

CTS Fasteners & Metals Report No. 85

Summary of Chemical Analysis Results

Chemical Analysis Carbon & Low Alloy Steel
 Material: AISI 8620 Steel
 Sample ID: L75

Element	Grand Mean	B-L Std Dev	Two Std Dev Range		Three Std Dev Range	
Carbon	0.1919	0.0063	0.1793	- 0.2045	0.1730	- 0.2108
Manganese	0.8182	0.0103	0.7976	- 0.8388	0.7873	- 0.8491
Phosphorus	0.0089	0.0008	0.0073	- 0.0105	0.0065	- 0.0113
Sulfur	0.0246	0.0014	0.0218	- 0.0274	0.0204	- 0.0288
Silicon	0.2181	0.0048	0.2085	- 0.2277	0.2037	- 0.2325
Copper	0.1198	0.0032	0.1134	- 0.1262	0.1102	- 0.1294
Nickel	0.4472	0.0095	0.4282	- 0.4662	0.4187	- 0.4757
Chromium	0.4879	0.0072	0.4735	- 0.5023	0.4663	- 0.5095
Molybdenum	0.1684	0.0042	0.1600	- 0.1768	0.1558	- 0.1810
Aluminum	0.0256	0.0017	0.0222	- 0.0290	0.0205	- 0.0307

Material: AISI 8740 Steel
 Sample ID: L76

Element	Grand Mean	B-L Std Dev	Two Std Dev Range		Three Std Dev Range	
Carbon	0.4119	0.0075	0.3969	- 0.4269	0.3894	- 0.4344
Manganese	0.9169	0.0117	0.8935	- 0.9403	0.8818	- 0.9520
Phosphorus	0.0242	0.0010	0.0222	- 0.0262	0.0212	- 0.0272
Sulfur	0.0087	0.0010	0.0067	- 0.0107	0.0057	- 0.0117
Silicon	0.2498	0.0056	0.2386	- 0.2610	0.2330	- 0.2666
Copper	0.1096	0.0029	0.1038	- 0.1154	0.1009	- 0.1183
Nickel	0.5048	0.0090	0.4868	- 0.5228	0.4778	- 0.5318
Chromium	0.5018	0.0070	0.4878	- 0.5158	0.4808	- 0.5228
Molybdenum	0.2060	0.0048	0.1964	- 0.2156	0.1916	- 0.2204
Aluminum	0.0173	0.0015	0.0143	- 0.0203	0.0128	- 0.0218

Statistics for samples L75 and L76 are based on the results of at least 103 labs.