The CRC Materials Science & Engineering Handbook

Platform: Windows
Requires Mathcad 3.1 or higher, 5 MB hard disk space
Available for ground shipment

MathSoft has joined with CRC to offer you electronic access to the tables of data and diagrams that you use every day from *The CRC Materials Science and Engineering Handbook*. This Electronic Book provides interactive on-line access to over 140 tables of data, illustrations and Mathcad plots. Because it uses Mathcad, every number is "live." For example, suppose you are interested in the critical fields and critical temperatures of some common superconducting alloys. You would pick the Selected Properties of Superconductive Elements from the book's table of contents. A complete table listing of common elements, together with critical fields in oersteds and critical temperatures in Kelvin, appears. Double-click on the critical field of Indium and it appears in your Mathcad document complete with correct units.

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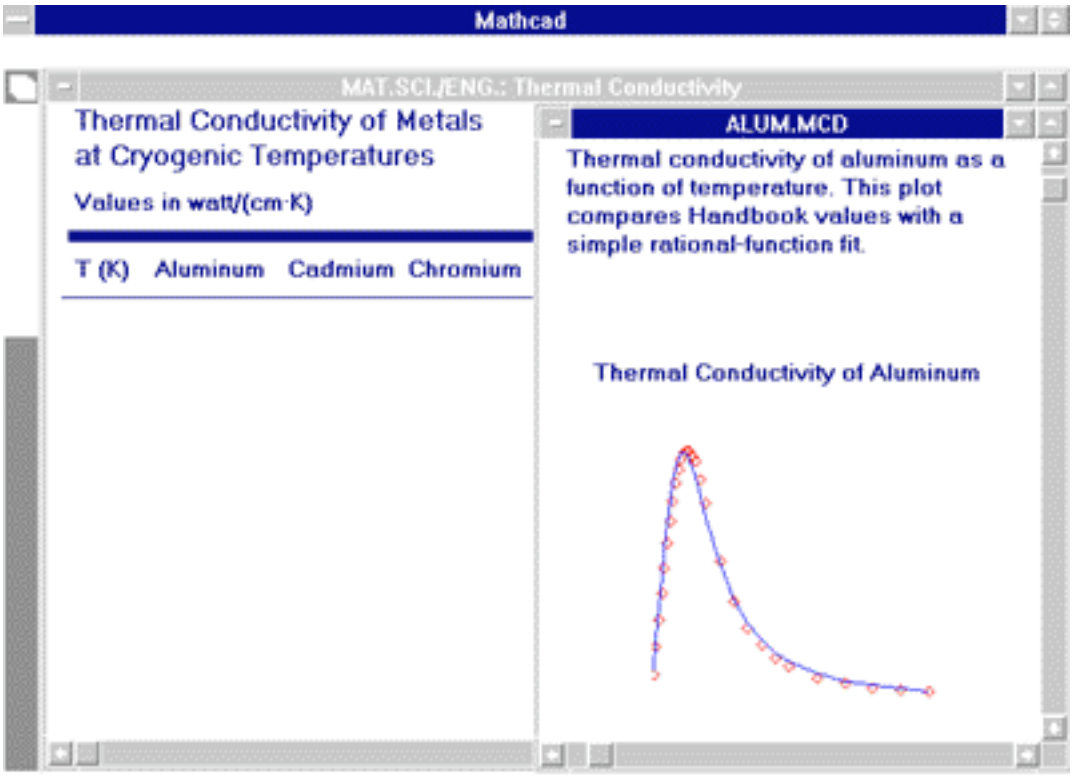

The CRC Materials Science and Engineering Handbook includes tables of of "live" data that you can drag-and-drop into your Mathcad document.

Topics include: Properties of Superconducting Elements, Engineering Ceramics and Superconducting Compounds, Crystal Systems and Bravis Lattices, Mechanical Properties of Selected Irons and Steels, Hardness and Resistivities of Ceramics and Polymers, and more.

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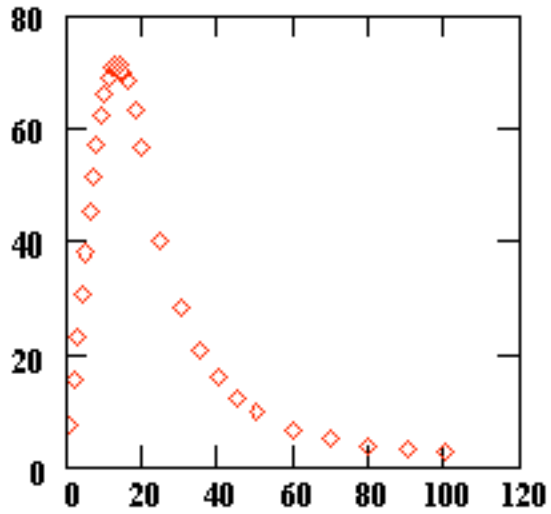
Thermal Conductivity of Metals at Cryogenic Temperatures

