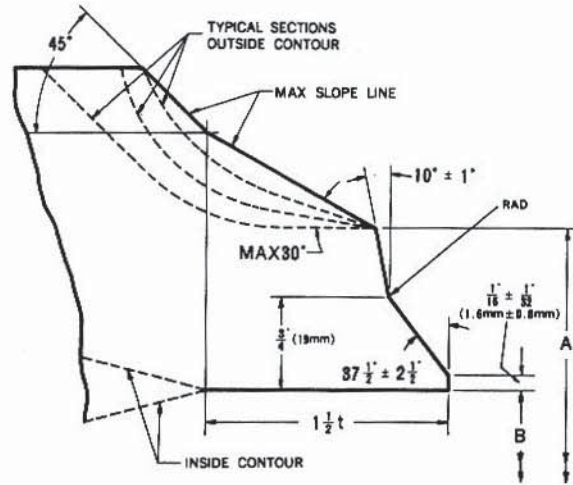


### PLAIN BEVEL

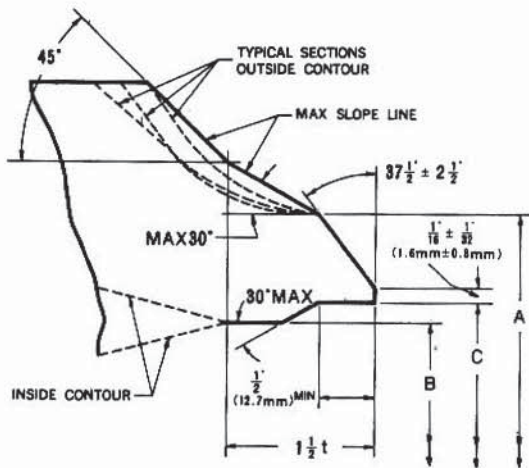
Used when nominal pipe wall thickness is  $\frac{3}{8}$ " (22.23mm) or less.



### COMPOUND BEVEL

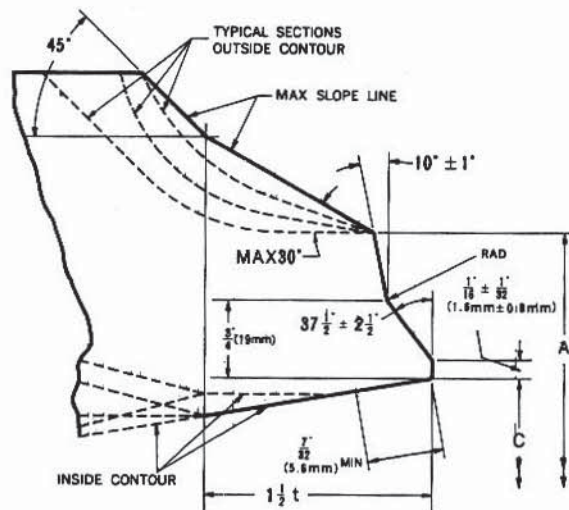
Used when nominal pipe wall thickness is greater than  $\frac{3}{8}$ " (22.23mm).

### WELDING END DETAILS FOR CAST COMPONENTS FOR USE WITHOUT BACKING RING OR WITH SPLIT BACKING RING



### PLAIN BEVEL

Used when nominal pipe wall thickness is  $\frac{3}{8}$ " (22.23mm) or less.



### COMPOUND BEVEL

Used when nominal pipe wall thickness is greater than  $\frac{3}{8}$ " (22.23mm).

