5	Win 209	One R.S. SAM 1 2 3/4" & One 20 ga. 1/8" felt under shot	1418	10300	1
Steel	34.0	Fed 209A	One R.S. SAM 1 2 3/4"	1360	7700	1

Remington Premier STS Plastic 2 3/4" Cases

1 oz. Steel Loads

Powder	Charge (grs)	Primer	Wad Column	Velocity (fps)	Pressure (psi)	
Steel	34.5	Fed 209A	One R.S. SAM 1 2 3/4"	1465	10700	1
Steel	29.5	Fed 209A	One P.R. TUPRW12 & One 20 ga. 1/8" felt under shot	1380	9500	1

Federal Gold Metal 2 3/4" Case

7/8 oz. Steel Loads

Powder	Charge (grs)	Primer	Wad Column	Velocity (fps)	Pressure (psi)	
Steel	45	Fed. 209A	Ballistic Products MM1275	1,765	9,000	3

Federal Gold Metal 2 3/4" Case

1 oz. Steel Loads

Powder	Charge (grs)	Primer	Wad Column	Velocity (fps)	Pressure (psi)	
Steel	36	Fed. 209A	Reloading Specialties "SAM 1" 12 ga 2 3/4"	1,520	9,200	3

Federal Gold Metal 2 3/4" Case

1 1/8 oz. Steel Loads

Powder	Charge (grs)	Primer	Wad Column	Velocity (fps)	Pressure (psi)	
Steel	32	Fed. 209A	Reloading Specialties "SAM 1" 12 ga 2 3/4"	1,380	9,000	3
Steel	32	Fed. 209A	Precision Reloading TUPRW12 (white)	1,425	9,600	3

Remington Nitro Steel 2 3/4" Case

1 oz. Steel Loads

Powder	Charge (grs)	Primer	Wad Column	Velocity (fps)	Pressure (psi)	
Steel	35.5	Fed. 209A	Precision Reloading TUPRW12 (white)	1,520	10,800	3
Steel	35.5	Fed. 209A	Reloading Specialties "SAM 1" 12 ga 2 3/4"	1,546	10,250	3

Remington Nitro Steel 2 3/4" Case

1 1/8 oz. Steel Loads

Powder	Charge (grs)	Primer	Wad Column	Velocity (fps)	Pressure (psi)	
Steel	29.5	Fed. 209A	Precision Reloading TUPRW12 (white)	1,361	10,420	3
Steel	32.5	Fed. 209A	Reloading Specialties "SAM 1" 12 ga 2 3/4"	1,428	10,410	3

1 - From Lyman 5th Edition Shotshell Reloading Handbook

3 - From Alliant Powder Internet Site

3" Steel Shot Loads

Winchester Plastic Cases, Plastic Basewad, Fold Crimp, 3" Shell

1 oz. Steel Loads

Powder	Charge (grs)	Primer	Wad Column	Velocity (fps)	Pressure (psi)	
Steel	42.0	Fed. 209A	One R.S. SAM I 3" & One 20 ga. 1/4" fiber under shot	1600	9400	1
Steel	43.0	Fed. 209A	One B.P. Ranger Plus & One 20 ga. 1/4" fiber under shot	1795	10500	1

Winchester Plastic Cases, Plastic Basewad, Fold Crimp, 3" Shell

1 1/8 oz. Steel Loads

Powder	Charge (grs)	Primer	Wad Column	Velocity (fps)	Pressure (psi)	
Steel	34	Fed. 209A	One R.S. SAM I 3" & One 20 ga. 1/4" fiber under shot	1470	9000	1
Steel	36	Fed. 209A	One B.P. Ranger Plus	1480	10800	1
Steel	34	Fed. 209A	One P.R. TUPRW123 & One 20 ga. 1/4" fiber under shot	1470	9500	1

Winchester Plastic Cases, Plastic Basewad, Fold Crimp, 3" Shell

1 1/4 oz. Steel Loads

Powder	Charge (grs)	Primer	Wad Column	Velocity (fps)	Pressure (psi)	
Steel	32.5	Fed. 209A	One P.R. TUPRW123	1375	10400	1

Federal .090 Integral Basewad, 3" Shell

1 oz. Steel Loads

Powder	Charge (grs)	Primer	Wad Column	Velocity (fps)	Pressure (psi)	
Steel	44	Fed. 209A	Precision Reloading TUPRW123 (orange) & one 12-gauge, 1/4" felt spacer to the inside bottom of the shot cup.	1,660	9,400	3
Steel	47	Fed. 209A	Reloading Specialties "SAM 1" 12 ga 3" & one 12-gauge, 3/8" felt spacer to the inside bottom of the shot cup.	1,720	8,900	3
Steel	45	Fed. 209A	Ballistics Products MM1230 & one 12-gauge, 3/8" felt spacer to the inside bottom of the shot cup.	1,690	10,500	3

