PADDLE, SPECTACLE, PADDLE SPACER & EZ GUILLOTINE™ BLINDS

AVAILABLE FOR RENTAL AND SALE · READY TO SHIP 24/7 / 365

USA Industries stainless steel paddle, spectacle & paddle spacer blinds are Certified to NSF/ANSI/CAN 61

USA Industries is one of the leading manufacturers and suppliers of **PADDLE BLINDS** — also known as Line Blanks, Spades, Isolation Skillets, Figure 8s, and Spectacle Blind Flanges. We offer both isolation and hydrotest thicknesses; however, as a **CUSTOM MANUFACTURER**, we can also produce blinds in any thickness, handle type, alloy, or coating needed — based on your specifications and material availability.

PADDLE BLINDS

Paddle Blinds are designed to safely isolate sections of a pipeline between two flanges, effectively blocking flow during maintenance or repair operations.

SPECIFICATION	DETAILS
SIZES	1/2" – 96"
HANDLE OPTIONS	T • 7 • Straight
FACE OPTIONS	Flat • Raised • RTJ Female • RTJ Male
FINISH OPTIONS	Mill • Serrated (125/250 RMS)
STOCKED ALLOYS	SA516 Gr.70 Carbon Steel • 304 & 316 Stainless Steels (any available alloy upon request)
PROCESSING	Precision-ground smooth edges, fully stamped, freshly painted, and color-coded for easy pressure rating identification
AVAILABILITY	Purchase or Rent

ASME STANDARD	ASME STANDARD	ASME STANDARD
B16.48	**B16.47** (26"+ Series A & B)	**B16.5**

FLANGE RATINGS DESIGNATED BY COLORED HANDLES

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

SPECTACLE BLINDS / FIGURE 8S

Spectacle Blinds are typically installed permanently between two pipe flanges in a piping system. During normal operation, the open end functions as a spacer to allow flow. When isolation is needed, the blind is rotated into position between the flanges to block flow and safely isolate downstream piping and equipment.

PADDLE SPACER BLINDS

A Paddle Spacer Blind is the open half of a Spectacle Blind — installs between two flanges to allow flow. To block the line, it's swapped with a paddle blind (spade), requiring only half the bolts to be removed. Recognizable by their distinctive "O"-shaped handles, Paddle Spacers and Blinds offer a more compact alternative to bulky full Spectacle Blinds in larger sizes.

EZ GUILLOTINE™ BLINDS

EZ Guillotine Slip Blinds isolate the downstream (flare header) side of a PSV before removal for repair, protecting technicians and limiting hydrocarbon or chemical release. Rated for 1–2 lbs of pressure, they're used when flare header pressure is near zero — conditions where an open pipe can still release enough vapor to ignite from a spark. Installed correctly, the EZ Guillotine cuts that exposure to seconds. A blind flange is then bolted over it to hold against intermittent pressure.

LINE BLIND & SPACER DIMENSIONS

HYDRO TEST THICKNESS CHART

Line Size (in.)	ISO. THK	150#			300#			600#			900#			1500#			2500#		
		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	1/2	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	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

Line Size (in.)	ISO. THK	150#			300#			600#			900#		
		O.D.	I.D.	THK	O.D.	I.D.	THK	O.D.	I.D.	THK	O.D.	I.D.	THK
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
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
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
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
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
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
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
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
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
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
46	5/16	52-1/8	46	2-7/8	50	46	4-1/2	51-7/8	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	—	—	—

LINE BLIND & SPACER DIMENSIONS

SERIES B SPECS & METHODOLOGY

API-605 SERIES "B" SPECS

Line Size (in.)	ISO. THK	150#			300#			600#			900#		
		O.D.	I.D.	THK	O.D.	I.D.	THK	O.D.	I.D.	THK	O.D.	I.D.	THK
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	—	—	—	—	—	—

METHODOLOGY

Line sizes up to 96" are available. Standard isolation thickness is 5/16" (+/- 1/16). Any thickness rating or alloy is available upon request. Sizes and thicknesses meet the following specifications: **ASME B16.48, ASME B16.5, ASME B16.47.**

Blank thicknesses over 24 NPS were calculated using the equation for blanks in ASME B31.3:

$$T = d\sqrt{((3P) / (16SE))}$$

d = I.D. of ring gasket (in.) · **T** = Blank thickness (in.) · **S** = 23,300 psi · **E** = 1.00 · **P** = Design gauge pressure (psi)

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 a temperature range of -20° to 100° Fahrenheit. This calculation does not account for any required corrosion allowance.