

Межгосударственный стандарт ГОСТ 17375-2001 (ИСО 3419-81) "Детали трубопроводов бесшовные приварные из углеродистой и низколегированной стали. Отводы крутоизогнутые типа 3D (R приблизительно = $1,5 DN$). Конструкция" (введен в действие постановлением Госстандарта РФ от 27 мая 2002 г. N 205-ст) (с изменениями и дополнениями)

Carbon and low-alloy steel butt-welding fittings. Sharply curved bends type 3D ($R \approx 1,5 DN$). Design

Дата введения 1 января 2003 г.
Взамен ГОСТ 17375-83

1. Область применения

Настоящий стандарт распространяется на бесшовные приварные отводы из углеродистой и низколегированной стали типа 3D с $R \approx 1,5 DN$ и $\theta = 45^\circ$, $\theta = 60^\circ$, $\theta = 90^\circ$ и $\theta = 180^\circ$, изготавливаемые из труб методами штамповки или протяжки по рогообразному сердечнику.

Область применения отводов - в соответствии с [разделом 1](#) ГОСТ 17380.

Требования [пункта 4.1](#) и [раздела 5](#) являются обязательными, остальные требования - рекомендуемыми.

2. Нормативные ссылки

В настоящем стандарте использована ссылка на [ГОСТ 17380-2001 \(ИСО 3419-81\)](#). Детали трубопроводов бесшовные приварные из углеродистой и низколегированной стали. Общие технические условия

3. Определения, обозначения и сокращения

Термины, их определения, обозначения и сокращения - по [ГОСТ 17380](#).

4. Конструкция и размеры

4.1 Конструкция и размеры отводов должны соответствовать указанным на [рисунке 1](#) и в [таблицах 1](#) и [2](#).

