

CTS Fasteners & Metals Report No. 86

Summary of Chemical Analysis Results

Chemical Analysis of Corrosion Resistant Steel
 Material: AISI 310
 Sample ID: M77

Element	Grand Mean	B-L Std Dev	Two Std Dev Range	Three Std Dev Range
Carbon	0.0518	0.0021	0.0476 - 0.0560	0.0455 - 0.0581
Manganese	1.205	0.028	1.149 - 1.261	1.121 - 1.289
Phosphorus	0.0216	0.0016	0.0184 - 0.0248	0.0168 - 0.0264
Cobalt	0.0681	0.0060	0.0561 - 0.0801	0.0501 - 0.0861
Silicon	0.4859	0.0142	0.4575 - 0.5143	0.4433 - 0.5285
Copper	0.2130	0.0081	0.1968 - 0.2292	0.1887 - 0.2373
Nickel	20.177	0.201	19.775 - 20.579	19.574 - 20.780
Chromium	24.329	0.124	24.081 - 24.577	23.957 - 24.701
Molybdenum	0.3814	0.0213	0.3388 - 0.4240	0.3175 - 0.4453
Nitrogen	0.0449	0.0039	0.0371 - 0.0527	0.0332 - 0.0566

Material: AISI 310
 Sample ID: M78

Element	Grand Mean	B-L Std Dev	Two Std Dev Range	Three Std Dev Range
Carbon	0.0438	0.0023	0.0392 - 0.0484	0.0369 - 0.0507
Manganese	1.074	0.025	1.024 - 1.124	0.999 - 1.149
Phosphorus	0.0226	0.0017	0.0192 - 0.0260	0.0175 - 0.0277
Cobalt	0.0680	0.0062	0.0556 - 0.0804	0.0494 - 0.0866
Silicon	0.5135	0.0149	0.4837 - 0.5433	0.4688 - 0.5582
Copper	0.2293	0.0085	0.2123 - 0.2463	0.2038 - 0.2548
Nickel	20.129	0.076	19.977 - 20.281	19.901 - 20.357
Chromium	24.256	0.152	23.952 - 24.560	23.800 - 24.712
Molybdenum	0.3132	0.0178	0.2776 - 0.3488	0.2598 - 0.3666
Nitrogen	0.0372	0.0036	0.0300 - 0.0444	0.0264 - 0.0480

Grand Means and Between-Lab Standard Deviations have been rounded to three or four decimal places.
 Statistics for samples M77 and M78 are based on the results of at least 48 labs except for Nitrogen.