

# ORTC - One Revolution Tube Cutter

Tools designed for cutting both ferrous and non-ferrous tubes commonly found in heat exchangers, boilers and condensers. Standard tool length is adjustable from 1"-6" (25-155 mm). Longer reach tools are available in 10" (254 mm) increments. The tool is designed to be used with a hand or ratchet wrench only. Impact wrenches should never be used with these tools. The Cutting of the tube is based on the eccentric principle, where the cutter bit moves out to the tube wall as the cutter is rotated. Continued clockwise rotation will puncture and cut the tube in one revolution. Simply rotating the tool counterclockwise closes the bit and the tool can be removed from the tube.



## ORTCC - ONE REVOLUTION TUBE CUTTER VERSION C

One Revolution Tube Cutter version C is used for piercing heavy wall, carbon steel tubes for ventilation prior to plugging the leaky tubes. Delivered in two length version 6" and 12".

| TUBE OD |       | TUBE GAUGE | TUBE ID |       |        |       | TOOL NO.  | TOOL BIT |
|---------|-------|------------|---------|-------|--------|-------|-----------|----------|
|         |       |            | [MM]    |       | [INCH] |       |           |          |
| [INCH]  | [MM]  | [BWG]      | MIN     | MAX   | MIN    | MAX   |           |          |
| 1/2     | 12,70 | 18-19      | 10,20   | 10,70 | 0,402  | 0,421 | ORTCC-100 | N-625-4  |
|         |       | 20         | 11,00   | 11,30 | 0,433  | 0,445 | ORTCC-108 | N-625-4  |
| 5/8     | 15,88 | 14         | 11,40   | 11,90 | 0,449  | 0,469 | ORTCC-113 | N-625-3  |
|         |       | 15-16      | 12,00   | 12,90 | 0,472  | 0,508 | ORTCC-119 | N-625-3  |
|         |       | 17-18      | 12,70   | 13,50 | 0,500  | 0,531 | ORTCC-123 | N-625-2  |
|         |       | 19-20      | 13,50   | 14,20 | 0,531  | 0,559 | ORTCC-131 | N-625-2  |
|         |       | 22         | 14,00   | 14,70 | 0,551  | 0,579 | ORTCC-139 | N-750-2  |
| 3/4     | 19,05 | 14-15      | 14,70   | 15,50 | 0,579  | 0,610 | ORTCC-145 | N-750-2  |
|         |       | 16-18      | 15,20   | 16,50 | 0,598  | 0,650 | ORTCC-153 | N-750-2  |
|         |       | 19-20      | 16,70   | 17,50 | 0,657  | 0,689 | ORTCC-163 | N-1000-1 |
| 7/8     | 22,23 | 14-15      | 17,80   | 18,50 | 0,701  | 0,728 | ORTCC-174 | N-1000-1 |
|         |       | 16-17      | 18,80   | 19,50 | 0,740  | 0,768 | ORTCC-184 | N-1000-1 |
|         |       | 18-20      | 19,30   | 20,60 | 0,760  | 0,811 | ORTCC-193 | N-1000-2 |
| 1       | 25,40 | 12         | 19,80   | 20,60 | 0,780  | 0,811 | ORTCC-193 | N-1000-2 |
|         |       | 14         | 20,80   | 21,60 | 0,819  | 0,850 | ORTCC-205 | N-1000-2 |
| 1       | 25,40 | 15         | 21,30   | 22,10 | 0,839  | 0,870 | ORTC-210  | N-1000-2 |
|         |       | 16-17      | 21,80   | 22,60 | 0,858  | 0,890 | ORTC-215  | N-1000-2 |
|         |       | 18-20      | 22,60   | 23,10 | 0,890  | 0,909 | ORTC-223  | N-1000-2 |
|         |       | 22         | 23,90   | 24,60 | 0,941  | 0,969 | ORTC-232  | N-1000-2 |
| 1-1/4   | 31,75 | 10-11      | 24,90   | 25,60 | 0,980  | 1,008 | ORTC-245  | N-1000-2 |
|         |       | 12         | 25,90   | 26,70 | 1,020  | 1,051 | ORTC-255  | N-1000-2 |
|         |       | 13-14      | 26,70   | 27,40 | 1,051  | 1,079 | ORTC-264  | N-1000-2 |
|         |       | 15-16      | 27,90   | 28,70 | 1,098  | 1,130 | ORTC-274  | N-1000-2 |
|         |       | 17-19      | 28,70   | 29,60 | 1,130  | 1,165 | ORTC-283  | N-1000-2 |