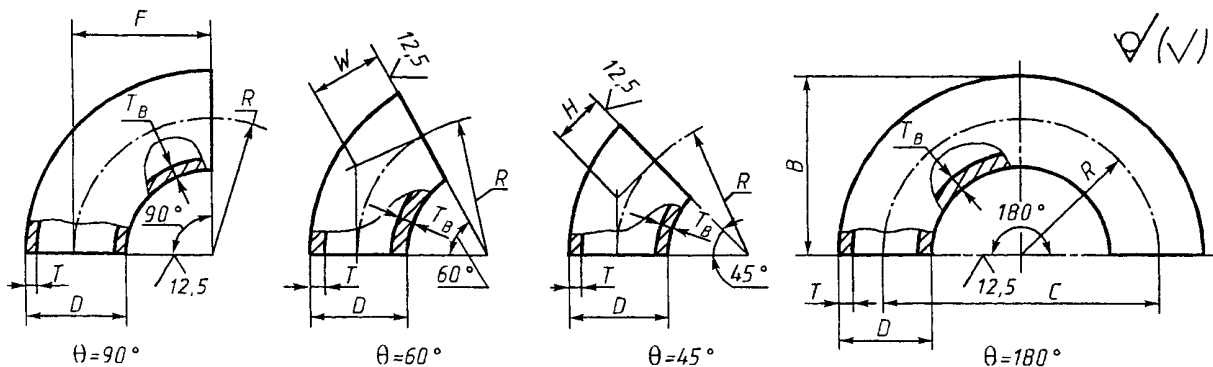


Рисунок 1

Таблица 1 - Отводы исполнения 1

Размеры в миллиметрах

| DN | D | T | F = R | H | C | B | Масса, кг, отвода с θ | | |
|-----|-------|-----|-------|----|-----|-----|------------------------------|------|------|
| | | | | | | | 45° | 90° | 180° |
| 15 | 21,3 | 2,0 | 28 | 14 | 56 | 38 | 0,02 | 0,04 | 0,08 |
| | | 3,2 | | | | | 0,03 | 0,06 | 0,12 |
| | | 4,0 | | | | | 0,04 | 0,07 | 0,14 |
| 20 | 26,9 | 2,0 | 29 | 14 | 58 | 43 | 0,03 | 0,06 | 0,11 |
| | | 3,2 | | | | | 0,04 | 0,08 | 0,17 |
| | | 4,0 | | | | | 0,06 | 0,10 | 0,20 |
| 25 | 33,7 | 2,3 | 38 | 18 | 76 | 56 | 0,05 | 0,11 | 0,21 |
| | | 3,2 | | | | | 0,08 | 0,16 | 0,32 |
| | | 4,5 | | | | | 0,09 | 0,19 | 0,38 |
| 32 | 42,4 | 2,6 | 48 | 23 | 96 | 69 | 0,10 | 0,19 | 0,39 |
| | | 3,6 | | | | | 0,13 | 0,26 | 0,52 |
| | | 5,0 | | | | | 0,17 | 0,35 | 0,60 |
| 40 | 48,3 | 2,6 | 57 | 29 | 114 | 82 | 0,13 | 0,26 | 0,53 |
| | | 3,6 | | | | | 0,18 | 0,36 | 0,72 |
| | | 5,0 | | | | | 0,24 | 0,47 | 0,95 |
| 50 | 60,3 | 2,9 | 76 | 35 | 152 | 106 | 0,25 | 0,50 | 0,99 |
| | | 4,0 | | | | | 0,33 | 0,67 | 1,30 |
| | | 5,6 | | | | | 0,50 | 0,89 | 1,80 |
| 65 | 76,1 | 2,9 | 95 | 44 | 190 | 133 | 0,40 | 0,79 | 1,60 |
| | | 5,0 | | | | | 0,72 | 1,50 | 2,90 |
| | | 7,1 | | | | | 0,90 | 1,80 | 3,60 |
| 80 | 88,9 | 3,2 | 114 | 51 | 228 | 159 | 0,60 | 1,20 | 2,40 |
| | | 5,6 | | | | | 1,00 | 2,10 | 4,10 |
| | | 8,0 | | | | | 1,40 | 2,80 | 5,70 |
| 100 | 114,3 | 3,6 | 152 | 64 | 304 | 210 | 1,20 | 2,40 | 4,70 |
| | | 6,3 | | | | | 2,00 | 4,00 | 8,00 |

| | | | | | | | | | |
|------|--------|------|------|-----|------|------|--------|--------|--------|
| | | 8,8 | | | | | 2,80 | 5,40 | 11,00 |
| 125 | 139,7 | 4,0 | 190 | 79 | 380 | 260 | 2,00 | 4,00 | 8,00 |
| | | 6,3 | | | | | 3,10 | 6,20 | 12,00 |
| | | 10,0 | | | | | 4,80 | 9,60 | 19,00 |
| 150 | 168,3 | 4,5 | 229 | 95 | 457 | 313 | 3,20 | 6,50 | 13,00 |
| | | 7,1 | | | | | 5,10 | 10,00 | 20,00 |
| | | 11,0 | | | | | 7,70 | 15,00 | 31,00 |
| 200 | 219,1 | 6,3 | 305 | 127 | 610 | 414 | 8,00 | 16,00 | 32,00 |
| | | 8,0 | | | | | 9,90 | 20,00 | 40,00 |
| | | 12,5 | | | | | 14,00 | 31,00 | 61,00 |
| 250 | 273,0 | 6,3 | 381 | 159 | 762 | 518 | 12,00 | 25,00 | 50,00 |
| | | 10,0 | | | | | 19,00 | 39,00 | 78,00 |
| 300 | 323,9 | 7,1 | 457 | 190 | 914 | 619 | 20,00 | 40,00 | 80,00 |
| | | 10,0 | | | | | 28,00 | 56,00 | 111,00 |
| 350 | 355,6 | 8,0 | 533 | 222 | 1066 | 711 | 24,00 | 57,00 | 114,00 |
| | | 11,0 | | | | | 39,00 | 78,00 | 156,00 |
| 400 | 406,4 | 8,8 | 610 | 254 | 1220 | 813 | 41,00 | 82,00 | 165,00 |
| | | 12,5 | | | | | 58,00 | 117,00 | 234,00 |
| 450 | 457,0 | 10,0 | 686 | 286 | 1372 | 914 | 59,00 | 119,00 | 237,00 |
| 500 | 508,0 | 11,0 | 762 | 318 | 1524 | 1016 | 81,00 | 162,00 | 323,00 |
| 600 | 610,0 | 12,5 | 914 | 381 | 1828 | 1219 | 133,00 | 266,00 | 531,00 |
| 700 | 711,0 | - | 1067 | 444 | 2134 | 1422 | - | - | - |
| 800 | 813,0 | - | 1219 | 507 | 2238 | - | - | - | - |
| 900 | 914,0 | - | 1372 | 570 | 2744 | - | - | - | - |
| 1000 | 1016,0 | - | 1524 | 634 | 3048 | - | - | - | - |

Примечания

1 Масса приведена для справок.

 2 Отводы с $\theta = 60^\circ$ исполнения 1 не предусматриваются.

