

OIL TEMPERED CARBON VALVE SPRING WIRE

Valve spring wire is one of the highest quality wires available. Tight quality requirements, backed-up with extra eddy current surface inspection, provide wire that meets the demands for exceptional surface quality with no seams and decarburization. Valve quality wire is used for applications such as engine valves, automatic transmissions, fuel injectors, pumps, generators and air compressors. Wire available in size ranges from .041ö-.331ö.

Chemical Composition Per ASTM-A-230 *Max value		Dimensional Tolerances	Tolerance (inch)
Carbon	.60 - .75%	Less than .062	+/- .0005
Manganese	.60 - .90%	.062 to .092 incl.	+/- .0008
Phosphorus	.025% *	Over .092 to .148 incl.	+/- .001
Sulfur	.030% *	Over .148 to .177 incl.	+/- .0015
Silicon	.15 - .35%	Over .177	+/- .002

Tensile Strength Table (ASTM-A230)

Dia inch.	Tensile Min PSI	Tensile Max PSI	Dia inch.	Tensile Min PSI	Tensile Max PSI
Less than .062	245,000	265,000	Over .162 to .192, incl	225,000	245,000
Over .062 to .092, incl	240,000	260,000	Over .192 to .225, incl	220,000	240,000
Over .092 to .128, incl	235,000	255,000	Over .225 to .250, incl	215,000	235,000
Over .128 to .162, incl	230,000	250,000	Over .250	210,000	230,000

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.