Federal .090 Integral Basewad, 3" Shell

1 1/8 oz. Steel Loads

Powder	Charge (grs)	Primer	Wad Column	Velocity (fps)	Pressure (psi)	
Steel	37	Fed. 209A	Ballistics Products MM1230 & one 12-gauge, 1/4" felt spacer to the inside bottom of the shot cup.	1,510	10,400	3
Steel	38	Fed. 209A	Precision Reloading TUPRW123 (orange) & one 12-gauge, 1/4" felt spacer to the inside bottom of the shot cup.	1,515	10,900	3
Steel	40.5	Fed. 209A	Reloading Specialties "SAM 1" 12 ga 3" & one 12-gauge, 1/8" felt spacer to the inside bottom of the shot cup.	1,580	10,700	3

Federal .090 Integral Basewad, 3" Shell

1 1/4 oz. Steel Loads

Powder	Charge (grs)	Primer	Wad Column	Velocity (fps)	Pressure (psi)	
Steel	33	Fed. 209A	Precision Reloading TUPRW123 (orange) & one 12-gauge, 1/8" felt spacer to the inside bottom of the shot cup	1,355	10,500	3
Steel	33	Fed. 209A	Ballistics Products MM1230 & one 12-gauge, 1/8" felt spacer to the inside bottom of the shot cup	1,370	10,500	3

Steel	37	Fed. 209A	Reloading Specialties "SAM 1" 12 ga 3" & one 12-gauge, 1/8" felt spacer to the inside bottom of the shot cup	1,455	10,800	3
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**Federal 7/16 Paper Basewad, 3" Shell
1 oz. Steel Loads**

Powder	Charge (grs)	Primer	Wad Column	Velocity (fps)	Pressure (psi)	
Steel	45	Fed. 209A	Ballistics Products MM1230 & one 12-gauge, 1/4" felt spacer to the inside bottom of the shot cup	1,665	8,900	3
Steel	48	Fed. 209A	Reloading Specialties "SAM 1" 12 ga 3" & one 12-gauge, 1/4" felt spacer to the inside bottom of the shot cup	1,700	8,200	3

**Federal 7/16 Paper Basewad, 3" Shell
1 1/8 oz. Steel Loads**

Powder	Charge (grs)	Primer	Wad Column	Velocity (fps)	Pressure (psi)	
Steel	39.5	Fed. 209A	Ballistics Products MM1230 & one 12-gauge, 1/4" felt spacer to the inside bottom of the shot cup	1,550	10,600	3
Steel	40.5	Fed. 209A	Reloading Specialties "SAM 1" 12 ga 3" & one 12-gauge, 1/8" felt spacer to the inside bottom of the shot cup	1,560	10,500	3

**Federal 7/16 Paper Basewad, 3" Shell
1 1/4 oz. Steel Loads**

Powder	Charge (grs)	Primer	Wad Column	Velocity (fps)	Pressure (psi)	
Steel	33	Fed. 209A	Ballistics Products MM1230 & one 12-gauge, 1/4" felt spacer to the inside bottom of the shot cup	1,390	10,900	3
Steel	36	Fed. 209A	Reloading Specialties "SAM 1" 12 ga 3"	1,430	10,500	3

**Remington Nitro Steel, 3" Shell
1 1/8 oz. Steel Loads**

Powder	Charge (grs)	Primer	Wad Column	Velocity (fps)	Pressure (psi)	
Steel	33.5	Fed. 209A	Ballistics Products MM1230 & one 12-gauge, 1/4" felt spacer to the inside bottom of the shot cup	1,440	10,795	3
Steel	35	Fed. 209A	Precision Reloading TUPRW123 (orange) & one 12-gauge, 1/4" felt spacer to the inside bottom of the shot cup	1,457	10,710	3
Steel	33	Fed. 209A	Reloading Specialties "SAM 1" 12 ga 3" & one 12-gauge, 1/4" felt spacer to the inside bottom of the shot cup	1,479	10,620	3

**Remington Nitro Steel, 3" Shell
1 1/4 oz. Steel Loads**

Powder	Charge (grs)	Primer	Wad Column	Velocity (fps)	Pressure (psi)	
Steel	32	Fed. 209A	Precision Reloading TUPRW123 (orange) & one 12-gauge, 1/8" felt spacer to the inside bottom of the shot cup	1,392	10,690	3

- 1 - From Lyman 5th Edition Shotgun Reloading Handbook
3 - From Alliant Powder Internet Site

3 1/2" Steel Shot Loads

Winchester Plastic Cases, Plastic Basewad, Fold Crimp, 3 1/2" Shell

1 1/4 oz. Steel Loads

Powder	Charge (grs)	Primer	Wad Column	Velocity (fps)	Pressure (psi)	
Steel	41	Fed. 209A	One P.R. TUPRW1235 & One 20 ga. 1/4" fiber under shot	1530	12600	1
Steel	43	Fed. 209A	One B.P. Multi Metal 3 1/2 & One 20 ga. 1/4" fiber under shot	1540	12500	1

Winchester Plastic Cases, Plastic Basewad, Fold Crimp, 3 1/2" Shell

1 3/8 oz. Steel Loads

Powder	Charge (grs)	Primer	Wad Column	Velocity (fps)	Pressure (psi)	
Steel	38	Fed. 209A	One P.R. TUPRW1235 & One 20 ga. 1/4" fiber under shot	1410	11700	1
Steel	40	Fed. 209A	One B.P. Multi Metal 3 1/2	1450	12900	1