### WELDING END DETAILS FOR CAST COMPONENTS FOR USE WITH CONTINUOUS RECTANGULAR OR TAPERED BACKING RING.

# BUTT-WELDING ENDS

# ANSI B16.25-1972

Dimensions of Butt-Welding Ends

| Nominal Pipe Size | Schedule Number or Wall | Outside Diameter (Cast Steel Valves) A |        | Nominal Inside Diameter B |        | Machined Inside Diameter C |        | Nominal Wall Thickness t |       |
|-------------------|-------------------------|--|--------|---------------------------|--------|----------------------------|--------|--------------------------|-------|
|                   |                         | inches                                 | mm     | inches                    | mm     | inches                     | mm     | inches                   | mm    |
| 3                 | xxs                     | 3 $\frac{1}{2}$                        | 91.28  | 2.300                     | 58.42  | 2.409                      | 61.19  | 0.600                    | 15.24 |
| 4                 | xxs                     | 4 $\frac{1}{2}$                        | 117.48 | 3.152                     | 80.06  | 3.279                      | 83.29  | 0.674                    | 17.12 |
| 5                 | 160                     | 5 $\frac{1}{2}$                        | 144.46 | 4.313                     | 109.55 | 4.428                      | 112.47 | 0.625                    | 15.88 |
|                   | xxs                     |  |        | 4.063                     | 103.20 | 4.209                      | 106.91 | 0.750                    | 19.05 |
| 6                 | 120                     | 6 $\frac{1}{2}$                        | 172.24 | 5.501                     | 139.73 | 5.600                      | 142.24 | 0.562                    | 14.27 |
|                   | 160                     |  |        | 5.189                     | 131.80 | 5.327                      | 135.31 | 0.719                    | 18.26 |
|                   | xxs                     |  |        | 4.897                     | 124.38 | 5.072                      | 128.83 | 0.864                    | 21.95 |
| 8                 | 100                     | 8 $\frac{1}{2}$                        | 223.04 | 7.439                     | 188.95 | 7.546                      | 191.67 | 0.594                    | 15.09 |
|                   | 120                     |  |        | 7.189                     | 182.60 | 7.327                      | 186.11 | 0.719                    | 18.26 |
|                   | 140                     |  |        | 7.001                     | 177.83 | 7.163                      | 181.94 | 0.812                    | 20.62 |
|                   | xxs                     |  |        | 6.875                     | 174.63 | 7.053                      | 179.15 | 0.875                    | 22.23 |
|                   | 160                     |  |        | 6.813                     | 173.05 | 6.998                      | 177.75 | 0.906                    | 23.01 |
| 10                | 80                      | 10 $\frac{1}{2}$                       | 277.81 | 9.564                     | 242.93 | 9.671                      | 245.64 | 0.594                    | 15.09 |
|                   | 100                     |  |        | 9.314                     | 236.58 | 9.452                      | 240.08 | 0.719                    | 18.26 |
|                   | 120                     |  |        | 9.064                     | 230.23 | 9.234                      | 234.54 | 0.844                    | 21.44 |
|                   | 140                     |  |        | 8.750                     | 222.25 | 8.959                      | 227.56 | 1.000                    | 25.40 |
|                   | 160                     |  |        | 8.500                     | 215.90 | 8.740                      | 222.00 | 1.125                    | 28.58 |
| 12                | 60                      | 12 $\frac{1}{2}$                       | 329.41 | 11.626                    | 295.30 | 11.725                     | 297.82 | 0.562                    | 14.27 |
|                   | 80                      |  |        | 11.376                    | 288.95 | 11.507                     | 292.28 | 0.688                    | 17.48 |
|                   | 100                     |  |        | 11.064                    | 281.03 | 11.234                     | 285.34 | 0.844                    | 21.44 |
|                   | 120                     |  |        | 10.750                    | 273.05 | 10.959                     | 278.36 | 1.000                    | 25.40 |
|                   | 140                     |  |        | 10.500                    | 266.70 | 10.740                     | 272.80 | 1.125                    | 28.58 |
|                   | 160                     |  |        | 10.126                    | 257.20 | 10.413                     | 264.49 | 1.312                    | 33.32 |
| 14                | 60                      | 14 $\frac{1}{4}$                       | 361.95 | 12.814                    | 325.48 | 12.921                     | 328.19 | 0.594                    | 15.09 |
|                   | 80                      |  |        | 12.500                    | 317.50 | 12.646                     | 321.21 | 0.750                    | 19.05 |
|                   | 100                     |  |        | 12.126                    | 308.00 | 12.319                     | 312.90 | 0.938                    | 23.83 |
