

CTS Fasteners & Metals Report No. 88

Summary of Chemical Analysis Results

Chemical Analysis of Corrosion Resistant Steel
 Material: AISI 347 Steel
 Sample ID: M81

Element	Grand Mean	B-L Std Dev	Two Std Dev Range	Three Std Dev Range
Carbon	0.0530	0.0021	0.0488 - 0.0572	0.0467 - 0.0593
Manganese	1.673	0.022	1.629 - 1.717	1.607 - 1.739
Phosphorus	0.0272	0.0017	0.0238 - 0.0306	0.0221 - 0.0323
Cobalt	0.1428	0.0059	0.1310 - 0.1546	0.1251 - 0.1605
Silicon	0.6248	0.0143	0.5962 - 0.6534	0.5819 - 0.6677
Copper	0.2679	0.0061	0.2557 - 0.2801	0.2496 - 0.2862
Nickel	9.437	0.079	9.279 - 9.595	9.200 - 9.674
Chromium	17.582	0.099	17.384 - 17.780	17.285 - 17.879
Molybdenum	0.2921	0.0076	0.2769 - 0.3073	0.2693 - 0.3149
Niobium	0.6483	0.0211	0.6061 - 0.6905	0.5850 - 0.7116

Material: AISI 347 Steel
 Sample ID: M82

Element	Grand Mean	B-L Std Dev	Two Std Dev Range	Three Std Dev Range
Carbon	0.0480	0.0022	0.0436 - 0.0524	0.0414 - 0.0546
Manganese	1.538	0.022	1.494 - 1.582	1.472 - 1.604
Phosphorus	0.0321	0.0020	0.0281 - 0.0361	0.0261 - 0.0381
Cobalt	0.1550	0.0061	0.1428 - 0.1672	0.1367 - 0.1733
Silicon	0.4670	0.0112	0.4446 - 0.4894	0.4334 - 0.5006
Copper	0.4550	0.0095	0.4360 - 0.4740	0.4265 - 0.4835
Nickel	9.010	0.074	8.862 - 9.158	8.788 - 9.232
Chromium	17.280	0.095	17.090 - 17.470	16.995 - 17.565
Molybdenum	0.4130	0.0112	0.3906 - 0.4354	0.3794 - 0.4466
Niobium	0.6330	0.0211	0.5908 - 0.6752	0.5697 - 0.6963

Grand Means and Between-Lab Standard Deviations have been rounded to three and four decimal places.
 Statistics for samples M81 and M82 are based on the results of at least 43 labs.