Таблица 2 - Отводы исполнения 2

Размеры в миллиметрах

| DN | D | T | F = R | W | H | C | B | Масса отвода с $\theta = 90^\circ$, кг |
|----|----|-----|-------|----|----|----|----|--|
| 25 | 32 | 2,0 | 38 | 22 | 18 | 76 | 56 | 0,1 |
| | | 2,5 | | | | | | 0,2 |
| | | 3,0 | | | | | | 0,2 |
| | | 3,5 | | | | | | 0,2 |
| 32 | 38 | 2,0 | 48 | 28 | 23 | 96 | 69 | 0,2 |
| | | 2,5 | | | | | | 0,2 |
| | | 3,0 | | | | | | 0,2 |
| | | 3,5 | | | | | | 0,3 |
| | | 4,0 | | | | | | 0,3 |

| | | | | | | | | |
|-----|-----|--|-----|----|----|-----|-----|---|
| 40 | 45 | 2,5 3,0 3,5 4,0 5,0 | 60 | 35 | 25 | 120 | 83 | 0,3 0,3 0,4 0,4 0,5 |
| 50 | 57 | 2,5 3,0 3,5 4,0 4,5 5,0 5,5 6,0 | 75 | 43 | 30 | 150 | 104 | 0,4 0,5 0,6 0,7 0,7 0,8 0,9 1,0 |
| 65 | 76 | 3,0 3,5 4,0 4,5 5,0 5,5 6,0 7,0 8,0 | 100 | 57 | 41 | 200 | 138 | 0,8 1,0 1,1 1,3 1,4 1,6 1,7 2,0 2,2 |
| 80 | 89 | 3,0 3,5 4,0 4,5 5,0 5,5 6,0 7,0 8,0 | 120 | 69 | 50 | 240 | 165 | 1,2 1,4 1,5 1,7 1,9 2,1 2,3 2,7 3,0 |
| 100 | 102 | 3,5 4,0 4,5 5,0 6,0 7,0 8,0 9,0 10,0 | 150 | 87 | 62 | 300 | 201 | 2,1 2,4 2,6 2,9 3,4 3,9 4,5 5,0 5,5 |
| | 108 | 3,5 4,0 4,5 5,0 6,0 | | | | | 204 | 2,2 2,5 2,8 3,1 3,6 |

| | | | | | | | | |
|-----|-----|---|-----|-----|----|-----|-----|---|
| | | 7,0 8,0 9,0 10,0 | | | | | | 4,1 4,7 5,3 5,8 |
| | 114 | 3,5 4,0 4,5 5,0 6,0 7,0 8,0 9,0 10,0 | | | | | 207 | 2,2 2,6 2,9 3,3 3,8 4,4 5,0 5,7 6,1 |
| 125 | 133 | 3,5 4,0 4,5 5,0 6,0 7,0 8,0 9,0 10,0 11,0 12,0 | 190 | 110 | 79 | 380 | 257 | 3,3 3,8 4,3 4,8 5,7 6,5 7,4 8,2 9,1 10,0 11,0 |
| 150 | 159 | 4,0 4,5 5,0 6,0 7,0 8,0 9,0 10,0 11,0 12,0 13,0 14,0 | 225 | 130 | 93 | 450 | 305 | 5,4 6,1 6,7 8,1 9,4 11,0 12,0 13,0 14,0 16,0 17,0 18,0 |
| | 168 | 4,0 4,5 5,0 6,0 7,0 8,0 9,0 10,0 11,0 | | | | | | 5,6 6,4 7,1 8,5 9,8 11,2 12,5 14,0 15,0 |

| | | | | | | | | |
|-----|-----|--|-----|-----|-----|-----|-----|--|
| | | 12,0 13,0 14,0 | | | | | | 16,0 17,5 19,0 |
| 200 | 219 | 5,0 6,0 7,0 8,0 9,0 10,0 11,0 12,0 13,0 14,0 15,0 16,0 17,0 18,0 | 300 | 173 | 124 | 600 | 410 | 13,0 15,0 17,0 20,0 22,0 25,0 27,0 29,0 32,0 34,0 37,0 39,0 42,0 44,0 |
| 250 | 273 | 6,0 7,0 8,0 9,0 10,0 11,0 12,0 13,0 14,0 15,0 16,0 17,0 18,0 20,0 22,0 | 375 | 217 | 155 | 750 | 512 | 23,0 27,0 31,0 35,0 39,0 43,0 46,0 50,0 54,0 58,0 61,0 66,0 70,0 78,0 85,0 |
| 300 | 325 | 7,0 8,0 9,0 10,0 11,0 12,0 13,0 14,0 15,0 16,0 17,0 18,0 20,0 | 450 | 260 | 186 | 900 | 613 | 39,0 45,0 50,0 56,0 61,0 66,0 72,0 77,0 82,0 87,0 92,0 96,0 107,0 |

