

## **USA INDUSTRIES BLIND SOLUTIONS**

Available for Rental and Sale. Ready to Ship 24/7-365 Days of the Year.

# PADDLE, SPECTACLE & PADDLE SPACER BLINDS

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 to meet your specific needs.

Our blinds are manufactured and stocked in:

- Line sizes from 1/2" to 96"
- Flange ratings from 150# to 2500#
- · Raised face, mill, or serrated finishes
- RTJ (Ring Type Joint), male or female, oval or octagonal configurations
- NSF Certification applies exclusively to stainless steel products

Standard materials include SA516 Gr.70 carbon steel and 304 & 316 stainless steels. Additional alloys and pressure ratings are available upon request.

Whether for purchase or rental, each blind is precision-ground with a smooth edge finish, stamped, freshly painted, and color-coded for easy pressure rating identification. All products are manufactured in strict compliance with ASME B16.47 & B16.48 / ANSI B16.5 & B16.2 standards.

#### **Paddle Blinds**

Paddle Blinds are designed to safely isolate sections of a pipeline between two flanges, effectively blocking flow during maintenance or repair operations. USA Industries offers Paddle Blinds in three standard handle styles: "7", "T", and Straight. As a custom manufacturer, we can also produce blinds in any handle type, thickness, or alloy needed—based on your specifications and material availability.



COLORED HANDLES DESIGNATE BLIND RATINGS											
150#	RED	300#	BLUE	600#	YELLOW						
900#	GREEN	1500#	WHITE	2500#	ORANGE						

#### Spectacle Blind / Figure 8

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 Blind**

A Paddle Spacer, shaped like the open half of a spectacle blind, is installed between two flanges to allow flow through the line. When flow needs to be blocked, it's swapped with a paddle blind (or spade). Only half the bolts need removal for this switch. Paddle Spacers are easily recognized by their distinctive "0"-shaped handles. Unlike full Spectacle Blinds, which can be bulky in larger sizes, Paddle Blinds and Spacers offer a more compact, convenient alternative.

For more information on USA Industries products, contact us at (713) 941-3797 or go to www.USAIndustries.com



52

54

56

58

60

5/16 | 55-5/16

5/16 57-1/2

5/16 59-1/2

5/16 62-1/16

5/16 64-1/16

52

54

56

58

60

3-1/4

3-1/4

3-3/8

3-1/2

3-5/8

57-3/4

60-1/8

62-5/8

65-1/16

67-1/16

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54

56

58

5

5-1/4

5-3/8

5-5/8

5-3/4

# **LINE BLIND & SPACER DIMENSIONS** WITH HYDRO TEST THICKNESS(THK) CHART

LINE	ISO.		150#		300#		600#		900#			1500#			2500#						
SIZE (in.)	THK	0.D.	I.D.	THK	0.D.	I.D.	THK	0.D.	I.D.	THK	0.D.	I.D.	THK	0.D.	I.D.	THK	0.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 0/0	5/16	3	1 1 2/2	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 5/16	3-1/4 4	1-7/8 2-3/8	5/16 5/16	3-5/8 4-1/4	1-7/8 2-3/8	5/16 3/8	3-5/8 4-1/4	1-5/8 2-1/8	3/8	3-3/4 5-1/2	1-5/8 2-1/8	3/8	3-3/4 5-1/2	1-5/8 2	1/2	4-1/2 5-5/8	1-5/8 2	5/8 5/8		
2-1/2	5/16	4-3/4	2-3/6	5/16	4-1/4 5	2-3/6	3/8	5	2-1/6	1/2	6-3/8	2-1/6	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	0 1/2	0 1/1	0/0	0-3/4 3 3/4 1-3/0 3 1/0							
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		ERTIFIE	<u> </u>		
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		7			
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	l ( <b>(</b>	ISO	) )		
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	J ( <b>1</b>	9001:2015	<b>/</b> /		
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							, \	OMPAN	<b>'</b>		
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							
- 00	F (40	00.0/0	00	4.5/0		SP-44 SI	_			0.4/0	04.5/0	00	4.0/0			METHO	DOLOGY				
26	5/16 5/16	30-3/8 32-5/8	26 28	1-5/8	32-3/4 35-1/4	26 28	2-1/2 2-3/4	34 35-7/8	26	3-1/2 3-3/4	34-5/8 37-1/8	26 28	4-3/8								
30	5/16	34-5/8	30	1-3/4	37-3/8	30	2-3/4	38-1/8	28 30	3-3/4 4-1/8	39-5/8	30	4-5/8 5	Line sizes up to 96" are available. Standard							
32	5/16	36-7/8	32	2	39-1/2	32	3-1/8	40-1/8	32	4-1/6	42-1/8	32	5-3/8	Isolation thickness is 5/16" (+/-1/16). Any							
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	thickness rating or alloy is available upon request.							
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	Toquo	request.						
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	۵.							
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				meet th				
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	specif	ications	ASME 1	6.48, AS	ME 16.5	, ASME		
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	B16.47	B16.47						
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			Blank thicknesses over 24 NPS were								
52	5/16	58-5/8	52	3-1/4	56-1/8	52	5	58-7/8	52	7	calculated using the equation for blanks in								e in		
54	5/16	60-7/8	54	3-1/4	58-5/8	54	5-1/4	61-1/8	54	7-1/4	ASME B31.3 as follows:										
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	T=d√ ((3P) / (16SE))										
2.5	F 11 -	00 =/:-		4 = 12		I-605 SEF				0.11	00.7		4.07	d=11	) of rine	gasket	(in )				
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	T = Bl	ank Thic	kness (i	n.)				
30	5/16 5/16	32-7/16 34-9/16	30 32	1-7/8	34-3/4 36-7/8	30 32	2-7/8 3-1/8	34-1/2 36-5/8	30 32	4-1/8 4-3/8	37-5/8 39-7/8	30 32	5 5-3/8	S = 23	S = 23,300psi						
34		34-9/16	34	2-1/8	36-7/8	34	3-1/8	39-1/8	34	4-3/8	39-7/8 42-1/8	34	5-3/8								
36	5/16	38-3/4	36	2-1/6	41-1/8	36	3-1/4	41-1/8	36	4-5/8	44-1/8	36	6	E = 1.00							
38	5/16	41	38	2-1/4	43-1/8	38	3-1/2	71-1/0	30	7-1/0	77-1/0	30	-	P – Docian Caugo Proceuro poi							
40	5/16	43	40	2-3/0	45/1/8	40	3-7/8	USA Industries Stainless Steel Paddle, Spectacle &													
42	5/16	45	42	2-5/8	47-1/8	42	4	Paddie Spacer Blinds are Certified to NSF/ANSI/CAN 61													
44	5/16	47	44	2-3/4	49-1/8	44	4-1/4	Factor) values were determined from tables													
46	5/16	49-5/16	46	2-7/8	51-3/4	46	4-1/2											ables			
48	5/16	51-5/16	48	3	53-3/4	48	4-5/8		A1 and A1-A from B31.3 for 516-Gr 70 material with the temperature range of -20												
50		53-5/16	50	3-1/8	55-3/4	50	4-7/8							material with the temperature range of -20							
52		55 5/16		2 1/4	57 2/4	52	5				- ®							90-0			

Certified to

NSF/ANSI/CAN 61

to 100° Fahrenheit. This calculation does

not take into consideration any required

corrosion allowance if needed.