

CONDENSER TUBE EXPANDER

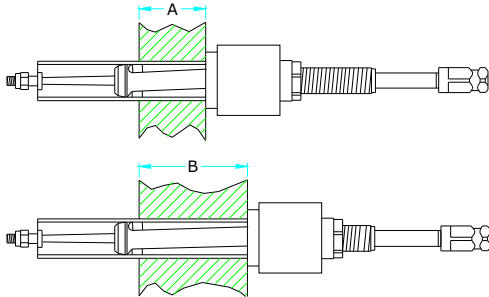


TUBE TOOLS

'B800' SERIES Tube O. D. 1 1/2" - 1.1/2"

FEATURES:

- Use -This is the most popular expander for use on heat exchanger and condensers with tubes of 1/2"- 1.1/2" O.D.



Sizes Available : 1/2" O.D. to 1.1/2" O.D.
Tube Internal diameter : 8.4mm (0.334") to 36.3mm (1.43")
Roller Length of Tube Expander: 1.1/2" (38.1mm) &
2.1/4" (57.1mm)

| TUBE EXPANDERS FITTED WITH ROLLER LENGTH | FOR TUBE SHEET ADJUSTABLE RANGE | |
|--|------------------------------------|-----------------|
| | MINIMUM A | MAXIMUM B |
| (38.1mm) 1.1/2" | (12.7mm) 1/2" | (38.1mm) 1.1/2" |
| (57.1mm) 2.1/4" | (31.7mm) 1.1/4" | (57.1mm) 2.1/4" |