| TUBE OD |       | TUBE GAUGE | TUBE ID |       |        |       | TOOL NO. | TOOL BIT |
|---------|-------|------------|---------|-------|--------|-------|----------|----------|
|         |       |            | [MM]    |       | [INCH] |       |          |          |
| [INCH]  | [MM]  | [BWG]      | MIN     | MAX   | MIN    | MAX   |          |          |
| 1-1/2   | 38,10 | 10-11      | 31,30   | 32,10 | 1,232  | 1,264 | ORTC-309 | N-1500-1 |
|         |       | 12-13      | 32,50   | 33,30 | 1,280  | 1,311 | ORTC-320 | N-1500-1 |
|         |       | 14-15      | 33,80   | 34,50 | 1,331  | 1,358 | ORTC-333 | N-1500-1 |
|         |       | 16-17      | 34,50   | 35,30 | 1,358  | 1,390 | ORTC-339 | N-1500-1 |
|         |       | 18-19      | 35,30   | 36,10 | 1,390  | 1,421 | ORTC-350 | N-1500-1 |
| 1-3/4   | 44,45 | 10-11      | 37,00   | 38,50 | 1,457  | 1,516 | ORTC-369 | N-1500-1 |
|         |       | 12-14      | 38,80   | 40,30 | 1,528  | 1,587 | ORTC-383 | N-1500-1 |
|         |       | 15-16      | 40,80   | 41,20 | 1,606  | 1,622 | ORTC-403 | N-1500-1 |
|         |       | 17-18      | 41,30   | 42,00 | 1,626  | 1,654 | ORTC-410 | N-1500-1 |
| 2       | 50,80 | 10         | 44,00   | 44,00 | 1,732  | 1,732 | ORTC-435 | N-1500-1 |
|         |       | 11         | 44,70   | 44,70 | 1,760  | 1,760 | ORTC-442 | N-1500-1 |
|         |       | 12-13      | 45,00   | 46,00 | 1,772  | 1,811 | ORTC-447 | N-1500-1 |
|         |       | 14-15      | 46,20   | 48,20 | 1,819  | 1,898 | ORTC-457 | N-1500-1 |
|         |       | 16-17      | 47,20   | 48,20 | 1,858  | 1,898 | ORTC-468 | N-1500-1 |
|         |       | 18-19      | 48,00   | 49,00 | 1,890  | 1,929 | ORTC-476 | N-1500-1 |
| 2-1/4   | 57,15 | 10         | 50,30   | 50,30 | 1,980  | 1,980 | ORTC-497 | N-2250-1 |
|         |       | 11         | 51,00   | 51,00 | 2,008  | 2,008 | ORTC-505 | N-2250-1 |
|         |       | 12-13      | 51,60   | 52,30 | 2,031  | 2,059 | ORTC-511 | N-2250-1 |
|         |       | 14-15      | 52,90   | 53,50 | 2,083  | 2,106 | ORTC-524 | N-2250-1 |
|         |       | 16-17      | 53,80   | 54,80 | 2,118  | 2,157 | ORTC-533 | N-2250-1 |
|         |       | 18-19      | 54,60   | 55,60 | 2,150  | 2,189 | ORTC-541 | N-2250-1 |
| 2-1/2   | 63,50 | 10         | 56,70   | 56,70 | 2,232  | 2,232 | ORTC-562 | N-2250-1 |
|         |       | 11         | 57,40   | 57,40 | 2,260  | 2,260 | ORTC-569 | N-2250-1 |
|         |       | 12-13      | 57,60   | 58,60 | 2,268  | 2,307 | ORTC-572 | N-2250-1 |
|         |       | 14-15      | 58,90   | 60,00 | 2,319  | 2,362 | ORTC-585 | N-2250-1 |
|         |       | 16-17      | 60,00   | 61,00 | 2,362  | 2,402 | ORTC-586 | N-2250-1 |
|         |       | 18-19      | 60,70   | 61,70 | 2,390  | 2,429 | ORTC-602 | N-2250-1 |