



PADDLE BLIND THICKNESS CHART

USA Industries is the leading provider of industrial piping isolation solutions.

24/7 - 365 days of the year availability, industry leading turnaround times, and the ability to customize any part to your needs makes us the ideal fit for your next project, no matter how big or small.

USA INDUSTRIES provides:

- Piping Isolation & Testing Products
- Tube Plugs
- Orifice Plates
- Tools for Heat Exchangers
- Customer Machining
- Rental Services

Call for more info. 

(800) 456-8721 • (713) 941-3797

www.USAIndustries.com



| LINE SIZE (in.) | ISO. | 150# | | | 300# | | | 600# | | | 900# | | | 1500# | | | 2500# | | | | |
|----------------------------|------|----------|--------|-------|---------|--------|-------|--------|--------|-------|--------|--------|-------|--|--------|-------|-------------|--------|-------|-----|--|
| | | THK | O.D. | I.D. | THK | O.D. | I.D. | THK | O.D. | I.D. | THK | O.D. | I.D. | THK | O.D. | I.D. | THK | O.D. | I.D. | THK | |
| 1/2 | 5/16 | 1-3/4 | 5/8 | 5/16 | 2 | 5/8 | 5/16 | 2 | 5/8 | 5/16 | 2-3/8 | 5/8 | 5/16 | 2-3/8 | 5/8 | 5/16 | 2-5/8 | 5/8 | 3/8 | | |
| 3/4 | 5/16 | 2-1/8 | 7/8 | 5/16 | 2-1/2 | 7/8 | 5/16 | 2-1/2 | 7/8 | 5/16 | 2-5/8 | 7/8 | 5/16 | 2-5/8 | 7/8 | 3/8 | 2-7/8 | 7/8 | 3/8 | | |
| 1 | 5/16 | 2-1/2 | 1-1/8 | 5/16 | 2-3/4 | 1-1/8 | 5/16 | 2-3/4 | 1 | 5/16 | 3 | 1 | 5/16 | 3 | 1 | 3/8 | 3-1/4 | 1 | 3/8 | | |
| 1-1/4 | 5/16 | 2-7/8 | 1-5/8 | 5/16 | 3-1/8 | 1-5/8 | 5/16 | 3-1/8 | 1-3/8 | 3/8 | 3-3/8 | 1-3/8 | 3/8 | 3-3/8 | 1-3/8 | 3/8 | 4 | 1-3/8 | 1/2 | | |
| 1-1/2 | 5/16 | 3-1/4 | 1-7/8 | 5/16 | 3-5/8 | 1-7/8 | 5/16 | 3-5/8 | 1-5/8 | 3/8 | 3-3/4 | 1-5/8 | 3/8 | 3-3/4 | 1-5/8 | 1/2 | 4-1/2 | 1-5/8 | 5/8 | | |
| 2 | 5/16 | 4 | 2-3/8 | 5/16 | 4-1/4 | 2-3/8 | 3/8 | 4-1/4 | 2-1/8 | 3/8 | 5-1/2 | 2-1/8 | 1/2 | 5-1/2 | 2 | 1/2 | 5-5/8 | 2 | 5/8 | | |
| 2-1/2 | 5/16 | 4-3/4 | 2-7/8 | 5/16 | 5 | 2-7/8 | 3/8 | 5 | 2-5/8 | 1/2 | 6-3/8 | 2-5/8 | 1/2 | 6-3/8 | 2-1/2 | 5/8 | 6-1/2 | 2-3/8 | 3/4 | | |
| 3 | 5/16 | 5-1/4 | 3-1/2 | 5/16 | 5-3/4 | 3-1/2 | 3/8 | 5-3/4 | 3-1/4 | 1/2 | 6-1/2 | 3-1/4 | 5/8 | 6-3/4 | 3 | 3/4 | 7-5/8 | 3 | 7/8 | | |