| Tube O.D. (Mm) inch | Tube Thickness | | Tube I. D. | | Minimum I. D. Tool Enters | | Maximum Expansion of Tool | | EXPANDER with (38.10mm) 1.1/2" Long rollers | | | EXPANDER with (57.15mm) Set No. 2.1/4" Long rollers | | | Ratchet Size Square Inch | |
|---------------------------|----------------|------|------------|------|---------------------------|------|---------------------------|------|---|-------------------|------------|---|-------------------|----------------|--------------------------|-------------|
| | Bwg | Inch | Mm | Inch | Mm | Inch | Mm | Inch | Mm | Complete Tool No. | Roller No. | Mandrel No. | Complete Tool No. | Roller Set No. | | Mandrel No. |
| 1/2 | 14 | .083 | 2.10 | .334 | 8.4 | .324 | 8.2 | .374 | 9.5 | B797 | 797 | 797 | - | - | - | 3/8 |
| | 15 | .072 | 1.82 | .356 | 9.0 | .348 | 8.8 | .398 | 10.1 | B799 | R-1 | 799 | - | - | - | |
| | 16 | .065 | 1.65 | .370 | 9.4 | .360 | 9.2 | .410 | 10.4 | B801 | R-1 | M-1 | - | - | - | |
| | 17 | .058 | 1.47 | .384 | 9.7 | .374 | 9.5 | .424 | 10.7 | B803 | R-2 | M-1 | - | - | - | 3/8 |
| | 18 | .049 | 1.24 | .402 | 10.2 | .392 | 9.9 | .447 | 11.3 | B805 | R-3 | M-2 | - | - | - | |
| 20 | .035 | 0.88 | .430 | 10.9 | .406 | 10.3 | .461 | 11.7 | B805 S | R-3 | M-3 | - | - | - | | |
| 5/8 | 12 | .109 | 2.76 | .407 | 10.3 | .392 | 9.9 | .447 | 11.3 | B805 | R-3 | M-2 | B806 | R-3-A | M-2 | 3/8 |
| | 13 | .095 | 2.41 | .435 | 11.0 | .425 | 10.8 | .480 | 12.1 | B807 | R-4 | M-3 | B808 | R-4-A | M-3 | |
| | 14 | .083 | 2.10 | .459 | 11.6 | .449 | 11.4 | .509 | 12.9 | B809 | R-4 | M-4 | B810 | R-4-A | M-4 | |
| | 15 | .072 | 1.82 | .481 | 12.2 | .471 | 11.9 | .536 | 13.6 | B811 | R-5 | M-5 | B812 | R-5-A | M-5 | 3/8 |
| | 16 | .065 | 1.65 | .495 | 12.5 | .485 | 12.3 | .550 | 13.9 | B813 | R-6 | M-5 | B814 | R-6-A | M-5 | |
| | 17 | .058 | 1.47 | .509 | 12.9 | .499 | 12.6 | .564 | 14.3 | B815 | R-6 | M-6 | B816 | R-6-A | M-6 | |
| | 18 | .049 | 1.24 | .527 | 13.3 | .517 | 13.1 | .572 | 14.5 | B817 | R-7 | M-7 | B818 | R-7-A | M-7 | |
| | 19 | .042 | 1.06 | .541 | 13.7 | .522 | 13.2 | .582 | 14.7 | B819 | R-7 | M-6 | B820 | R-7-A | M-6 | 3/8 |
| 20 | .035 | 0.88 | .555 | 14.1 | .536 | 13.6 | .596 | 15.1 | B819S | R-7 | M-8 | B820S | R-7-A | M-8 | | |
| 21 | .032 | 0.81 | .561 | 14.2 | .536 | 13.6 | .596 | 15.1 | B819S | R-7 | M-8 | B820S | R-7-A | M-8 | | |
| 22 | .028 | 0.71 | .569 | 14.4 | .536 | 13.6 | .596 | 15.1 | B819S | R-7 | M-8 | B820S | R-7-A | M-8 | | |
| 3/4 | 10 | .134 | 3.40 | .482 | 12.2 | .471 | 11.9 | .536 | 13.6 | B811 | R-5 | M-5 | B812 | R-5-A | M-5 | 3/8 |
| | 11 | .120 | 3.04 | .510 | 12.9 | .499 | 12.6 | .564 | 14.3 | B815 | R-6 | M-6 | B816 | R-6-A | M-6 | |
| | 12 | .109 | 2.76 | .532 | 13.5 | .522 | 13.2 | .582 | 14.7 | B819 | R-7 | M-6 | B820 | R-7-A | M-6 | |
| | 13 | .095 | 2.41 | .560 | 14.2 | .550 | 13.9 | .615 | 15.6 | B821 | R-8 | M-8 | B822 | R-8-A | M-8 | 3/8 |
| | 14 | .083 | 2.10 | .584 | 14.8 | .574 | 14.5 | .639 | 16.2 | B823 | R-9 | M-8 | B824 | R-9-A | M-8 | |
| | 15 | .072 | 1.82 | .606 | 15.3 | .596 | 15.1 | .661 | 16.7 | B825 | R-10 | M-8 | B826 | R-10-A | M-8 | |
| | 16 | .065 | 1.65 | .620 | 15.7 | .605 | 15.3 | .685 | 17.4 | B827 | R-10 | M-9 | B828 | R-10-A | M-9 | 3/8 |
| | 17 | .058 | 1.47 | .630 | 16.1 | .619 | 15.7 | .699 | 17.7 | B829 | R-11 | M-9 | B830 | R-11-A | M-9 | |
| 18 | .049 | 1.24 | .652 | 16.5 | .619 | 15.7 | .699 | 17.7 | B829 | R-11 | M-9 | B830 | R-11-A | M-9 | | |
| 19 | .042 | 1.06 | .666 | 16.9 | .642 | 16.3 | .722 | 18.3 | B831 | R-12 | M-9 | B832 | R-12-A | M-9 | 3/8 | |
| 20 | .035 | 0.88 | .680 | 17.2 | .642 | 16.3 | .722 | 18.3 | B831 | R-12 | M-9 | B832 | R-12-A | M-9 | | |
| 21 | .032 | 0.81 | .686 | 17.4 | .642 | 16.3 | .722 | 18.3 | B831 | R-12 | M-9 | B832 | R-12-A | M-9 | | |
| 22 | .028 | 0.71 | .694 | 17.6 | .642 | 16.3 | .722 | 18.3 | B831 | R-12 | M-9 | B832 | R-12-A | M-9 | | |
| 7/8 | 10 | .134 | 3.40 | .607 | 15.4 | .596 | 15.1 | .661 | 16.7 | B825 | R-10 | M-8 | B826 | R-10-A | M-8 | 3/8 |
| | 11 | .120 | 3.04 | .635 | 16.1 | .619 | 15.7 | .699 | 17.7 | B829 | R-11 | M-9 | B830 | R-11-A | M-9 | |
| | 12 | .109 | 2.76 | .657 | 16.6 | .642 | 16.3 | .722 | 18.3 | B831 | R-12 | M-9 | B832 | R-12-A | M-9 | |
| | 13 | .095 | 2.41 | .685 | 17.4 | .670 | 17.0 | .750 | 19.0 | B833 | R-13 | M-10 | B834 | R-13-A | M-10 | 3/8 |
| | 14 | .083 | 2.10 | .709 | 18.0 | .685 | 17.4 | .774 | 19.6 | B835 | R-14 | M-11 | B836 | R-14-A | M-11 | |
| | 15 | .072 | 1.82 | .731 | 18.5 | .712 | 18.0 | .801 | 20.3 | B837 | R-15 | M-11 | B838 | R-15-A | M-11 | |
| | 16 | .065 | 1.65 | .745 | 18.9 | .726 | 18.4 | .815 | 20.7 | B839 | R-15 | M-12 | B840 | R-15-A | M-12 | 3/8 |
| | 17 | .058 | 1.47 | .759 | 19.2 | .740 | 18.8 | .829 | 21.0 | B843 | R-16 | M-12 | B844 | R-16-A | M-12 | |
| 18 | .049 | 1.24 | .777 | 19.7 | .740 | 18.8 | .829 | 21.0 | B843 | R-16 | M-12 | B844 | R-16-A | M-12 | | |

