

OIL TEMPERED MB SPRING WIRE CLASS I

This is a general purpose, commercial quality, Class I tensile, spring steel wire. With a quality between hard drawn spring wire and music wire, moderately priced OTMB is excellent for springs without severe bends. The material is cold drawn to the desired size and heat treated by a continuous tempering method. A low temperature stress relief is required after processing. Wire is available in size ranges from .023 to .625.

Chemical Composition Per ASTM-A-229 *Max value		Dimensional Tolerances	Tolerance (inch)
Carbon	0.55 - 0.85%	.020 to .028	+/- .0008
Manganese	0.30 - 1.20%	Over .028 to .075	+/- .001
Phosphorus	0.040%*	Over .075 to .375	+/- .002
Sulfur	0.050%*	Over .375 to .625	+/- .003
Silicon	0.15 - 0.35%		

Tensile Strength Table (ASTM-A-229)

Dia. Inch	Tensile Min PSI	Tensile Max PSI	Dia. Inch	Tensile Min PSI	Tensile Max PSI
.020	293,000	323,000	.135	215,000	240,000
.023	289,000	319,000	.148	210,000	235,000
.026	286,000	316,000	.162	205,000	230,000
.029	283,000	313,000	.177	200,000	225,000
.032	280,000	310,000	.192	195,000	220,000
.035	274,000	304,000	.207	190,000	215,000
.041	266,000	296,000	.225	188,000	213,000
.048	259,000	289,000	.244	187,000	212,000
.054	253,000	283,000	.250	185,000	210,000
.062	247,000	277,000	.312	183,000	208,000
.072	241,000	271,000	.375	180,000	205,000
.080	235,000	265,000	.438	175,000	200,000
.092	230,000	260,000	.500	170,000	195,000
.106	225,000	255,000	.562	165,000	190,000
.120	220,000	250,000	.625	165,000	190,000

The above charts are intended to provide general background information. You should also review the appropriate material specification. Please contact Gibbs if you have any questions.