

BRYAN STEAM

U-Tube Heat Exchangers **US-Series, Steam to Water**



Bryan's Steam to Water Heat Exchangers are built to offer long life and maximum performance in all applications, including service water, space heating, radiation, swimming pool heating and various process applications.

These instantaneous heaters operate with steam on the shellside and water on the tubeside. Bryan offers U-Tube Heat Exchangers in sizes ranging from 4" diameter to 12" diameter and lengths up to 10', in both two and four-pass designs.

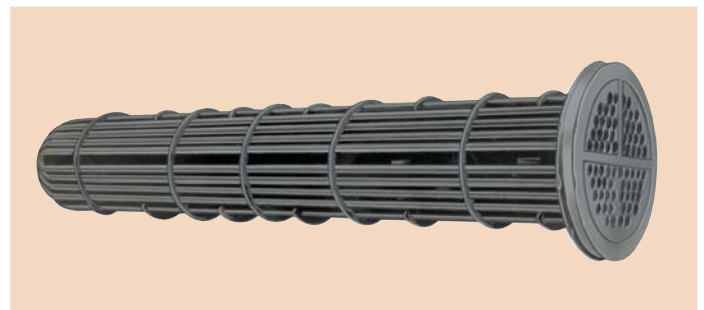
Material of construction

| | |
|--------------|-----------------|
| Heads: | Cast Iron |
| Tube sheets: | Steel |
| Shell: | Steel |
| Baffles: | Steel |
| Bolting: | Steel |
| Tubes: | ¾" O. D. copper |

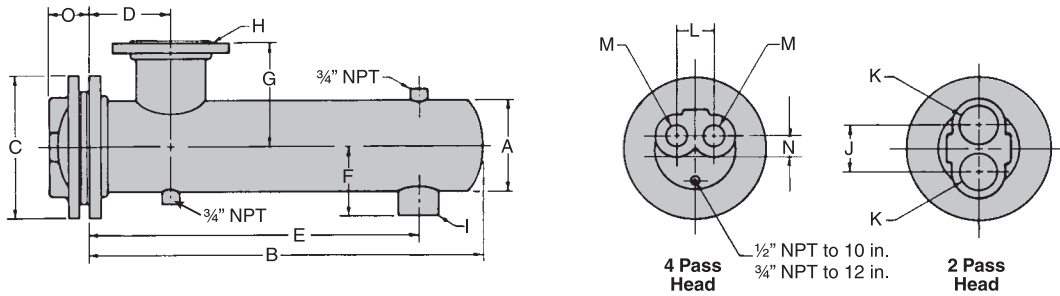
Units are available with optional materials of construction, such as brass, copper, cupro-nickel or other alloys as specified.

| Rating of Standard Units | | | | |
|--------------------------|------------------|---------|---------|-------------------------------------|
| Shell Diam. | Maximum Pressure | | | Maximum Operating Temperature |
| | Tubes | | Shell | |
| | 2 pass | 4 pass | | |
| 4" | 150 psi | 150 psi | 150 psi | 375°F |
| 6" | 150 psi | 150 psi | 150 psi | 375°F |
| 8" | 150 psi | 150 psi | 150 psi | 375°F |
| 10" | 125 psi | 150 psi | 150 psi | 375°F |
| 12" | 125 psi | 125 psi | 150 psi | 375°F |

Consult factory for working pressure and temperature higher than standard, as well as changes resulting from differences in optional construction materials.



