

OIL TEMPERED MB SPRING WIRE CLASS II

This is a general purpose, commercial quality, Class II 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 .120”-.625”.

| Chemical Composition Per ASTM-A-229 *Max values | | 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- A229)

| Dia. Inch | Tensile Min PSI | Tensile Max PSI | Dia. Inch | Tensile Min PSI | Tensile Max PSI |
|--------------|--------------------|--------------------|--------------|--------------------|--------------------|
| .020 | 324,000 | 354,000 | .135 | 241,000 | 266,000 |
| .023 | 320,000 | 350,000 | .148 | 236,000 | 261,000 |
| .026 | 317,000 | 347,000 | .162 | 231,000 | 256,000 |
| .029 | 314,000 | 344,000 | .177 | 226,000 | 251,000 |
| .032 | 311,000 | 341,000 | .192 | 221,000 | 246,000 |
| .035 | 305,000 | 335,000 | .207 | 216,000 | 241,000 |
| .041 | 297,000 | 327,000 | .225 | 214,000 | 239,000 |
| .048 | 290,000 | 320,000 | .244 | 213,000 | 238,000 |
| .054 | 284,000 | 314,000 | .250 | 211,000 | 236,000 |
| .062 | 278,000 | 308,000 | .312 | 209,000 | 234,000 |
| .072 | 272,000 | 302,000 | .375 | 206,000 | 231,000 |
| .080 | 266,000 | 296,000 | .438 | 201,000 | 226,000 |
| .092 | 261,000 | 291,000 | .500 | 196,000 | 221,000 |
| .106 | 256,000 | 286,000 | .562 | 191,000 | 216,000 |
| .120 | 251,000 | 281,000 | .625 | 191,000 | 216,000 |

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.