| 3-1/2 | 5/16 | 6-1/4 | 4 | 3/8 | 6-3/8 | 4 | 3/8 | 6-1/4 | 3-3/4 | 5/8 | | | | | | | | | | | |
| 4 | 5/16 | 6-3/4 | 4-1/2 | 3/8 | 7 | 4-1/2 | 1/2 | 7-1/2 | 4-1/4 | 5/8 | 8 | 4-1/4 | 3/4 | 8-1/8 | 4 | 7/8 | 9-1/8 | 4 | 1-1/8 | | |
| 5 | 5/16 | 7-5/8 | 5-1/2 | 3/8 | 8-3/8 | 5-1/2 | 5/8 | 9-3/8 | 5-3/8 | 3/4 | 9-5/8 | 5-1/4 | 7/8 | 9-7/8 | 5 | 1-1/8 | 10-7/8 | 5 | 1-3/8 | | |
| 6 | 5/16 | 8-5/8 | 6-5/8 | 1/2 | 9-3/4 | 6-5/8 | 5/8 | 10-3/8 | 6-3/8 | 7/8 | 11-1/4 | 6-3/8 | 1 | 11 | 6 | 1-3/8 | 12-3/8 | 6 | 1-5/8 | | |
| 8 | 5/16 | 10-7/8 | 8-5/8 | 1/2 | 12 | 8-5/8 | 7/8 | 12-1/2 | 8-3/8 | 1-1/8 | 14 | 8-3/8 | 1-3/8 | 13-3/4 | 8 | 1-5/8 | 15-1/8 | 7-7/8 | 2-1/8 | | |
| 10 | 5/16 | 13-1/4 | 10-3/4 | 5/8 | 14-1/8 | 10-3/4 | 1 | 15-5/8 | 10-3/8 | 1-3/8 | 17 | 10-3/8 | 1-5/8 | 17 | 10 | 2 | 18-5/8 | 9-3/4 | 2-5/8 | | |
| 12 | 5/16 | 16 | 12-3/4 | 3/4 | 16-1/2 | 12-3/4 | 1-1/8 | 17-7/8 | 12-3/8 | 1-5/8 | 19-1/2 | 12-3/8 | 1-7/8 | 20-3/8 | 12 | 2-3/8 | 21-1/2 | 11-3/8 | 3-1/8 | | |
| 14 | 5/16 | 17-5/8 | 14 | 3/4 | 19 | 14 | 1-1/4 | 19-1/4 | 13-5/8 | 1-3/4 | 20-3/8 | 13-5/8 | 2-1/8 | 22-5/8 | 13-1/8 | 2-5/8 | | | | | |
| 16 | 5/16 | 20-1/8 | 16 | 7/8 | 21-1/8 | 16 | 1-1/2 | 22-1/8 | 15-5/8 | 2 | 22-1/2 | 15-5/8 | 2-3/8 | 25-1/8 | 15 | 3 | | | | | |
| 18 | 5/16 | 21-1/2 | 18 | 1 | 23-3/8 | 18 | 1-5/8 | 24 | 17-5/8 | 2-1/8 | 25 | 17-5/8 | 2-5/8 | 27-5/8 | 16-7/8 | 3-3/8 | | | | | |
| 20 | 5/16 | 23-3/4 | 20 | 1-1/8 | 25-5/8 | 20 | 1-3/4 | 26-3/4 | 19-1/2 | 2-1/2 | 27-3/8 | 19-1/2 | 2-7/8 | 29-5/8 | 18-7/8 | 3-3/4 | | | | | |
| 22 | 5/16 | 25-7/8 | 22 | 1-1/4 | 27-5/8 | 22 | 1-7/8 | 28-3/4 | 21-1/2 | 2-3/4 | | | | | | | | | | | |
| 24 | 5/16 | 28-1/8 | 24 | 1-1/4 | 30-3/8 | 24 | 2 | 31 | 23-1/2 | 2-7/8 | 32-7/8 | 23-1/2 | 3-1/2 | 35-3/8 | 22-5/8 | 4-3/8 | | | | | |
| MSS SP-44 SERIES "A" SPECS | | | | | | | | | | | | | | | | | METHODOLOGY | | | | |
| 26 | 5/16 | 30-3/8 | 26 | 1-5/8 | 32-3/4 | 26 | 2-1/2 | 34 | 26 | 3-1/2 | 34-5/8 | 26 | 4-3/8 | Line sizes up to 96" are available. Standard Isolation thickness is 5/16" (+/-1/16). Any thickness rating or alloy is available upon request. | | | | | | | |
