

# 16 Gauge Loads

*By Tom Ceretto*

I had not received a letter, email or a phone call in a long time concerning 16 gauge loads. Then out of the blue I received several in a couple of weeks. One of them was from a member of "The Order of Edwardian Gunners" vintage shotgunners. He asked about low-pressure loads for vintage shotguns. Other inquiries were about target loads for skeet and sporting clays. Most were interested in the new wads from Claybuster and Down Range Manufacturing and wanted recipes for 7/8 and 1 ounce loads.

I called Alan Hensley at Claybuster and he told me that reloaders should reference the data for the now discontinued WAA16 when reloading with their CB0100-16 Winchester clone. I have found that Claybuster wads are usually a bit softer and lower pressure than the OEM wads they replace. That being the case, I would concur with Alan and recommend following powder company recommendations for the WAA16 when using Claybuster CB0100-16. There are quite a few loads still listed in reloading guides from Alliant and Hodgdon for the WAA16 even though it has been discontinued for a while.

The Downrange DR16 wad, which looks very much like the Winchester WAA16, is not a direct replacement for the WAA16 and should not be loaded the same as the WAA16. The WAA16 wad is best suited to reloading 1 ounce and 1 1/8 ounce loads while the DR16 is best suited to loading 7/8 ounce and 1 ounce loads.

I currently do not own a 16 gauge shotgun, but have owned a few in the past. Usually, when I do load and shoot the 16 gauge, I borrow one from a friend who owns both a side-by-side and an over-and-under in 16 gauge. As long as I have an accommodating friend, I am not going to purchase another 16 gauge shotgun. I have always felt that the best target loads and hunting loads for the 16 gauge are 7/8 ounce loads. I used the 16 gauge mostly for ruffed grouse and Hungarian partridge and felt that 7/8 ounce of number 8 shot in the 16 gauge is more than adequate for dispatching both species when hunting them in my home state of Wisconsin, plus Minnesota and Canada.

I do have some very nice data for 7/8 ounce loads in Remington SP hulls and Winchester hulls. My accommodating friend has been loading them for some time and loves them. Winchester loads are the lowest pressure and would be excellent loads for use in vintage shotguns.

Case: 16 ga. Winchester  
Primer: Winchester 209  
Powder: 15.8 gr. International Clays  
Wad: DR16  
Shot: 7/8 oz. lead  
1,150 fps @ 6,200 psi

Case: 16 ga. Winchester  
Primer: Winchester 209  
Powder: 16.9 gr. International Clays  
Wad: DR16  
Shot: 7/8 oz. lead  
1,200 fps @ 7,300 psi

Case: 16 ga. Winchester  
Primer: Winchester 209  
Powder: 18.0 gr. International Clays  
Wad: DR16  
Shot: 7/8 oz. lead  
1,250 fps @ 8,300 psi

Case: 16 ga. Winchester  
Primer: Winchester 209

Powder: 17.4 gr. IMR PB  
Wad: DR16  
Shot: 7/8 oz. lead  
1,150 fps @ 5,900 psi

Case: 16 ga. Winchester  
Primer: Winchester 209  
Powder: 18.7 gr. IMR PB  
Wad: DR16  
Shot: 7/8 oz. lead  
1,200 fps @ 6,800 psi

Case: 16 ga. Winchester  
Primer: Winchester 209  
Powder: 20 gr. IMR PB  
Wad: DR16  
Shot: 7/8 oz. lead  
1,250 fps @ 7,600 psi

Both Alliant and Hodgdon have loads listed in their current reloading guides and on the Internet. I recommend going online to get the latest recipes. Hodgdon is the only one listing 7/8 ounce loads using the DR16 wad in both Remington and Winchester hulls. The recipes are easy to download and print.

I received an interesting letter from Jim on a different subject.

*"Your recent articles on Alliant 300MP for the .410 interested me and I purchased a pound. I have used Alliant .410 in the past and I have been satisfied with that powder, but I'm always interested in lowering pressures and reaping the benefits of that.*

*"I followed the recipe you published for the Remington STS exactly with the exception of the powder charge. I dropped 17.4 grains of 300MP instead of 17.3. All charges (shot and powder) were weighed so as to have exact shells to chronograph and pattern. The powder of each shell was weighed individually on two different scales. The powder reloads nicely and the results on the pattern board were very good. It does get a little tight with 18.0 grains as you hinted in your article.*

*"The only difference between your published results and mine was the velocity. I had 1,400, 1,413, 1,421, 1,427 and 1,430 for an average of 1,418. I don't have the ability to measure pressure. I didn't chronograph the 18.0 grain loading as the loading aforementioned was faster than I expected at 1,200.*

*"I thought I'd drop you a note and give you some feedback concerning the velocity. At 1,400 fps + I am wondering if the pressure isn't more in the low 8,000 psi range."*

First of all, let me say that I agree with Jim on the readings he got on his chronograph. I do not doubt the numbers he read. What most reloaders do not know is that there are two types of chronographs for measuring velocity of metallic cartridges and shotgun shells. They are the ubiquitous photoelectric screens most of us non-professionals have and industrial velocity coil chronographs that powder companies and ammunition manufacturers use. Both types do an excellent job measuring the velocity of bullets shot out of rifles and are very accurate for that purpose. The velocity coil units are very accurate at measuring the velocity of shotgun shot strings because they measure the center mass of a shot cloud. The photoelectric screen chronographs are not very good at measuring the velocity of shotgun shells because they will use the velocity of the first pellet to break the photoelectric beam and not the center of the shot cloud mass. That first pellet is usually traveling faster than the shot cloud center mass is.

I always take the advice of the manufacturer of one of my two chronographs and automatically reduce the given velocity by 3 percent when calculating the velocity of shotgun shells. Other environmental factors such as temperature, humidity and altitude can affect velocity and must be factored into finding the true velocity of a shotgun shell. If it is a hot day I will reduce the velocity of any reading I get by a couple more percentage points or more.

I do not use my chronograph to check velocity as much as I use it to check the consistency of my reloads. When I

reload I am very interested in loading shells that have very low extreme variations in velocity and pressure. I am very fortunate to have access to industry equipment when I need it badly. I try not to abuse that privilege and wear out my welcome.