

CTS Fasteners & Metals Report No. 86

Summary of Chemical Analysis Results

Chemical Analysis of Nickel-based Alloy

Material: 625 alloy

Sample ID: J77

Element	Grand Mean	B-L Std Dev	Two Std Dev Range	Three Std Dev Range
Chromium	21.858	0.249	21.360 - 22.356	21.111 - 22.605
Manganese	0.1099	0.0099	0.0901 - 0.1297	0.0802 - 0.1396
Iron	3.688	0.093	3.502 - 3.874	3.409 - 3.967
Molybdenum	9.207	0.149	8.909 - 9.505	8.760 - 9.654
Aluminum	0.2870	0.0215	0.2440 - 0.3300	0.2225 - 0.3515
Silicon	0.1166	0.0325	0.0516 - 0.1816	0.0191 - 0.2141
Titanium	0.2924	0.0212	0.2500 - 0.3348	0.2288 - 0.3560
Niobium	3.587	0.092	3.403 - 3.771	3.311 - 3.863

Material: 625 alloy

Sample ID: J78

Element	Grand Mean	B-L Std Dev	Two Std Dev Range	Three Std Dev Range
Chromium	21.859	0.200	21.459 - 22.259	21.259 - 22.459
Manganese	0.1873	0.0116	0.1641 - 0.2105	0.1525 - 0.2221
Iron	3.801	0.085	3.631 - 3.971	3.546 - 4.056
Molybdenum	8.857	0.109	8.639 - 9.075	8.530 - 9.184
Aluminum	0.2278	0.0161	0.1956 - 0.2600	0.1795 - 0.2761
Silicon	0.1911	0.0298	0.1315 - 0.2507	0.1017 - 0.2805
Titanium	0.2892	0.0199	0.2494 - 0.3290	0.2295 - 0.3489
Niobium	3.455	0.067	3.321 - 3.589	3.254 - 3.656

Grand Means and Between-Lab Standard Deviations have been rounded to three or four decimal places.
 Statistics for samples J77 and J78 are based on the results of at least 23 labs.