| 28 | 5/16 | 32-5/8 | 28 | 1-3/4 | 35-1/4 | 28 | 2-3/4 | 35-7/8 | 28 | 3-3/4 | 37-1/8 | 28 | 4-5/8 | Sizes and thicknesses meet the following specifications ASME 16.48, ASME 16.5, ASME B16.47 | | | | | | | |
| 30 | 5/16 | 34-5/8 | 30 | 1-7/8 | 37-3/8 | 30 | 2-7/8 | 38-1/8 | 30 | 4-1/8 | 39-5/8 | 30 | 5 | Blank thicknesses over 24 NPS were calculated using the equation for blanks in ASME B31.3 as follows: | | | | | | | |
| 32 | 5/16 | 36-7/8 | 32 | 2 | 39-1/2 | 32 | 3-1/8 | 40-1/8 | 32 | 4-3/8 | 42-1/8 | 32 | 5-3/8 | $T=d\sqrt{(3P)/(16SE)}$ | | | | | | | |
| 34 | 5/16 | 38-7/8 | 34 | 2-1/8 | 41-1/2 | 34 | 3-1/4 | 42-1/8 | 34 | 4-5/8 | 44-5/8 | 34 | 5-5/8 | d = I.D. of ring gasket (in.) | | | | | | | |
| 36 | 5/16 | 41-1/8 | 36 | 2-1/4 | 43-7/8 | 36 | 3-1/2 | 44-3/8 | 36 | 4-7/8 | 47-1/8 | 36 | 6 | T = Blank Thickness (in.) | | | | | | | |
| 38 | 5/16 | 43-5/8 | 38 | 2-3/8 | 41-3/8 | 38 | 3-5/8 | 43-3/8 | 38 | 5-1/8 | 47-1/8 | 38 | 6-1/4 | S = 23,300psi | | | | | | | |
| 40 | 5/16 | 45-5/8 | 40 | 2-1/2 | 43-3/4 | 40 | 3-7/8 | 45-3/8 | 40 | 5-3/8 | 49-1/8 | 40 | 6-5/8 | E = 1.00 | | | | | | | |
| 42 | 5/16 | 47-7/8 | 42 | 2-5/8 | 45-3/4 | 42 | 4 | 47-7/8 | 42 | 5-5/8 | 51-1/8 | 42 | 7 | P = Design Gauge Pressure psi. | | | | | | | |
| 44 | 5/16 | 50-1/8 | 44 | 2-3/4 | 47-7/8 | 44 | 4-1/4 | 49-7/8 | 44 | 6 | 53-3/4 | 44 | 7-1/4 | S (Basic Allowable Stress) and E (Quality Factor) values were determined from tables A1 and A1-A from B31.3 for 516-Gr 70 material with the temperature range of -20 to 100° Fahrenheit. This calculation does not take into consideration any required corrosion allowance if needed. | | | | | | | |
| 46 | 5/16 | 52-1/8 | 46 | 2-7/8 | 50 | 46 | 4-1/2 | 52-1/8 | 46 | 6-1/4 | 56-3/8 | 46 | 7-5/8 | | | | | | | | |
| 48 | 5/16 | 54-3/8 | 48 | 3 | 52 | 48 | 4-5/8 | 54-5/8 | 48 | 6-1/2 | 58-3/8 | 48 | 8 | | | | | | | | |
| 50 | 5/16 | 56-3/8 | 50 | 3-1/8 | 54-1/8 | 50 | 4-7/8 | 56-7/8 | 50 | 6-3/4 | | | | | | | | | | | |
| 52 | 5/16 | 58-5/8 | 52 | 3-1/4 | 56-1/8 | 52 | 5 | 58-7/8 | 52 | 7 | | | | | | | | | | | |
| 54 | 5/16 | 60-7/8 | 54 | 3-1/4 | 58-5/8 | 54 | 5-1/4 | 61-1/8 | 54 | 7-1/4 | | | | | | | | | | | |
| 56 | 5/16 | 63-1/8 | 56 | 3-3/8 | 60-5/8 | 56 | 5-3/8 | 63-3/8 | 56 | 7-1/2 | | | | | | | | | | | |