CONDENSER TUBE EXPANDER



TUBE TOOLS

'B800' SERIES Tube O. D. 1 1/2" - 1.1/2"

| Tube O.D. (Mm) inch | Tube Thickness | | Tube I. D. | | Minimum I. D. Tool Enters | | Maximum Expansion of Tool | | EXPANDER with (38.10mm) 1.1/2" Long rollers | | | EXPANDER with (57.15mm) 2.1/4" Long rollers | | | Ratchet Size Square Inch | | | |
|---------------------------|------------------|------|------------|-------|---------------------------|-------|---------------------------|-------|---|-------------------|----------------|---|-------------------|----------------|--------------------------|-------------|------|-----|
| | Bwg | Inch | Mm | Inch | Mm | Inch | Mm | Inch | Mm | Complete Tool No. | Roller Set No. | Mandrel No. | Complete Tool No. | Roller Set No. | | Mandrel No. | | |
| 1 (25.40) | 8 | .165 | 4.19 | .669 | 17.0 | .654 | 16.6 | .732 | 18.6 | B841 | R-13 | M-9 | B842 | R-13-A | M-9 | 3/8 | | |
| | 9 | .148 | 3.75 | .701 | 17.8 | .685 | 17.4 | .772 | 19.6 | B835 | R-14 | M-11 | B836 | R-14-A | M-11 | | | |
| | 10 | .134 | 3.40 | .728 | 18.5 | .709 | 18.0 | .799 | 20.3 | B837 | R-15 | M-11 | B836 | R-15-A | M-11 | | | |
| | 3/8 | 11 | .120 | 3.04 | .760 | 19.3 | .760 | 19.3 | .827 | 21.0 | B843 | R-16 | M-12 | B844 | R-16-A | M-12 | 3/8 | |
| | | 12 | .109 | 2.76 | .787 | 20.0 | .787 | 20.0 | .850 | 21.6 | B845 | R-17 | M-12 | B846 | R-17-A | M-12 | | |
| | | 13 | .095 | 2.41 | .807 | 20.5 | .807 | 20.5 | .878 | 22.3 | B847 | R-18 | M-12 | B848 | R-18-A | M-12 | | |
| | 3/8 | 14 | .083 | 2.10 | .831 | 21.1 | .835 | 21.2 | .906 | 23.0 | B849 | R-18 | M-13 | B850 | R-18-A | M-13 | 3/8 | |
| | | 15 | .072 | 1.82 | .854 | 21.7 | .835 | 21.2 | .933 | 23.7 | B851 | R-19 | M-13 | B852 | R-19-A | M-13 | | |
| | | 16 | .065 | 1.65 | .870 | 22.1 | .862 | 21.9 | .933 | 23.7 | B851 | R-19 | M-13 | B852 | R-19-A | M-13 | | |
| | | 17 | .058 | 1.47 | .882 | 22.4 | .862 | 21.9 | .961 | 24.4 | B855 | R-21 | M-13 | B856 | R-21-A | M-13 | | |
| | 1.1/8 (28.58) | 18 | .049 | 1.24 | .902 | 22.9 | .862 | 21.9 | .961 | 24.4 | B855 | R-21 | M-13 | B856 | R-21-A | M-13 | 3/8 | |
| | | 19 | .042 | 1.06 | .913 | 23.2 | .862 | 21.9 | .961 | 24.4 | B855 | R-21 | M-13 | B856 | R-21-A | M-13 | | |
| 20 | | .035 | 0.88 | .929 | 23.6 | .862 | 21.9 | .961 | 24.4 | B855 | R-21 | M-13 | B856 | R-21-A | M-13 | | | |
| 1.1/4 (31.75) | | 8 | .165 | 4.19 | .791 | 20.1 | .776 | 19.7 | .874 | 22.2 | B853 | R-20 | M-13 | B854 | R-20-A | M-13 | 3/8 | |
| | | 9 | .148 | 3.75 | .827 | 21.0 | .807 | 20.5 | .906 | 23.0 | B849 | R-18 | M-13 | B850 | R-18-A | M-13 | | |
