

Plain Truth About Chrome Plating Thickness

There is a misconception about chrome plating that the thicker the chrome plating the longer the gage will wear. The following information with simple graphic is meant to provide the facts so that our customers can make their own decisions based on technical merit and not perceptions.

FACT: All thread plugs manufactured that will be chrome plated, are ground under final size to allow for the build up of a hard chrome layer to provide a harder surface for longer wear life.

Vermont Gage Chrome plated Thread plugs are ground undersized and a layer of chrome plating is bonded to the surface. The hardness is controlled by the process with an average of RC 72 on the chrome surface. The thickness of the chrome plating on VTG thread plugs is in excess of any possible wear limit allowed by applicable specifications for the thread gages. This is done in order to make sure that when the lower acceptable wear limit on a gage is reached the chrome plating is still intact on the gage. If the chrome plating is worn away the gage is well below the acceptable limit for this gage and it should have been replaced or in certain conditions re-chromed and reground to final size again.

There is the perception that more chrome thickness is better and provides longer wear life. The fact is, that even though some OEMs do apply a thicker chrome plating thickness to the gage it is worn out long before the chrome is worn away.

In both cases the chrome thickness is greater than the wear tolerance on the gage so that at no time will either gage ever wear through the chrome if the gage is still in conformance to the standards the gage was manufactured to. Thicker chrome plating **does not** provide more wear as long as the chrome plating is thicker than the allowable wear tolerance on the Thread Plug.

