

SLT[®] Wire

Fort Wayne Metals' SLT medical grade wire combines excellent straightness and torqueability, directly off the spool or when cut to length. SLT wire eliminates the need for further straightening operations.

Features and Benefits

SLT wire offers properties unique from other spooled wire by providing straightness directly off the spool with a deviation of less than .020" in 12" (0.5 mm in 300 mm). Due to the straightness of the wire, only negligible whip is experienced in the distal end when torque is applied to the proximal end. SLT wire also offers the ease of grinding to very small diameters depending on the type of grinding processes used.

Applications

Fort Wayne Metals manufactures SLT wire for many different situations where straightened wire was previously used. Applications may include: guidewires, Suture Needles, Stylets and Mandrel Wires. SLT wire will also have uses in the fields of orthodontics and orthopaedics.

Coating

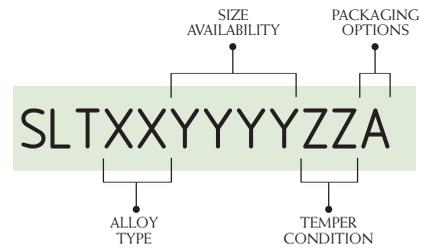
Fort Wayne Metals offers a variety of biocompatible coatings that can be applied to SLT wire. Common coatings include ethylene tetrafluoroethylene (ETFE), polytetrafluoroethylene (PTFE) and perfluoroalkoxy (PFA).

Shelf Life

SLT wire has currently been tested in various diameters and spool types for as long as ten months. No evidence of change has been observed in axial mechanicals and no degradation of straightness has been seen. Only a slight decrease in tensile strength, less than 2%, has been noted.

Specification

In cases where no specification exists, the customer may find it helpful to follow this layout to create their own part number. Below is the optional part number layout:



As an example, part number *SLT4V0283FH2* would describe SLT wire that is produced from alloy 304V, with a diameter of .0283", at the full hard condition, and packaged on a DIN 160 spool. In the sections listed below the corresponding letters and part number codes are described.

Alloy Selection for SLT Wire (XX)

Fort Wayne Metals offers various types of medical grade wire that can be transformed into SLT wire. Our engineering staff can assist you in making an alloy decision that best suits your application.

The list below contains some alloys that may be used for SLT wire along with the corresponding part number codes. Please check with Fort Wayne Metals technical staff for other available alloy options.

Alloy Type	Code (XX)
304V	4V
304LV	4L
302	32
301	31
35N LT [®]	35
316LVM	6L
Nitinol #1	N1

Size Availability (YYYY)

Fort Wayne Metals offers SLT wire in a variety of diameters from .003" to approximately .035". More diameter options may be available. Please contact your customer service associate for more information. For a diameter of 0.0283" (.72 mm) the corresponding part number code would be YYYY = 0283.

Temper Conditions (ZZ)

SLT wire can also be produced in many different temper conditions. Listed below are some examples along with the corresponding order codes. Please note that all conditions may not be available at certain diameters.

Temper Condition	Code (ZZ)
3/4 Hard	3H
Full Hard	FH
Spring	SP
Double Spring	DS
Ultra Spring	UP
Hyten	HY

Packaging Options (A)

Fort Wayne Metals offers several different packaging options for SLT wire. Our packaging ensures that the quality of our wire is protected while en route to our customers. Depending on the diameter size of the SLT wire, certain spools may be more beneficial than others. Please ask Fort Wayne Metals technical staff for recommendations. Below is a list of a few of the spool types offered for SLT wire and the corresponding recommended wire sizes:

Spool	Wire Diameter Inches (mm)	Flange Diameter Inches (mm)	Hub Diameter Inches (mm)	Traverse Length Inches (mm)	Bore Diameter Inches (mm)	Code (A)
DIN 160	Up to .005" (.127 mm)	6.3" (160 mm)	3.9" (99 mm)	5" (127 mm)	.87" (22 mm)	2
Weld Wire Reel	.006" - .0236" (.15 - .6 mm)	11.7" (297 mm)	8.3" (211 mm)	3.62" (92 mm)	2" (50.8 mm)	3
13.75" x 2.56"	.006" - .0365" (.15 - .927 mm)	13.75" (349 mm)	11" (279 mm)	2.5" (63.5 mm)	2" (50.8 mm)	4
K355	.013" - .0283" (.33 - .72 mm)	13.98" (355 mm)	8.82" (224 mm)	6.3" (160 mm)	1.42" (36 mm)	5
SH 370K Reel	.0283" - .0365" (.72 - .927 mm)	14.57" (370 mm)	12.24" (311 mm)	2.76" (70 mm)	12" (305 mm)	6

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