T (K)	Aluminum	Cadmium	(watt/cm·K) Chromium	Copper	Gold
1	7.8	48.7	0.401	28.7	4.4
3	23.2	104	1.20	85.5	13.1
5	38.1	69.1	1.99	138	20.7
7	51.5	28.0	2.77	177	26.0
9	62.2	12.2	3.50	195	28.2
11	69.0	6.91	4.18	193	27.7
13	71.5	4.67	4.78	176	25.5
15	70.2	3.55	5.27	50	22.6
18	63.5	2.62	5.81	124	17.7
20	56.5	2.26	6.01	105	15.0
25	40.0	1.79	6.07	50	10.2
30	28.5	1.56	5.58	43	7.6
35	21.0	1.41	5.03	29	6.1
40	16.0	1.32	4.30	20.5	5.2
50	10.0	1.20	3.17	12.2	4.2
60	6.7	1.13	2.48	8.5	3.8
80	4.0	1.06	1.82	5.7	3.52
100	3.0	1.03	1.58	4.83	3.45

Thermal Conductivity of Aluminum (watt/cm·K) vs. Temperature (K)



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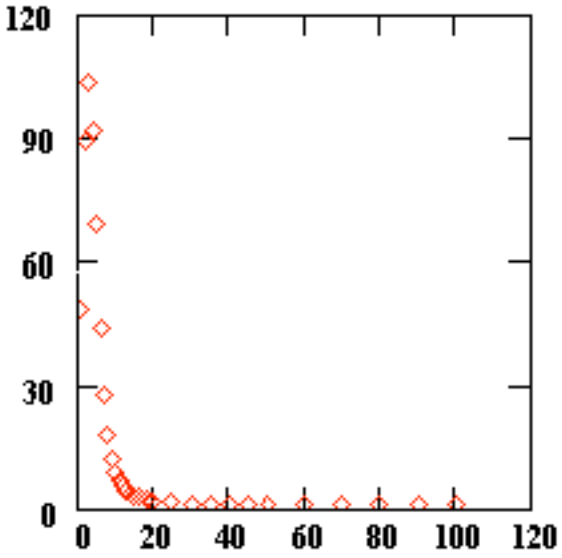
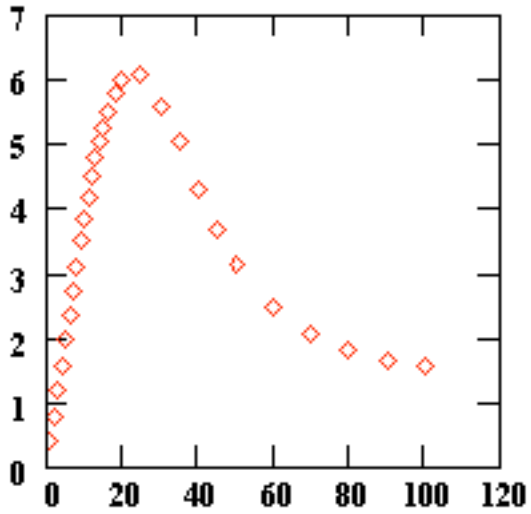
Thermal Conductivity of Cadmium (watt/cm·K) vs. Temperature (K)



Thermal Conductivity of Chromium (watt/cm·K) vs. Temperature (K)



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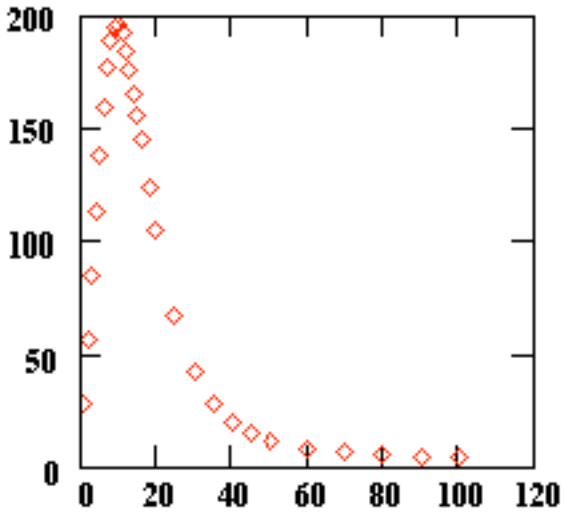
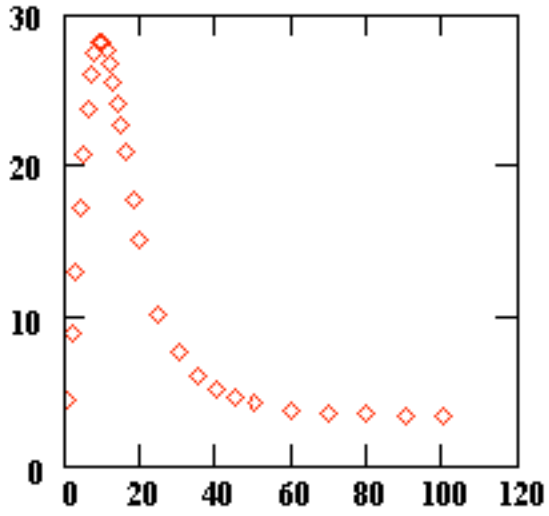
Thermal Conductivity of Copper (watt/cm·K) vs. Temperature (K)



Thermal Conductivity of Gold (watt/cm·K) vs. Temperature (K)



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