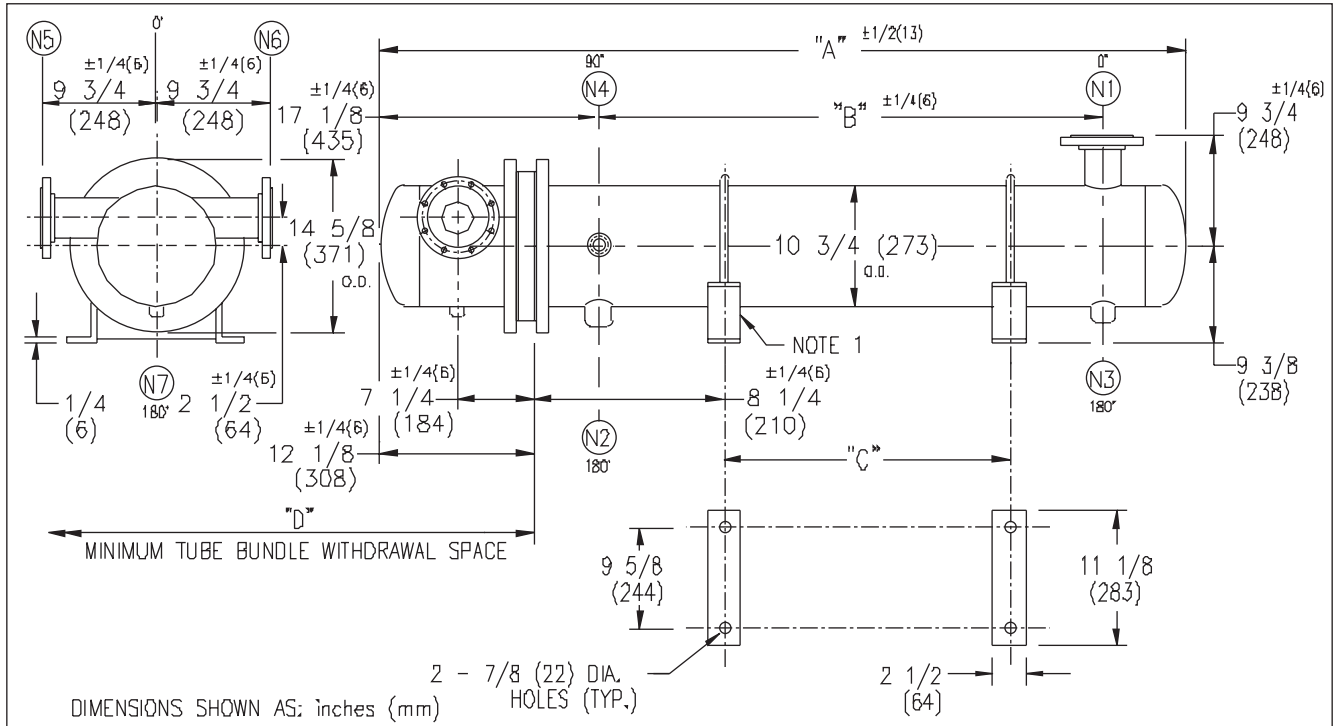


# ARMSTRONG®



| EXCHANGER SIZE<br>*BAFFLE SPACING | DIMENSIONS |      |         |      |         |      |        |      |        |     |        |    |
|-----------------------------------|------------|------|---------|------|---------|------|--------|------|--------|-----|--------|----|
|                                   | A          |      | B       |      | C       |      | D      |      | N1     |     | N2     |    |
|                                   | inches     | mm   | inches  | mm   | inches  | mm   | inches | mm   | inches | mm  | inches | mm |
| WS3T-102-4*-E4                    | 49 1/8     | 1248 | 23 3/4  | 603  | 11 3/4  | 298  | 26     | 660  | 4      | 102 | 1 1/2  | 38 |
| WS3T-103-4*-E4                    | 61 1/8     | 1553 | 35 3/4  | 908  | 23 3/4  | 603  | 38     | 965  | 4      | 102 | 1 1/2  | 38 |
| WS3T-104-4*-E4                    | 73 1/8     | 1858 | 47 3/4  | 1213 | 35 3/4  | 908  | 50     | 1270 | 6      | 152 | 2      | 51 |
| WS3T-105-4*-E4                    | 85 1/8     | 2163 | 59 3/4  | 1518 | 47 3/4  | 1213 | 62     | 1574 | 6      | 152 | 2      | 51 |
| WS3T-106-4*-E4                    | 97 1/8     | 2467 | 71 3/4  | 1822 | 59 3/4  | 1518 | 74     | 1879 | 6      | 152 | 2      | 51 |
| WS3T-107-4*-E4                    | 109 1/8    | 2772 | 83 3/4  | 2127 | 71 3/4  | 1822 | 86     | 2184 | 6      | 152 | 2      | 51 |
| WS3T-108-4*-E4                    | 121 1/8    | 3077 | 95 3/4  | 2432 | 83 3/4  | 2127 | 98     | 2489 | 6      | 152 | 2      | 51 |
| WS3T-109-4*-E4                    | 133 1/8    | 3382 | 107 3/4 | 2737 | 95 3/4  | 2432 | 110    | 2794 | 6      | 152 | 2      | 51 |
| WS3T-1010-4*-E4                   | 145 1/8    | 3687 | 119 3/4 | 3042 | 107 3/4 | 2737 | 122    | 3098 | 6      | 152 | 2      | 51 |
| WS3T-1011-4*-E4                   | 157 1/8    | 3991 | 131 3/4 | 3346 | 119 3/4 | 3042 | 134    | 3403 | 6      | 152 | 2      | 51 |
| WS3T-1012-4*-E4                   | 169 1/8    | 4296 | 143 3/4 | 3651 | 131 3/4 | 3346 | 146    | 3708 | 6      | 152 | 2      | 51 |
| WS3T-1013-4*-E4                   | 181 1/8    | 4601 | 155 3/4 | 3956 | 143 3/4 | 3651 | 158    | 4013 | 6      | 152 | 2      | 51 |