Winchester Plastic Cases, Plastic Basewad, Fold Crimp, 3 1/2" Shell

1 1/2 oz. Steel Loads

Powder	Charge (grs)	Primer	Wad Column	Velocity (fps)	Pressure (psi)	
Blue Dot	34	Win. 209	One B.P. Multi Metal 3 1/2	1240	11700	1
Blue Dot	35	Win. 209	One P.R. TUPRW1235	1270	12000	1
Steel	32.5	Fed. 209A	One B.P. Multi Metal 3 1/2	1235	13000	1

Federal Integral Base Wad, 3 1/2" Shell

1 1/4 oz. Steel Loads

Powder	Charge (grs)	Primer	Wad Column	Velocity (fps)	Pressure (psi)	
Steel	45	Fed. 209A	Reloading Specialties "SAM 1" 12 ga 3 1/2" & one 12-gauge, 3/8" felt spacer to the inside bottom of the shot cup	1,510	10,400	3
Steel	45	Fed. 209A	Ballistic Products MM1235 & one 12-gauge, 1/8" felt spacer to the inside bottom of the shot cup	1,560	10,900	3
Steel	45	Fed. 209A	Precision Reloading TUPRW123 (orange) & one 12-gauge, 1/2" fiber wad to the inside bottom of the shot cup	1,565	10,700	3

Federal Integral Base Wad, 3 1/2" Shell

1 3/8 oz. Steel Loads

Powder	Charge (grs)	Primer	Wad Column	Velocity (fps)	Pressure (psi)	
Steel	40	Fed. 209A	Precision Reloading TUPRW1235 (green) & one 12-gauge, 3/8" felt spacer to the inside bottom of the shot cup	1,470	12,500	3
Steel	41.5	Fed. 209A	Ballistic Products MM1235 & one 12-gauge, 3/8" felt spacer to the inside bottom of the shot cup	1,485	12,600	3

Federal Integral Base Wad, 3 1/2" Shell

1 1/2 oz. Steel Loads

Powder	Charge (grs)	Primer	Wad Column	Velocity (fps)	Pressure (psi)	
Steel	36	Fed. 209A	Precision Reloading TUPRW1235 (green) & one 12-gauge, 3/8" felt spacer to the inside bottom of the shot cup	1,360	12,600	3
Steel	37	Fed. 209A	Ballistic Products MM1235 & one 12-gauge, 1/4" felt spacer to the inside bottom of the shot cup	1,385	12,800	3

Steel	39	Fed. 209A	Reloading Specialties "SAM 1" 12 ga 3 1/2" & one 12-gauge, 1/4" felt spacer to the inside bottom of the shot cup	1,390	13,300	3
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Remington Plastic SP , 3 1/2" Shell

1 1/4 oz. Steel Loads

Powder	Charge (grs)	Primer	Wad Column	Velocity (fps)	Pressure (psi)	
Steel	45	Fed. 209A	Reloading Specialties "SAM 1" 12 ga 3 1/2" & one) 12-gauge, 3/8" felt spacer to the inside bottom of the shot cup	1,595	13,100	3
Steel	45	Fed. 209A	Ballistic Products MM1235 & one) 12-gauge, 3/8" felt spacer to the inside bottom of the shot cup	1,615	13,300	3

Remington Plastic SP , 3 1/2" Shell

1 3/8 oz. Steel Loads

Powder	Charge (grs)	Primer	Wad Column	Velocity (fps)	Pressure (psi)	
Steel	38.5	Fed. 209A	Reloading Specialties "SAM 1" 12 ga 3 1/2" & one) 12-gauge, 3/8" felt spacer to the inside bottom of the shot cup	1,430	12,800	3
Steel	37	Fed. 209A	Ballistic Products MM1235 & one) 12-gauge, 1/4" felt spacer to the inside bottom of the shot cup	1,430	12,800	3

Remington Plastic SP , 3 1/2" Shell

1 1/2 oz. Steel Loads

Powder	Charge (grs)	Primer	Wad Column	Velocity (fps)	Pressure (psi)	
Steel	33	Fed. 209A	Ballistic Products MM1235 & one) 12-gauge, 1/4" felt spacer to the inside bottom of the shot cup	1,305	13,000	3
Steel	35	Fed. 209A	Reloading Specialties "SAM 1" 12 ga 3 1/2" & one) 12-gauge, 1/4" felt spacer to the inside bottom of the shot cup	1,330	13,000	3

1 - From Lyman 5th Edition Shotshell Reloading Handbook

3 - From Alliant Powder Internet Site

RELOADING SUPPLIERS

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975 19th St
Prairie du Sac, Wi. 53578
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9am-5pm Mon.-Sat.
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Lomira, WI 53048
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www.midwestern-shooters.com/
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Pine Island, MN 55963
1-800-274-0403
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507-356-8500
www.reloadingspecialties.com/
Steel Reloading Supplies

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PO Box 293
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1-888-273-5623
<http://www.ballisticproducts.com/>
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Mayville, Wisconsin 53050
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