

## Expanded Constantan Heater

Heanjia Constantan expanded sheet heater is a durable heating product that is oxidation and creeping resistant. High mechanical strength. It offers low temperature coefficient of electric resistivity and produce large amount of heat when heated above 650C. Extremely ductile constantan mesh is produced into any shape to fit in the specific configurations.

Constantan shows superior corrosion resistance than Manganin. Following is the standard produced Constantan expanded sheet heater specification.

| Style           | Weight per sq. ft, pounds | Center to center size, inches |          | Opening size, |            | Strand size |          | Gauge   | Overall thickness | Open area |
|-----------------|---------------------------|-------------------------------|----------|---------------|------------|-------------|----------|---------|-------------------|-----------|
|                 |                           | SWD                           | LWD      | SWO           | LWO        | Thickness   | width    |         |                   |           |
| 1/4 in-20R      | .86                       | .255 in                       | 1 in     | 11/64 in      | 23/32 in   | .036 in     | .073 in  | 20      | .125 in           | 45 %      |
| 1/4 in-18R      | 1.14                      | .255 in                       | 1 in     | 11/64 in      | 23/32 in   | .048 in     | .073 in  | 18      | .125 in           | 43 %      |
| 1/2 in-20R      | .43                       | .500 in                       | 1.20 in  | 7/16 in       | 15/16 in   | .036 in     | .070 in  | 20      | .124 in           | 80 %      |
| 1/2 in-18R      | .70                       | .500 in                       | 1.20 in  | 3/8 in        | 15/16 in   | .048 in     | .088 in  | 18      | .155 in           | 77 %      |
| 1/2 in-16R      | .86                       | .500 in                       | 1.20 in  | 23/64 in      | 15/16 in   | .060 in     | .088 in  | 16      | .157 in           | 71 %      |
| 1/2 in-13R      | 1.46                      | .500 in                       | 1.20 in  | 11/32 in      | 15/16 in   | .048 in     | 0.093 in | 13      | .182 in           | 58 %      |
| 3/4 in-16       | .54                       | .920 in                       | 2 in     | 13/16 in      | 1-3/4 in   | .060 in     | .092 in  | 16      | .186 in           | 85 %      |
| 3/4 in-13       | .80                       | .925 in                       | 2 in     | 3/4 in        | 1-11/16 in | .090 in     | .096 in  | 13      | .195 in           | 78 %      |
| 3/4 in-10       | 1.20                      | .925 in                       | 2 in     | 3/4 in        | 1-5/8 in   | .060 in     | .144 in  | 13      | .282 in           | 77 %      |
| 3/4 in-9        | 1.80                      | .925 in                       | 2 in     | 3/4 in        | 1-1/2 in   | .090 in     | .148 in  | 10      | .300 in           | 68 %      |
| 1-1/2 in-16     | .40                       | 1.330 in                      | 3 in     | 1-1/4 in      | 2-5/8 in   | .090 in     | .108 in  | 16      | .211 in           | 89 %      |
| 1-1/2 in-13     | .60                       | 1.330 in                      | 3 in     | 1-3/16 in     | 2-1/2 in   | .134 in     | .107 in  | 13      | .215 in           | 86 %      |
| 1-1/2 in-9      | 1.20                      | 1.330 in                      | 3 in     | 1-3/16 in     | 2-5/8 in   | .060 in     | .140 in  | 10      | .295 in           | 75 %      |
| 1-1/2 in-6      | 2.45                      | 1.330 in                      | 3 in     | 1-1/16 in     | 2-1/2 in   | .090 in     | .200 in  | 3/16 in | .425 in           | 63 %      |
| 1/4 in- 20      | .84                       | .258 in                       | 1.050 in | 1-3/16 in     | 2-1/2 in   | .090 in     | .086 in  | 20      | .030 in           | 35 %      |
| 1/4 in- 18      | 1.12                      | .258 in                       | 1.050 in | 3/32 in       | 25/32 in   | .040 in     | .085 in  | 18      | .040 in           | 35 %      |
