ASTM 1085 – *Cliffs Notes*

The construction industry, specifically engineers and architects, have always taken issue with the HSS A500B specification. The industry doesn't like the -10% in wall thickness. As a result, beam is often the preferred to spec for construction projects. The new ASTM specification solves this problem as well as addresses strength and corner radius.

The new 1085 spec calls for a -5% in wall thickness from the nominal, and more importantly a -3.5% in mass. This will basically require HSS tubers to buy coil at a new min, just 3.5% shy of nominal. The new spec has seismic design which is becoming more and more important – now in 26 states. This effects yield and tensile. The ASTM A500B min yield is 46ksi with no max, and min tensile is 58ksi. This new 1085 spec calls for a min yield of 50ksi and max of 70ksi. The new 1085 spec calls for a min tensile of 65ksi. Further, there are Charpy notch tests required with 1085. The new 1085 spec also has a min and max corner radius.

This new spec was published on 4/11/13. We expect both specs (A500B/C and A1085) to live side by side for a number of years.