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## Stainless Recipes Are Quite Similar.

When looking for an industrial ball valve made from stainless steel, many specifiers instantly assume they are looking for 316 stainless steel. You won't find one from Milwaukee Valve. Wait, what?!?! Doesn't Milwaukee make stainless steel ball valves? If it's not 316 stainless, then what is it?



For this example, let's use the F90/91 series of flanged ball valves. Under the available body materials is a listing for ASTM A351/A744 GR CF8M. The A351 and A744 are material standards for castings that the valve bodies meet.

(The differences aren't important for this discussion.)  
The focus here is the grade; CF8M.

Without going too far into the weeds, CF8M is the **cast** equivalent of 316 stainless steel. For the most part, CF8M and 316 stainless steels are chemically equivalent, having the same carbon content and very similar nickel and chromium contents. Basically, the recipe for each is the same.

For the purposes of this discussion, CF8M is for **castings** (bodies, tailpieces, etc.) and 316 stainless is for **forgings** and **hot rolled bars** (balls, stems, fasteners, etc.). Both "flavors" are produced under various ASTM material



specifications depending on the service for which each component is intended.

To be clear, there are stainless valves produced from forgings and others that are machined from bar stock that are 316 stainless. But the stainless valves that Milwaukee Valve produces, including high-performance butterfly valves, are **cast** bodies or CF8M. But, at the end of the day, CF8M and 316 are considered synonymous.

**BONUS CONTENT:** There's also a method to the madness of the casting alloys:

- 'C' stands for corrosion resistant
- 'F' represents the combination of iron, nickel, and chromium
- '8' is the carbon content
- 'M' is for the addition of molybdenum

For more information on Milwaukee Valve stainless ball valves, just click [HERE](#), visit [www.MilwaukeeValve.com](http://www.MilwaukeeValve.com) or contact your Milwaukee Valve customer service rep today. A complete listing, by territory, can be searched at our website, at [www.MilwaukeeValve.com/Find-Sales-Rep/](http://www.MilwaukeeValve.com/Find-Sales-Rep/).



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