



PMC LONE STAR



Gages, Calibration & Instruments

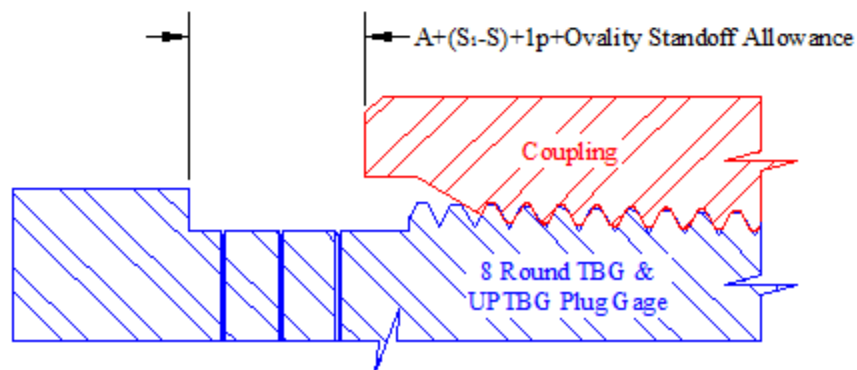
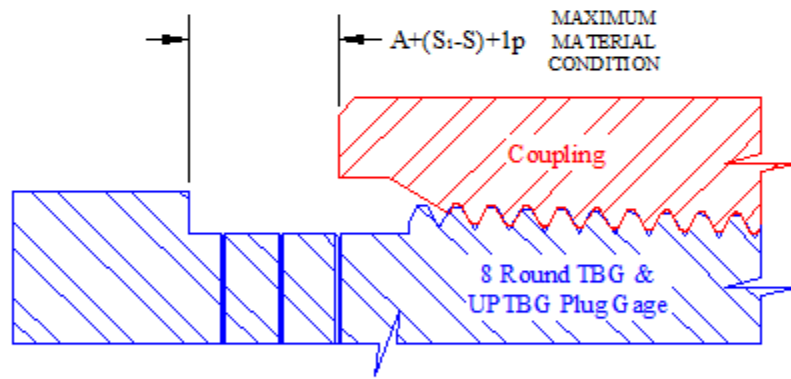
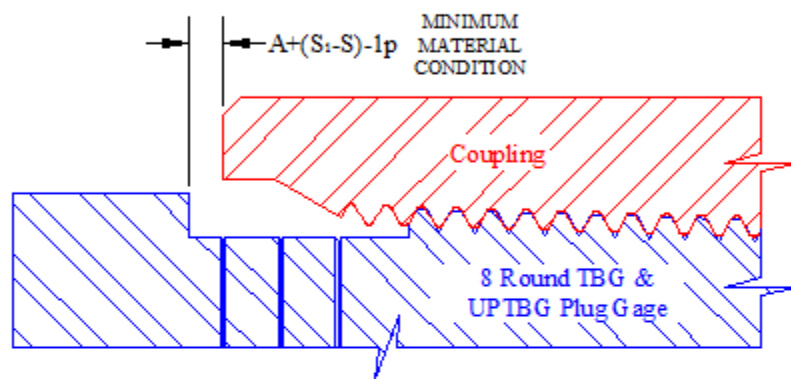
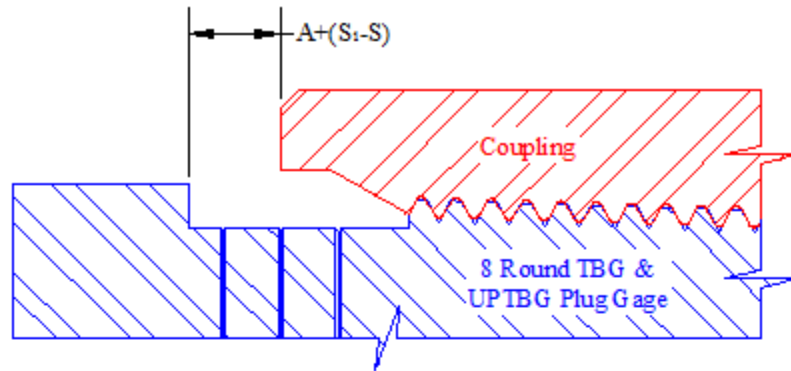
8 Round TBG. & UPTBG. Adjusted Plug Gage Standoff for Ovality

PMC Lone Star Technical Brief Doc. 110 Rev. A

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API Specification 5B 16th edition has added new requirements for inspecting ovality of 8-Round TBG. & UPTBG couplings, using crest diameter gages such as the CDRP. This addition of crest diameter inspection to the specification changes the allowable standoff of plug gages used to inspect couplings for functional size. The presence of ovality in a coupling will cause the plug gage to standoff further. The revised specification acknowledges this effect on standoff and provides guidance on allowable standoff variation based on the amount of ovality present. The ovality standoff allowance is added to the maximum standoff as prescribed within the specification, the minimum standoff remains unchanged.





8 Round TBG. & UPTBG.

The basic standoff of a plug gage to an 8 Round TBG. & UPTBG. Coupling is $A \pm 1p$

$A = 0.250$ (2 Turns) for all 8 Round TBG. & UPTBG.

$p = 0.125$ for all 8 Round TBG. & UPTBG.

Min Standoff = $A - 1p = 0.125$

Max Standoff = $A + 1p + \text{Ovality Standoff Allowance}$

Max Standoff = $0.375 + \text{Ovality Standoff Allowance}$

8 Round TBG. & UPTBG. A = 2 Turns Coupling Standoff			
Thread Ovality (in.)	Ovality Standoff Allowance (in.)	Min Plug Gage Standoff A - 1p (in.)	Max Plug Gage Standoff A + 1p + Ovality Standoff Allowance (in.)
0.001	0.008	0.125	0.383
0.002	0.016	0.125	0.391
0.003	0.024	0.125	0.399
0.004	0.032	0.125	0.407
0.005	0.040	0.125	0.415
0.006	0.048	0.125	0.423
0.007	0.056	0.125	0.431
0.008	0.064	0.125	0.439
0.009	0.072	0.125	0.447
0.010	0.080	0.125	0.455
0.011	0.088	0.125	0.463
0.012	0.096	0.125	0.471
0.013	0.104	0.125	0.479
0.014	0.112	0.125	0.487