| | | 10 | .134 | 3.40 | .854 | 21.7 | .835 | 21.2 | .933 | 23.7 | B851 | R-19 | M-13 | B852 | R-19-A | M-13 | | |
| | | 1/2 | 11 | .120 | 3.04 | .882 | 22.4 | .862 | 21.9 | .961 | 24.4 | B855 | R-21 | M-13 | B856 | R-21-A | M-13 | 1/2 |
| | | | 12 | .109 | 2.76 | .906 | 23.0 | .882 | 22.4 | .980 | 24.9 | B857 | R-21 | M-14 | B858 | R-21-A | M-14 | |
| | | | 13 | .095 | 2.41 | .933 | 23.7 | .913 | 23.7 | 1.012 | 25.7 | B859 | R-22 | M-14 | B860 | R-22-A | M-14 | |
| | | 1/2 | 14 | .083 | 2.10 | .957 | 24.3 | .961 | 24.4 | 1.043 | 26.5 | B861 | R-23 | M-15 | B862 | R-23-A | M-15 | 1/2 |
| | | | 15 | .072 | 1.82 | .980 | 24.9 | .961 | 24.4 | 1.071 | 27.2 | B863 | R-24 | M-15 | B864 | R-24-A | M-15 | |
| | | | 16 | .065 | 1.65 | .992 | 25.2 | .988 | 21.9 | 1.071 | 27.2 | B863 | R-24 | M-15 | B864 | R-24-A | M-15 | |
| | 17 | | .058 | 1.47 | 1.01 | 25.6 | .988 | 21.9 | 1.098 | 27.9 | B867 | R-26 | M-16 | B868 | R-26-A | M-16 | | |
| | 18 | | .049 | 1.24 | 1.03 | 26.0 | .988 | 21.9 | 1.098 | 27.9 | B867 | R-26 | M-16 | B868 | R-26-A | M-16 | | |
| | 1.3/8 (34.92) | 8 | .165 | 4.19 | .920 | 23.3 | .901 | 22.8 | 1.010 | 25.6 | B865 | R-25 | M-15 | B866 | R-25-A | M-15 | 1/2 | |
| 9 | | .148 | 3.75 | .954 | 24.2 | .935 | 23.7 | 1.044 | 26.5 | B861 | R-23 | M-15 | B862 | R-23-A | M-15 | | | |
| 10 | | .134 | 3.40 | .982 | 24.9 | .962 | 24.4 | 1.071 | 27.2 | B863 | R-24 | M-13 | B864 | R-24-A | M-13 | | | |
| 1/2 | | 11 | .120 | 3.04 | 1.010 | 25.6 | .990 | 25.1 | 1.099 | 27.9 | B867 | R-26 | M-16 | B868 | R-26-A | M-16 | 1/2 | |
| | | 12 | .109 | 2.76 | 1.032 | 26.2 | 1.013 | 25.7 | 1.122 | 28.5 | B869 | R-27 | M-16 | B870 | R-27-A | M-16 | | |
| | | 13 | .095 | 2.41 | 1.060 | 26.9 | 1.039 | 26.4 | 1.150 | 29.2 | B871 | R-28 | M-17 | B872 | R-28-A | M-17 | | |
| 1/2 | | 14 | .083 | 2.10 | 1.084 | 27.5 | 1.060 | 26.9 | 1.169 | 29.6 | B873 | R-29 | M-17 | B874 | R-29-A | M-17 | 1/2 | |
| | | 15 | .072 | 1.82 | 1.106 | 28.0 | 1.087 | 27.6 | 1.196 | 30.3 | B875 | R-30 | M-17 | B876 | R-30-A | M-17 | | |
| | | 16 | .065 | 1.65 | 1.120 | 28.4 | 1.087 | 27.6 | 1.196 | 30.3 | B875 | R-30 | M-17 | B876 | R-30-A | M-17 | | |
| | | 17 | .058 | 1.47 | 1.134 | 28.8 | 1.115 | 28.3 | 1.224 | 31.0 | B879 | R-30 | M-18 | B880 | R-30-A | M-18 | | |
| | | 18 | .049 | 1.24 | 1.152 | 29.2 | 1.115 | 28.3 | 1.224 | 31.0 | B879 | R-30 | M-18 | B880 | R-30-A | M-18 | | |
| 1.1/2 (38.10) | | 8 | .165 | 4.19 | 1.045 | 26.5 | 1.026 | 26.0 | 1.135 | 28.8 | B877 | R-31 | M-17 | B878 | R-31-A | M-17 | 1/2 | |