| 1/2 in - 20     | .40                       | .500 in                       | 1.250 in | 3/8 in        | 1 in       | .030 in     | .074 in  | 20      | .029 in           | 65 %      |
| 1/2 in - 18     | .66                       | .500 in                       | 1.250 in | 9/32 in       | 1 in       | .040 in     | .095 in  | 18      | .039 in           | 60 %      |
| 1/2 in - 16     | .80                       | .500 in                       | 1.250 in | 1/4 in        | 1 in       | .050 in     | .100 in  | 16      | .050 in           | 60 %      |
| 1/2 in - 13     | 1.38                      | .500 in                       | 1.250 in | 1/4 in        | 1 in       | .070 in     | .120 in  | 13      | .070 in           | 57 %      |
| 3/4 in - 16     | .50                       | .500 in                       | 1.250 in | 3/4 in        | 1-3/4 in   | .048 in     | .112 in  | 16      | .048 in           | 74 %      |
| 3/4 in - 14     | .65                       | .925 in                       | 2.1 in   | 11/16 in      | 1-13/16 in | .063 in     | .115 in  | 14      | .061 in           | 73 %      |
| 3/4 in - 13     | .75                       | .925 in                       | 2.1 in   | 11/16 in      | 1-25/32 in | .070 in     | .120 in  | 13      | .0710 in          | 73 %      |
| 3/4 in - 10     | 1.14                      | .923 in                       | 2.1 in   | 5/8 in        | 1-3/4 in   | .070 in     | .160 in  | 13      | .700 in           | 68 %      |
| 3/4 in - 9      | 1.70                      | .923 in                       | 2.1 in   | 5/8 in        | 1-11/16 in | .115 in     | .160 in  | 10      | .110 in           | 78 %      |
| 1 in -16F       | 1.37                      | 1.010 in                      | 2.56 in  | 7/8           | 1-3/4      | .120 in     | .156 in  | 16      | .700 in           | 61 %      |
| 1 in -9         | .37                       | 1.330 in                      | 3.2 in   | 1-1/16 in     | 1-11/16 in | .050 in     | .120 in  | 14      | .110 in           | 82 %      |
| 1-1/2 in -16    | .56                       | 1.330 in                      | 3.2 in   | 1-1/16 in     | 2-1/4 in   | .070 in     | .130 in  | 13      | .048 in           | 80 %      |
| 1-1/2 in -13    | 1.12                      | 1.330 in                      | 3.2 in   | 1 in          | 2-3/4 in   | .110 in     | .165 in  | 13      | .118 in           | 77 %      |
| 1-1/2 in -9     | .81                       | 1.830 in                      | 4.360 in | 1.45 in       | 2-5/8 in   | .134 in     | .150 in  | 10      | .048 in           | 83 %      |
| 2 in -9         | .26                       | .500 in                       | 1.20 in  | 3/8 in        | 3-11/16 in | .050 in     | .092 in  | 16      | .070 in           | 70 %      |
| 1/2 in -.051    | .43                       | .500 in                       | 1.20 in  | 3/8 in        | 15/16 in   | .080 in     | .094 in  | 10      | .110 in           | 60 %      |
| 1/2 in -.081    | .17                       | .920 in                       | 2 in     | 13/16 in      | 15/16 in   | .050 in     | .109 in  | 16      | .280 in           | 90 %      |
| 3/4 in -.051    | .32                       | .920 in                       | 2 in     | 3/4 in        | 1-3/4 in   | .080 in     | .126 in  | 10      | .158 in           | 76 %      |
| 3/4 in -.081    | .41                       | .920 in                       | 2 in     | 3/4 in        | 1-11/16 in | .080 in     | .164 in  | 16      | .186 in           | 74 %      |
| 3/4 in -.080    | .65                       | .920 in                       | 2 in     | 11/16 in      | 1-11/16 in | .125 in     | .170 in  | 13      | .200 in           | 66 %      |
| 3/4 in -.125    | .16                       | 1.330 in                      | 3 in     | 1-3/16 in     | 2-1/2 in   | .063 in     | .110 in  | 10      | .305 in           | 87 %      |
| 1-1/2 in - .081 | .42                       | 1.330 in                      | 3 in     | 1-3/16 in     | 2-1/2 in   | .125 in     | .160 in  | 10      | .240 in           | 78 %      |