| 58 | 5/16 | 65-3/8 | 58 | 3-1/2 | 62-5/8 | 58 | 5-5/8 | 65-3/8 | 58 | 7-7/8 | | | | | | | | | | | |
| 60 | 5/16 | 67-3/8 | 60 | 3-5/8 | 64-5/8 | 60 | 5-3/4 | 68-1/8 | 60 | 8-1/8 | | | | | | | | | | | |
| API-605 SERIES "B" SPECS | | | | | | | | | | | | | | | | | | | | | |
| 26 | 5/16 | 28-7/16 | 26 | 1-5/8 | 30-1/4 | 26 | 2-1/2 | 30 | 26 | 3-1/2 | 32-7/8 | 26 | 4-3/8 | | | | | | | | |
| 28 | 5/16 | 30-7/16 | 28 | 1-3/4 | 32-3/8 | 28 | 2-3/4 | 32-1/8 | 28 | 3-3/4 | 35-3/8 | 28 | 4-5/8 | | | | | | | | |
| 30 | 5/16 | 32-7/16 | 30 | 1-7/8 | 34-3/4 | 30 | 2-7/8 | 34-1/2 | 30 | 4-1/8 | 37-5/8 | 30 | 5 | | | | | | | | |
| 32 | 5/16 | 34-9/16 | 32 | 2 | 36-7/8 | 32 | 3-1/8 | 36-5/8 | 32 | 4-3/8 | 39-7/8 | 32 | 5-3/8 | | | | | | | | |
| 34 | 5/16 | 36-11/16 | 34 | 2-1/8 | 39 | 34 | 3-1/4 | 39-1/8 | 34 | 4-5/8 | 42-1/8 | 34 | 5-5/8 | | | | | | | | |
| 36 | 5/16 | 38-3/4 | 36 | 2-1/4 | 41-1/8 | 36 | 3-1/2 | 41-1/8 | 36 | 4-7/8 | 44-1/8 | 36 | 6 | | | | | | | | |
| 38 | 5/16 | 41 | 38 | 2-3/8 | 43-1/8 | 38 | 3-5/8 | | | | | | | | | | | | | | |
| 40 | 5/16 | 43 | 40 | 2-1/2 | 45-1/8 | 40 | 3-7/8 | | | | | | | | | | | | | | |
| 42 | 5/16 | 45 | 42 | 2-5/8 | 47-1/8 | 42 | 4 | | | | | | | | | | | | | | |
| 44 | 5/16 | 47 | 44 | 2-3/4 | 49-1/8 | 44 | 4-1/4 | | | | | | | | | | | | | | |
| 46 | 5/16 | 49-5/16 | 46 | 2-7/8 | 51-3/4 | 46 | 4-1/2 | | | | | | | | | | | | | | |
| 48 | 5/16 | 51-5/16 | 48 | 3 | 53-3/4 | 48 | 4-5/8 | | | | | | | | | | | | | | |
| 50 | 5/16 | 53-5/16 | 50 | 3-1/8 | 55-3/4 | 50 | 4-7/8 | | | | | | | | | | | | | | |
| 52 | 5/16 | 55-5/16 | 52 | 3-1/4 | 57-3/4 | 52 | 5 | | | | | | | | | | | | | | |
| 54 | 5/16 | 57-1/2 | 54 | 3-1/4 | 60-1/8 | 54 | 5-1/4 | | | | | | | | | | | | | | |
| 56 | 5/16 | 59-1/2 | 56 | 3-3/8 | 62-5/8 | 56 | 5-3/8 | | | | | | | | | | | | | | |
| 58 | 5/16 | 62-1/16 | 58 | 3-1/2 | 65-1/16 | 58 | 5-5/8 | | | | | | | | | | | | | | |
| 60 | 5/16 | 64-1/16 | 60 | 3-5/8 | 67-1/16 | 60 | 5-3/4 | | | | | | | | | | | | | | |

BLIND HANDLE COLORS

| | |
|----------------------|-----------------------|
| 150# - RED | 300# - BLUE |
| 600# - YELLOW | 900# - GREEN |
| 1500# - WHITE | 2500# - ORANGE |

24/7 AVAILABLE 24/7, 365 DAYS A YEAR!