

Coil Springs

Material and Chemical Characterization

The material and chemical characterization charts show the types of materials used in WCT's coil springs. The charts identify the main alloy components and trace elements.

1 Materials

1.1 Coil Springs

Table 1

Nickel Titanium Springs per ASTM F2063 – 18	
Element	%(mass/mass)
Nickel	54.5 to 57.0
Carbon, maximum	0.040
Cobalt, maximum	0.050
Copper, maximum	0.010
Chromium, maximum	0.010
Hydrogen, maximum	0.005
Iron, maximum	0.050
Niobium, maximum	0.025
Nitrogen, maximum	0.005
Oxygen, maximum	0.040
Titanium	Balance

1.2 Coil Spring Eyelets

Table 2

Stainless Steel 302 Grade	
Element	%(mass/mass)
Carbon, maximum	0.015
Manganese, maximum	2.000
Phosphorus, maximum	0.045
Sulfur, maximum	0.030
Silicon, maximum	1.00
Chromium	17.00 -19.00
Nickel	8.00 -10.00
Nitrogen, maximum	0.10
Copper	-

Approved By:
[\(CO-1040\) MR Unsafe - APII, Buttons, Stops, Hooks, Coil Springs, & Preformed Lig Ties](#)

Description
Activating MR Unsafe symbol on labels for APII, Buttons, Stops, Hooks, & Coil Springs.

Justification
MR Unsafe needed on labels. There is an updated MRI warning

Assigned To:	Initiated By:	Priority:	Impact:
Maureen Janssen	Maureen Janssen	Medium	Major

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