| | 9 | .148 | 3.75 | 1.079 | 27.4 | 1.060 | 26.9 | 1.169 | 29.6 | B873 | R-29 | M-17 | B874 | R-29-A | M-17 | | | |
| | 10 | .134 | 3.40 | 1.107 | 28.1 | 1.087 | 27.6 | 1.196 | 30.3 | B875 | R-30 | M-17 | B876 | R-30-A | M-17 | | | |
| | 1/2 | 11 | .120 | 3.04 | 1.135 | 28.8 | 1.115 | 28.3 | 1.224 | 31.0 | B879 | R-30 | M-18 | B880 | R-30-A | M-18 | 1/2 | |
| | | 12 | .109 | 2.76 | 1.157 | 29.3 | 1.133 | 28.7 | 1.242 | 31.5 | B881 | R-32 | M-18 | B882 | R-32-A | M-18 | | |
| | | 13 | .095 | 2.41 | 1.185 | 30.1 | 1.160 | 29.4 | 1.275 | 32.3 | B883 | R-33 | M-19 | B884 | R-33-A | M-19 | | |
| | 1/2 | 14 | .083 | 2.10 | 1.209 | 30.7 | 1.179 | 29.9 | 1.294 | 32.8 | B885 | R-34 | M-20 | B886 | R-34-A | M-20 | 1/2 | |
| | | 15 | .072 | 1.82 | 1.231 | 31.2 | 1.206 | 30.6 | 1.321 | 33.5 | B887 | R-35 | M-20 | B888 | R-35-A | M-20 | | |
| | | 16 | .065 | 1.65 | 1.245 | 31.6 | 1.206 | 30.6 | 1.321 | 33.5 | B887 | R-35 | M-20 | B888 | R-35-A | M-20 | | |
| | | 8 | .165 | 4.19 | 1.170 | 29.7 | 1.145 | 29.0 | 1.260 | 32.0 | B889 | R-34 | M-19 | B890 | R-34-A | M-19 | | |
| | | 9 | .148 | 3.75 | 1.204 | 30.5 | 1.177 | 29.9 | 1.290 | 32.8 | B885 | R-34 | M-20 | B886 | R-34-A | M-20 | | |
| | | 10 | .134 | 3.40 | 1.232 | 31.2 | 1.206 | 30.6 | 1.321 | 33.5 | B887 | R-35 | M-20 | B888 | R-35-A | M-20 | | |
| 1/2 | | 11 | .120 | 3.04 | 1.260 | 32.0 | 1.235 | 31.3 | 1.350 | 34.2 | B891 | R-36 | M-20 | B892 | R-36-A | M-20 | | 1/2 |
| | | 12 | .109 | 2.76 | 1.282 | 32.5 | 1.257 | 31.9 | 1.372 | 34.8 | B893 | R-37 | M-20 | B894 | R-37-A | M-20 | | |
| | | 13 | .095 | 2.41 | 1.310 | 33.2 | 1.285 | 32.6 | 1.400 | 35.5 | B895 | R-37 | M-21 | B896 | R-37-A | M-21 | | |
| 1/2 | 14 | .083 | 2.10 | 1.334 | 33.8 | 1.285 | 32.6 | 1.400 | 35.5 | B895 | R-37 | M-21 | B896 | R-37-A | M-21 | 1/2 | | |
| | 15 | .072 | 1.82 | 1.356 | 34.4 | 1.331 | 33.8 | 1.446 | 36.7 | B897 | R-38 | M-21 | B898 | R-38-A | M-21 | | | |
| | 16 | .065 | 1.65 | 1.370 | 34.8 | 1.331 | 33.8 | 1.446 | 36.7 | B897 | R-38 | M-21 | B898 | R-38-A | M-21 | | | |
| | 17 | .058 | 1.47 | 1.384 | 35.1 | 1.331 | 33.8 | 1.472 | 37.3 | B899 | R-38 | M-22 | B900 | R-38-A | M-22 | | | |
| | 18 | .049 | 1.24 | 1.402 | 35.6 | 1.331 | 33.8 | 1.472 | 37.3 | B899 | R-38 | M-22 | B900 | R-38-A | M-22 | | | |
| | 19 | .042 | 1.06 | 1.416 | 35.9 | 1.331 | 33.8 | 1.472 | 37.3 | B899 | R-38 | M-22 | B900 | R-38-A | M-22 | | | |
| 20 | .035 | 0.88 | 1.430 | 35.3 | 1.331 | 33.8 | 1.472 | 37.3 | B899 | R-38 | M-22 | B900 | R-38-A | M-22 | | | | |