Bryan Steam to Water Heat Exchanger



| Model Number | | Dimensions (inches) | | | | | | | | | | | | | | Heating Surface (sq. ft.) | Shipping Weight (lbs.) | | |
|-------------------------|-----------|---------------------|------|-----|----|------|------|-------|-----|--------|----|--------|------|-----|-----|---------------------------|------------------------|------|--|
| 2 Pass | 4 Pass | 2 and 4 Pass | | | | | | | | 2 Pass | | 4 Pass | | | | | | | |
| 4 Inch Diameter | | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | | | |
| US4-2-2 | US4-2-4 | 4½ | 24½ | 9 | 5 | 19½ | 4⅝ | 4¾ | 1¼T | 1T | 2½ | 1¼T | 2⅜ | 1T | 7/8 | 27/8 | 4.6 | 65 | |
| US4-3-2 | US4-3-4 | 4½ | 36½ | 9 | 5 | 31½ | 4⅝ | 4¾ | 1¼T | 1T | 2½ | 1¼T | 2⅜ | 1T | 7/8 | 27/8 | 7.0 | 75 | |
| US4-4-2 | US4-4-4 | 4½ | 48½ | 9 | 5 | 43½ | 4⅝ | 4¾ | 1¼T | 1T | 2½ | 1¼T | 2⅜ | 1T | 7/8 | 27/8 | 9.3 | 84 | |
| US4-5-2 | US4-5-4 | 4½ | 60½ | 9 | 5 | 55½ | 4⅝ | 4¾ | 1¼T | 1T | 2½ | 1¼T | 2⅜ | 1T | 7/8 | 27/8 | 11.7 | 94 | |
| US4-6-2 | US4-6-4 | 4½ | 72½ | 9 | 5 | 67½ | 4⅝ | 4¾ | 1½T | 1T | 2½ | 1¼T | 2⅜ | 1T | 7/8 | 27/8 | 14.1 | 104 | |
| US4-7-2 | US4-7-4 | 4½ | 84½ | 9 | 5 | 79½ | 4⅝ | 4¾ | 1½T | 1T | 2½ | 1¼T | 2⅜ | 1T | 7/8 | 27/8 | 16.4 | 114 | |
| 6 Inch Diameter | | | | | | | | | | | | | | | | | | | |
| US6-2-2 | US6-2-4 | 6⅝ | 25 | 11 | 5 | 18½ | 5⅝ | 6 | 1½T | 1T | 4 | 2T | 3¾ | 1½T | 1¼ | 37/16 | 9.1 | 120 | |
| US6-3-2 | US6-3-4 | 6⅝ | 37 | 11 | 5 | 30½ | 5⅝ | 6 | 2T | 1T | 4 | 2T | 3¾ | 1½T | 1¼ | 37/16 | 13.8 | 148 | |
| US6-4-2 | US6-4-4 | 6⅝ | 49 | 11 | 5 | 42½ | 5⅝ | 5 | 2½T | 1T | 4 | 2T | 3¾ | 1½T | 1¼ | 37/16 | 18.5 | 182 | |
| US6-5-2 | US6-5-4 | 6⅝ | 61 | 11 | 5 | 54½ | 5⅝ | 5 | 2½T | 1T | 4 | 2T | 3¾ | 1½T | 1¼ | 37/16 | 23.2 | 207 | |
| US6-6-2 | US6-6-4 | 6⅝ | 73 | 11 | 5 | 66½ | 5⅝ | 67/8 | 3T | 1T | 4 | 2T | 3¾ | 1½T | 1¼ | 37/16 | 27.9 | 235 | |
| US6-7-2 | US6-7-4 | 6⅝ | 85 | 11 | 5 | 78½ | 5⅝ | 67/8 | 3T | 1T | 4 | 2T | 3¾ | 1½T | 1¼ | 37/16 | 32.6 | 262 | |
| US6-8-2 | US6-8-4 | 6⅝ | 97 | 11 | 5 | 90½ | 5⅝ | 67/8 | 3T | 1T | 4 | 2T | 3¾ | 1½T | 1¼ | 37/16 | 37.3 | 290 | |
| 8 Inch Diameter | | | | | | | | | | | | | | | | | | | |
| US8-2-2 | US8-2-4 | 8⅝ | 26¼ | 13½ | 7 | 18 | 67/8 | 95/16 | 4F | 1½T | 4½ | 3T | 4½ | 2T | 1½ | 37/8 | 16.5 | 192 | |
| US8-3-2 | US8-3-4 | 8⅝ | 38¼ | 13½ | 7 | 30 | 67/8 | 95/16 | 4F | 1½T | 4½ | 3T | 4½ | 2T | 1½ | 37/8 | 25.1 | 234 | |
| US8-4-2 | US8-4-4 | 8⅝ | 50¼ | 13½ | 7 | 42 | 67/8 | 95/16 | 4F | 1½T | 4½ | 3T | 4½ | 2T | 1½ | 37/8 | 33.7 | 283 | |
| US8-5-2 | US8-5-4 | 8⅝ | 62¼ | 13½ | 8 | 54 | 67/8 | 95/16 | 6F | 2T | 4½ | 3T | 4½ | 2T | 1½ | 37/8 | 42.4 | 326 | |
| US8-6-2 | US8-6-4 | 8⅝ | 74¼ | 13½ | 8 | 66 | 67/8 | 95/16 | 6F | 2T | 4½ | 3T | 4½ | 2T | 1½ | 37/8 | 51.0 | 369 | |