|                  |      |          |          |           |            |         |         |        |         |      |
|------------------|------|----------|----------|-----------|------------|---------|---------|--------|---------|------|
| 1-1/2 in - .0125 | .25  | .500 in  | 1.250 in | 5/16 in   | 1 in       | .040 in | .100 in | 16 B&S | .300 in | 64 % |
| ½ in -.051       | .40  | .500 in  | 1.250 in | 5/16 in   | 1 in       | .060 in | .108 in | 12 B&S | .040 in | 59 % |
| ½ in -.081       | .16  | .920 in  | 2.130 in | ¼ in      | 1-13/16 in | .040 in | .130 in | 16 B&S | .060 in | 76 % |
| ¾ in -.051       | .30  | .920 in  | 2.130 in | 11/16 in  | 1-3/4 in   | .070 in | .140 in | 12 B&S | .040 in | 72 % |
| ¾ in -.081       | .38  | .920 in  | 2.130 in | 11/16 in  | 1-3/4 in   | .070 in | .180 in | 12 B&S | .070 in | 65 % |
| ¾ in -.125       | .62  | .920 in  | 2.130 in | 5/8 in    | 1-3/4 in   | .095 in | .198 in | 8 B&S  | .095 in | 63 % |
| 1-1/2 in - .081  | .20  | 1.330 in | 3.135 in | 1-1/6 in  | 2-3/4 in   | .058 in | .168 in | 12 B&S | .060 in | 77 % |
| 1-1/2 in - .125  | 1.47 | .250 in  | 3.135 in | 1 in      | 5/8 in     | .058 in | .087 in | 18     | .300 in | 30 % |
| ¼ in -18         | .75  | .500 in  | 1 in     | 1/8 in    | 15/16 in   | .080 in | .088 in | 19     | .164 in | 77 % |
| ½ in -18         | .94  | .500 in  | 1.2 in   | 7/16 in   | 15/16 in   | .050 in | .088 in | 16     | .164 in | 70 % |
| ½ in -16         | 1.88 | .500 in  | 1.2 in   | 7/16 in   | 7/8 in     | .050 in | .120 in | 13     | .225 in | 58 % |
| ½ in -13         | .62  | .925 in  | 2 in     | 5/16 in   | 1-3/4 in   | .062 in | .108 in | 16     | .200 in | 85 % |
| ¾ in -16         | .93  | .925 in  | 2 in     | 13/16 in  | 1-11/16 in | .093 in | .110 in | 13     | .200 in | 78 % |
| ¾ in -9          | 2.05 | .925 in  | 2 in     | ¼ in      | 1-1/2 in   | .062 in | .160 in | 10     | .300 in | 67 % |
| 1-1/2 in -16     | .45  | 1.335 in | 3 in     | 11/16 in  | 2-3/4 in   | .093 in | .116 in | 16     | .220 in | 89 % |
| 1-1/2 in -9      | 1.37 | 1.330 in | 3 in     | 1-1/4 in  | 2-5/8 in   | .140 in | .155 in | 10     | .280 in | 75 % |
| ¼ in -18         | 1.43 | .250 in  | 1 in     | 1-1/4 in  | 21/32 in   | .062 in | .090 in | 18     | .047 in | 29 % |
| ½ in -18         | .70  | .500 in  | 1.275 in | 5/64 in   | 1 in       | .140 in | .099 in | 18     | .040 in | 68 % |
| ½ in -16         | .88  | .500 in  | 1.275 in | 5/16 in   | 1 in       | .047 in | .099 in | 16     | .050 in | 60 % |
| ½ in -13         | 1.78 | .500 in  | 1.275 in | ¼ in      | 1 in       | .040 in | .099 in | 13     | .080 in | 56 % |
| ¾ in -16         | .48  | .925 in  | 2.1 in   | ¼ in      | 1-13/16 in | .050 in | .126 in | 16     | .050 in | 75 % |
| ¾ in -13         | .59  | .925 in  | 2.1 in   | 5/8 in    | 1-3/4 in   | .080 in | .120 in | 13     | .080 in | 74 % |
| ¾ in -13         | .88  | .925 in  | 2.1 in   | 5/8 in    | 1-5/8 in   | .130 in | .170 in | 10     | .119 in | 64 % |
| 1-1/2 in -16     | .43  | 1.334 in | 3.150 in | 1-1/16 in | 2-3/4 in   | .050 in | .128 in | 16     | .050 in | 83 % |
| 1-1/2 in -13     | .68  | 1.335 in | 3.150 in | 1 in      | 2-5/8 in   | .080 in | .126 in | 13     | .080 in | 79 % |
| 1-1/2 in -9      | 1.35 | 1.335 in | 3.150 in | 1 in      | 2-1/2 in   | .130 in | .170 in | 10     | .119 in | 76 % |



## Expanded Constantan Heater

[www.nickel-wiremesh.com](http://www.nickel-wiremesh.com)