| WS3T-1014-4*-E4                   | 193 1/8    | 4906 | 167 3/4 | 4261 | 155 3/4 | 3956 | 170    | 4318 | 6      | 152 | 2      | 51 |
| WS3T-1015-4*-E4                   | 205 1/8    | 5210 | 179 3/4 | 4566 | 167 3/4 | 4261 | 182    | 4623 | 6      | 152 | 2      | 51 |

| NOZZLE SCHEDULE |      |              |      |                  |
|-----------------|------|--------------|------|------------------|
| SERVICE         | MARK | SHELL SIDE   | MARK | TUBE SIDE        |
| INLET           | N1   | AS PER TABLE | N5   | 3 (76) 3DD# FLG. |
| OUTLET          | N2   | AS PER TABLE | N6   | 3 (76) 3DD# FLG. |
| DRAIN           | N3   | 1/2 (13) NPT | N7   | 1/2 (13) NPT     |
| VENT            | N4   | 3/4 (19) NPT |      |                  |

NOTES: 1. SUPPORTS SUPPLIED ONLY IF SPECIFIED ON ORDER.  
 2. NOZZLE SIZES SHOWN ARE RECOMMENDED FOR MAX. EXCHANGER LIFE, NO EXTERNAL FORCES APPLY.  
 3. FABRICATED TO ASME CODE SECTION VIII DIVISION 1 AND LATEST ADDENDA.  
 4. DRAWING IS NOT TO SCALE.  
 5. ALL DIM'S ±1/8 (3) UNLESS OTHERWISE SHOWN.

| DESIGN CONDITIONS       |          |          |          |          |
|-------------------------|----------|----------|----------|----------|
|                         | SHELL    |          | TUBES    |          |
| DESIGN PRESSURE         | 150 PSIG | 1034 KPa | 300 PSIG | 2068 KPa |
| DESIGN TEMPERATURE      | 375 °F   | 191 °C   | 375 °F   | 191 °C   |
| MIN. DESIGN METAL TEMP. | 35 °F    | 1.7 °C   | 35 °F    | 1.7 °C   |
| HYDRO. TEST PRESSURE    | 225 PSIG | 1551 KPa | 450 PSIG | 3102 KPa |
| CONTENTS                | STEAM    |          | WATER    |          |

CUSTOMER: \_\_\_\_\_  
 LOCATION: \_\_\_\_\_  
 ENGINEER: \_\_\_\_\_  
 ORDER No.: \_\_\_\_\_  
 PROJECT/JOB: \_\_\_\_\_  
 LOCATION: \_\_\_\_\_  
 TAG: \_\_\_\_\_ (QUOTE # \_\_\_\_\_)

|  |   |  |  |   |                         |      |
|--|---|--|--|---|-------------------------|------|
| TITLE<br>G.A. 300 LB. WS SERIES<br>HEAT EXCHANGERS | A R M S T R O N G                       |  |  |   | NUMBER<br>WS3T-10-4P-E4 | REV. |
| DATE: 03 / 02 / 01 BY: J.R.                        | TORONTO - CANADA<br>TEL: (416) 755-2291 | MONTREAL - CANADA<br>TEL: (514) 421-2424 | BUFFALO - N. Y.<br>TEL: (716) 693-8813 | COLCHESTER - U.K.<br>TEL: (44) 120-657-9491 |                         |      |