

For the Repair or Manufacture of Mass Spec Filaments and Heaters

Scientific Instrument Services™ supplies a wide range of resistance type wires for the repair and manufacture of filaments and heaters for mass spectrometers, SEM's and scientific instruments. Wires are often used for these applications such as rhenium, tungsten, platinum, and tantalum .

See Page A34 for Gage Size to Decimal Cross Reference Table

Thermocouple wires, such as chromel, constantan, alumel, and iron can be used to manufacture your own thermocouples. In addition, we supply a wide range of high purity wires including gold, silver and platinum for a wide range of uses including gasket fabrication and sputter coating. In addition to the wires listed below, we can obtain other sizes and types. Call with your specifications for a price quotation.

Quantity discounts - 10% discount on quantities of 10 or more feet with the exception of gold, silver, and platinum.

Part No.	Dimensions in (mm)	Resistance* (ohms/cm)	Price/ft. (1 ft.= .305m)
Alumel Wire			
W369	.005" (.13) dia.	.23600	
W380	.008" (.20) dia.	.08200	
W370	.010" (.25) dia.	.05827	
W371	.015" (.38) dia.	.02597	
W372	.020" (.50) dia.	.01442	
W381	.032" (.81) dia.	.00700	
Chromalloy O Wire			
W373	.010" (.25) dia.	.26800	
Chromel (90% NI/10% CR) Wire			
W374	.008" (.20) dia.	.20000	
W270	.010" (.25) dia.	.13963	
W272	.0125" (.32) dia.	.08793	
W274	.015" (.38) dia.	.06224	
W271	.020" (.51) dia.	.03455	
W379	.032" (.81) dia.	.00200	
Constantan (55% CU/45%NI) Wire			
W281	.005" (.13) dia.	.38100	
W280	.010" (.25) dia.	.08984	
W282	.0125" (.32) dia.	.05483	
W284	.015" (.38) dia.	.03888	
W285	.020" (.51) dia.	.02246	
W283	.032" (.81) dia.	.00130	
Copper Wire (OFHC), 99.95% Purity			
W286	.003" (.08) dia.	.03402	
W289	.010" (.25) dia.	.00348	
W472	.018" (.46) dia.	.00110	
W290	.020" (.51) dia.	.00087	
W292	.031" (.79) dia.	.00035	
W294	.040" (1.00) dia.	.00022	
Gold Wire, 99.99% Purity			
W351	.020" (.51) dia.	.00120	
W352	.025" (.64) dia.	.00073	
W353	.031" (.79) dia.	.00048	
W354	.040" (1.00) dia.	.00030	
Inconel 600 Wire			
W175	.020" (.51) dia.	.04991	
Inconel X750 Wire			
W180	.020" (.51) dia.	.04991	

* Resistance values are based on calculated theoretical values and may not be accurate

Part No.	Dimensions in (mm)	Resistance* (ohms/cm)	Price/ft.
Iridium Wire, 99.8% Purity			
W349	.003" (.08) dia.	.12800	
W474	.004" (.102) dia.		
W347	.005" (.127) dia.	.04500	
W350	.006" (.15) dia.	.29990	
W348	.007" (.179) dia.	.02260	
Iridium Ribbon, 99.8% Purity			
W421	.0015" x .030 (.04 x .76)	.01930	
Iron Wire			
W375	.005" (.13) dia.	.10200	
W376	.010" (.25) dia.	.00400	
W377	.015" (.38) dia.	.00160	
W378	.020" (.51) dia.	.00090	
Kovar Wire			
W425	.040" (1.00) dia.	.00623	
50%Moly/50% Rhenium Wire			
W455	.005" (.13) dia.	.01540	
W295	.030" (.76) dia.	.00656	
Molybdenum Ribbon, 99.95% Purity			
W300	.005" x .500" (.13 x 12.70)	.00031	
Molybdenum Wire			
W471	.005" (.13) dia.	.04140	
W296	.024" (.61) dia.	.00178	
W298	.030" (.76) dia.	.00115	
W301	.0315" (.80) dia.	.00100	
W299	.040" (1.00) dia.	.00066	
Nichrome Ribbon (80% NI/20% CR)			
W460	.0005" x .500" (.0127 x 12.7)	.06268	
W461	.0007" x .500" (.0179 x 12.7)	.05100	
W462	.001" x .200" (.025 x 5.08)	.08100	
W256	.001" x .060" (.025 x 1.52)	.29526	
W255	.002" x .250" (.051 x 6.35)	.03480	
W258	.003" x .062" (.076 x 1.57)	.09403	
W260	.004" x .125" (.102 x 3.18)	.03459	
W257	.005" x .037" (.127 x .94)	.09399	
W266	.005" x .040" (.127 x 1.00)	.08835	
W275	.005" x .100" (.127 x 2.54)	.03478	
W401	.005" x .150" (.127 x 3.81)	.02319	
W261	.005" x .180" (.127 x 4.57)	.01933	
W267	.005" x .190" (.127 x 4.83)	.01829	
W268	.005" x .200" (.127 x 5.08)	.01739	
W262	.005" x .250" (.127 x 6.35)	.01391	

Additional types of wires available on special request. A 10% discount on quantities of 10 or more feet on all wires except gold, silver and platinum.