| | | | | | | | | |
|-----|-----|------|-----|-----|-----|------|------|-------|
| | | 22,0 | | | | | | 118,0 |
| | | 24,0 | | | | | | 130,0 |
| | | 26,0 | | | | | | 141,0 |
| | | 28,0 | | | | | | 150,0 |
| 350 | 377 | 9,0 | 525 | 303 | 217 | 1050 | 714 | 68,0 |
| | | 10,0 | | | | | | 75,0 |
| | | 11,0 | | | | | | 83,0 |
| | | 12,0 | | | | | | 90,0 |
| | | 13,0 | | | | | | 97,0 |
| | | 14,0 | | | | | | 104,0 |
| | | 15,0 | | | | | | 112,0 |
| | | 16,0 | | | | | | 119,0 |
| | | 18,0 | | | | | | 133,0 |
| | | 20,0 | | | | | | 147,0 |
| | | 22,0 | | | | | | 161,0 |
| | | 24,0 | | | | | | 175,0 |
| | | 26,0 | | | | | | 188,0 |
| | | 28,0 | | | | | | 201,0 |
| | | 30,0 | | | | | | 214,0 |
| | | 32,0 | | | | | | 228,0 |
| 400 | 426 | 8,0 | 600 | 346 | 248 | 1200 | 813 | 78,0 |
| | | 9,0 | | | | | | 87,0 |
| | | 10,0 | | | | | | 97,0 |
| | | 11,0 | | | | | | 107,0 |
| | | 12,0 | | | | | | 117,0 |
| | | 13,0 | | | | | | 126,0 |
| | | 14,0 | | | | | | 135,0 |
| | | 15,0 | | | | | | 145,0 |
| | | 16,0 | | | | | | 154,0 |
| | | 17,0 | | | | | | 164,0 |
| | | 18,0 | | | | | | 173,0 |
| | | 20,0 | | | | | | 192,0 |
| | | 22,0 | | | | | | 210,0 |
| | | 24,0 | | | | | | 230,0 |
| | | 26,0 | | | | | | 249,0 |
| | | 28,0 | | | | | | 268,0 |
| | | 30,0 | | | | | | 286,0 |
| | | 32,0 | | | | | | 306,0 |
| | | 34,0 | | | | | | 324,0 |
| 500 | 530 | 9,0 | 750 | 433 | 310 | 1500 | 1015 | 138,0 |
| | | 10,0 | | | | | | 153,0 |
| | | 11,0 | | | | | | 168,0 |
| | | 12,0 | | | | | | 183,0 |
| | | 13,0 | | | | | | 198,0 |
| | | 14,0 | | | | | | 212,0 |

| | | | | | | | | |
|-----|-----|------|------|-----|-----|------|------|-------|
| | | 15,0 | | | | | | 227,0 |
| | | 16,0 | | | | | | 242,0 |
| | | 17,0 | | | | | | 256,0 |
| | | 18,0 | | | | | | 270,0 |
| | | 20,0 | | | | | | 298,0 |
| | | 22,0 | | | | | | 327,0 |
| | | 24,0 | | | | | | 356,0 |
| | | 26,0 | | | | | | 385,0 |
| | | 28,0 | | | | | | 413,0 |
| | | 30,0 | | | | | | 440,0 |
| | | 32,0 | | | | | | 467,0 |
| | | 34,0 | | | | | | 494,0 |
| | | 36,0 | | | | | | 520,0 |
| 600 | 630 | 9,0 | 900 | 519 | 373 | 1800 | 1215 | 198,0 |
| | | 10,0 | | | | | | 219,0 |
| | | 11,0 | | | | | | 245,0 |
| | | 12,0 | | | | | | 261,0 |
| | | 13,0 | | | | | | 282,0 |
| | | 14,0 | | | | | | 302,0 |
| | | 15,0 | | | | | | 324,0 |
| | | 16,0 | | | | | | 345,0 |
| | | 17,0 | | | | | | 366,0 |
| | | 18,0 | | | | | | 387,0 |
| | | 20,0 | | | | | | 429,0 |
| | | 22,0 | | | | | | 471,0 |
| | | 24,0 | | | | | | 513,0 |
| | | 26,0 | | | | | | 554,0 |
| | | 28,0 | | | | | | 595,0 |
| | | 30,0 | | | | | | 636,0 |
| | | 32,0 | | | | | | 678,0 |
| 700 | 720 | 9,0 | 1000 | 577 | 404 | 2000 | 1360 | 248,0 |
| | | 10,0 | | | | | | 275,0 |
| | | 11,0 | | | | | | 302,0 |
| | | 12,0 | | | | | | 329,0 |
| | | 13,0 | | | | | | 356,0 |
| | | 14,0 | | | | | | 383,0 |
| | | 15,0 | | | | | | 410,0 |
| | | 16,0 | | | | | | 436,0 |
| | | 17,0 | | | | | | 462,0 |
| | | 18,0 | | | | | | 489,0 |
| | | 20,0 | | | | | | 542,0 |
| | | 22,0 | | | | | | 595,0 |
| | | 24,0 | | | | | | 647,0 |
| | | 26,0 | | | | | | 698,0 |
| | | 28,0 | | | | | | 750,0 |