| US8-7-2 | US8-7-4 | 8⅝ | 86¼ | 13½ | 8 | 78 | 67/8 | 95/16 | 6F | 2T | 4½ | 3T | 4½ | 2T | 1½ | 37/8 | 59.7 | 390 | |
| US8-8-2 | US8-8-4 | 8⅝ | 98¼ | 13½ | 8 | 90 | 67/8 | 95/16 | 6F | 2T | 4½ | 3T | 4½ | 2T | 1½ | 37/8 | 68.3 | 453 | |
| US8-9-2 | US8-9-4 | 8⅝ | 110¼ | 13½ | 8 | 102 | 67/8 | 95/16 | 6F | 2T | 4½ | 3T | 4½ | 2T | 1½ | 37/8 | 76.9 | 496 | |
| 10 Inch Diameter | | | | | | | | | | | | | | | | | | | |
| US10-2-2 | US10-2-4 | 10¾ | 27¼ | 16 | 7 | 18 | 8 | 103/8 | 4F | 1½T | 6¼ | 4T | 5¼ | 3T | 2 | 51/16 | 26.8 | 300 | |
| US10-3-2 | US10-3-4 | 10¾ | 38¼ | 16 | 7 | 29 | 8 | 103/8 | 4F | 1½T | 6¼ | 4T | 5¼ | 3T | 2 | 51/16 | 40.9 | 353 | |
| US10-4-2 | US10-4-4 | 10¾ | 49¼ | 16 | 8 | 40 | 8 | 103/8 | 6F | 2T | 6¼ | 4T | 5¼ | 3T | 2 | 51/16 | 55.0 | 415 | |
| US10-5-2 | US10-5-4 | 10¾ | 62¼ | 16 | 8 | 53 | 8 | 103/8 | 6F | 2T | 6¼ | 4T | 5¼ | 3T | 2 | 51/16 | 69.2 | 476 | |
| US10-6-2 | US10-6-4 | 10¾ | 74¼ | 16 | 8 | 65 | 8 | 103/8 | 6F | 2T | 6¼ | 4T | 5¼ | 3T | 2 | 51/16 | 83.3 | 537 | |
| US10-7-2 | US10-7-4 | 10¾ | 85¼ | 16 | 8 | 76 | 8 | 103/8 | 6F | 2T | 6¼ | 4T | 5¼ | 3T | 2 | 51/16 | 97.5 | 598 | |
| US10-8-2 | US10-8-4 | 10¾ | 98¼ | 16 | 8 | 89 | 8 | 103/8 | 6F | 2T | 6¼ | 4T | 5¼ | 3T | 2 | 51/16 | 111.6 | 660 | |
| US10-9-2 | US10-9-4 | 10¾ | 110¼ | 16 | 8 | 101 | 8 | 103/8 | 6F | 2T | 6¼ | 4T | 5¼ | 3T | 2 | 51/16 | 125.7 | 721 | |
| US10-10-2 | US10-10-4 | 10¾ | 122¼ | 16 | 8 | 113 | 8 | 103/8 | 6F | 2T | 6¼ | 4T | 5¼ | 3T | 2 | 51/16 | 139.9 | 782 | |
| 12 Inch Diameter | | | | | | | | | | | | | | | | | | | |
| US12-3-2 | US12-3-4 | 12¾ | 36¼ | 19 | 10 | 28¼ | 9 | 113/8 | 4F | 1¼T | 8 | 4T | 57/8 | 3T | 2½ | 59/16 | 58.6 | 510 | |
| US12-4-2 | US12-4-4 | 12¾ | 48¼ | 19 | 10 | 40¼ | 9 | 113/8 | 6F | 1¼T | 8 | 4T | 57/8 | 3T | 2½ | 59/16 | 79.0 | 596 | |
| US12-5-2 | US12-5-4 | 12¾ | 60¼ | 19 | 10 | 52¼ | 9 | 113/8 | 6F | 1½T | 8 | 4T | 57/8 | 3T | 2½ | 59/16 | 99.5 | 681 | |
| US12-6-2 | US12-6-4 | 12¾ | 72¼ | 19 | 10 | 64¼ | 9 | 113/8 | 6F | 2T | 8 | 4T | 57/8 | 3T | 2½ | 59/16 | 119.9 | 772 | |
| US12-7-2 | US12-7-4 | 12¾ | 84¼ | 19 | 10 | 76¼ | 9 | 113/8 | 8F | 2T | 8 | 4T | 57/8 | 3T | 2½ | 59/16 | 140.3 | 857 | |
| US12-8-2 | US12-8-4 | 12¾ | 96¼ | 19 | 10 | 87¼ | 81/8 | 113/8 | 8F | 2½T | 8 | 4T | 57/8 | 3T | 2½ | 59/16 | 160.8 | 941 | |
| US12-9-2 | US12-9-4 | 12¾ | 108¼ | 19 | 10 | 99¼ | 81/8 | 113/8 | 8F | 2½T | 8 | 4T | 57/8 | 3T | 2½ | 59/16 | 181.2 | 1027 | |
| US12-10-2 | US12-10-4 | 12¾ | 120¼ | 19 | 10 | 111¼ | 81/8 | 113/8 | 8F | 2½T | 8 | 4T | 57/8 | 3T | 2½ | 59/16 | 201.6 | 1111 | |

NOTE: Dimensions and specifications are subject to change without notice. Consult factory for certified dimensions.



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