|                   | 120                     |  |        | 11.814                    | 300.08 | 12.046                     | 305.97 | 1.094                    | 27.79 |
|                   | 140                     |  |        | 11.500                    | 292.10 | 11.771                     | 298.98 | 1.250                    | 31.75 |
|                   | 160                     |  |        | 11.188                    | 284.18 | 11.498                     | 292.05 | 1.406                    | 35.71 |
| 16                | 60                      | 16 $\frac{1}{4}$                       | 412.75 | 14.688                    | 373.08 | 14.811                     | 376.20 | 0.656                    | 16.66 |
|                   | 80                      |  |        | 14.314                    | 363.58 | 14.484                     | 367.89 | 0.844                    | 21.44 |
|                   | 100                     |  |        | 13.938                    | 354.03 | 14.155                     | 359.54 | 1.031                    | 26.19 |
|                   | 120                     |  |        | 13.564                    | 344.53 | 13.827                     | 351.21 | 1.219                    | 30.96 |
|                   | 140                     |  |        | 13.124                    | 333.35 | 13.442                     | 341.43 | 1.438                    | 36.53 |
|                   | 160                     |  |        | 12.814                    | 325.48 | 13.171                     | 334.54 | 1.594                    | 40.49 |
| 18                | 40                      | 18 $\frac{1}{2}$                       | 464.34 | 16.876                    | 428.65 | 16.975                     | 431.17 | 0.562                    | 14.27 |
|                   | 60                      |  |        | 16.500                    | 419.10 | 16.646                     | 422.81 | 0.750                    | 19.05 |
|                   | 80                      |  |        | 16.126                    | 409.60 | 16.319                     | 414.50 | 0.938                    | 23.83 |
|                   | 100                     |  |        | 15.688                    | 398.48 | 15.936                     | 404.77 | 1.156                    | 29.36 |
|                   | 120                     |  |        | 15.250                    | 387.35 | 15.553                     | 395.05 | 1.375                    | 34.93 |
|                   | 140                     |  |        | 14.876                    | 377.85 | 15.225                     | 386.72 | 1.562                    | 39.67 |
| 20                | 160                     | 20 $\frac{1}{4}$                       | 515.94 | 14.438                    | 366.73 | 14.842                     | 376.99 | 1.781                    | 45.24 |
|                   | 40                      |  |        | 18.814                    | 477.88 | 18.921                     | 480.59 | 0.594                    | 15.09 |
|                   | 60                      |  |        | 18.376                    | 466.75 | 18.538                     | 470.87 | 0.812                    | 20.62 |
|                   | 80                      |  |        | 17.938                    | 455.63 | 18.155                     | 461.14 | 1.031                    | 26.19 |
|                   | 100                     |  |        | 17.438                    | 442.93 | 17.717                     | 450.01 | 1.281                    | 32.54 |
|                   | 120                     |  |        | 17.000                    | 431.80 | 17.334                     | 440.28 | 1.500                    | 38.10 |
| 24                | 140                     | 24 $\frac{3}{4}$                       | 619.13 | 16.500                    | 419.10 | 16.896                     | 429.16 | 1.750                    | 44.45 |
|                   | 160                     |  |        | 16.064                    | 408.03 | 16.515                     | 419.48 | 1.969                    | 50.01 |
|                   | 30                      |  |        | 22.876                    | 581.05 | 22.975                     | 583.57 | 0.562                    | 14.27 |
|                   | 40                      |  |        | 22.626                    | 574.70 | 22.757                     | 578.03 | 0.688                    | 17.48 |
|                   | 60                      |  |        | 22.064                    | 560.43 | 22.265                     | 565.53 | 0.969                    | 24.61 |
|                   | 80                      |  |        | 21.564                    | 547.73 | 21.827                     | 554.41 | 1.219                    | 30.96 |
|                   | 100                     |  |        | 20.938                    | 531.83 | 21.280                     | 540.51 | 1.531                    | 38.89 |
|                   | 120                     |  |        | 20.376                    | 517.55 | 20.788                     | 528.02 | 1.812                    | 46.02 |
| 140               | 19.876                  | 504.85                                 | 20.350 | 516.89                    | 2.062  | 52.37                      |        |                          |       |
|                   | 160                     | 19.314                                 | 490.58 | 19.859                    | 504.42 | 2.344                      | 59.54  |                          |       |