| | | | | | | | | |
|-----|-----|------|------|-----|-----|------|------|--------|
| | | 30,0 | | | | | | 801,0 |
| | | 32,0 | | | | | | 852,0 |
| 800 | 820 | 9,0 | 1200 | 693 | 485 | 2400 | 1610 | 339,0 |
| | | 10,0 | | | | | | 376,0 |
| | | 11,0 | | | | | | 413,0 |
| | | 12,0 | | | | | | 450,0 |
| | | 13,0 | | | | | | 487,0 |
| | | 14,0 | | | | | | 524,0 |
| | | 15,0 | | | | | | 561,0 |
| | | 16,0 | | | | | | 598,0 |
| | | 17,0 | | | | | | 636,0 |
| | | 18,0 | | | | | | 670,0 |
| | | 20,0 | | | | | | 743,0 |
| | | 22,0 | | | | | | 815,0 |
| | | 24,0 | | | | | | 887,0 |
| | | 26,0 | | | | | | 959,0 |
| | | 28,0 | | | | | | 1030,0 |
| | | 30,0 | | | | | | 1101,0 |
| | | 32,0 | | | | | | 1171,0 |

Примечания

1 Масса приведена для справок.

2 Масса отводов с $\theta = 60^\circ$ и $\theta = 45^\circ$ соответственно в 1,5 и 2 раза меньше, а отводов с $\theta = 180^\circ$ в 2 раза больше указанной.

Примеры условных обозначений:

- отвода с $\theta = 90^\circ$, исполнения 1, D = 139,7 мм, T = 4,0 мм из стали марки TS4:

Отвод 90-1-139,7x4-TS4 ГОСТ 17375-2001

- отвода с $\theta = 45^\circ$, исполнения 2, D = 159 мм, T = 4,0 мм, $T_B = 6,0$ мм из стали марки 20:

Отвод 45-159x4/6 ГОСТ 17375-2001

- отвода с $\theta = 90^\circ$, исполнения 2, D = 57 мм, T = 5,0 мм из стали марки 09Г2С:

Отвод 90-57x5-09Г2С ГОСТ 17375-2001

- то же, для трубопроводов, подконтрольных органам надзора:

Отвод П90-57x5-09Г2С ГОСТ 17375-2001

- отвода с $\theta=90^\circ$, исполнения 2, D = 159 мм, T = 6 мм из стали марки 09Г2С класса прочности К52, с минимальной температурой стенки отвода при эксплуатации минус 26°C для трубопроводов, подконтрольных органам надзора:

Отвод П90-159 х 6-09Г2С-К52-26°C ГОСТ 17375-2001

- отвода с $\theta=90^\circ$, исполнения 2, D = 159 мм, T = 6 мм класса прочности К60, с минимальной температурой стенки отвода при эксплуатации минус 30°C для трубопроводов, подконтрольных органам надзора:

Отвод П90-159 х 6-К60-30°C ГОСТ 17375-2001

4.2 По согласованию между изготовителем и потребителем (заказчиком) допускается изготовление отводов исполнения 2 с другими размерами и углами θ .

4.3 Допускается изготовление отводов исполнения 2 с увеличенной толщиной стенки в неторцевых сечениях T_B .

5. Технические условия

Технические условия - по [ГОСТ 17380](#).