

Rely on the people who know screen systems!



Profile Wire | Urethane | Perforated Plate | Locking & Hold-Down Systems

Since 1975



Princeton, West Virginia USA www.CONN-WELD.com

Conn-Weld Industries, LLC - Princeton, WV 24740 - 304.487.1421-www.conn-weld.com

Every screen application presents a new challenge. Over the years Conn-Weld has met this challenge by engineering and designing screen systems to size, dewater, filter, and to work under abrasive tough jobs.



We have engineered innovative solutions for coal applications, aggregate, scalping pond recover, wood and corn wet milling, scrap metal, minerals and organic fertilizers, sand and gravel, cement and asphalt, and more.

We have positioned district managers globally to guide you through the screen media selection process. Our specialist ask the right questions and know the right answers to make sure you get solutions for your screening application.

Contact our experts today and let us help you choose the right screen systems to meet your needs.

Conn-Weld Screening Systems and Media Products

- Tuff-Screens and Profile Wire
- Urethane
- Perforated Plate
- Tufflok Screen Panel Locking Systems
- Patented Panelok Screen Hold-Down System
- Patented Panelok II Locking System

CONN/WELD

CONN-WELD INDUSTRIES, LLC.

PROFILE WIRE





Conn-Weld knows screen systems. Since 1975, we have perfected our manufacturing processes and understand the key requirements to ensure the best performance.

First, Conn-Weld engineers are experts in choosing the correct opening and wire size for maximum screen life in your specific application.

Second, we manufacture all stainless profile wire and shapes in our own mill. Using special instrumentation, we monitor every inch of wire to ensure proper tolerances and consistency are maintained. Through years of testing, we have determined metallurgical content of every pound of wire for optimum screen life.



Conn-Weld Tuff Screens[®], a proven Fusion Welding Process and Forge Welding Process, guarantee reliable screen assembly so no members fail prematurely.

- Profile screens manufactured in any type of steel
- A range of openings to select from
- Panels framed using rubber, mild steel, or stainless steel
- Screen support options available such as deflector strips
- Proper tolerances and sharp edges minimize break-in period
- Screen openings from .0015" to 3"
- 304 and 316 Stainless Steel (others available upon request)
- Fine screening up to 100 microns
- Rubber, mild steel, stainless steel and other framing options available
- Screen panels for any vibrator

DEWATERING CAPACITY, STATIC SIEVE BEND

(GPM PER LINEAL FOOT OF SCREEN)

PROFILE WIRE	.010" 1/4MM	.013" 1/3MM	.020" 1/2MM	.030" 3/4MM	.040" 1 MM	.050" 1-1/4MM	.060" 1-1/2MM	
.030	100	115	160	*	*	*	*	*
.045	60	75	145	*	*	*	*	*
C1/16	35	60	130	195	240	270	*	*
C3/32	*	*	100	100	195	215	240	280
C1/8	*	*	70	125	155	185	210	240

% SOLIDS: 20% @ 50#/FT³

30% @ 100#/FT³

40% @ 150#/FT³

SCREEN ROD SELECTIONS





WIRE APPLICATION GUIDE - FLAT SCREENS CG 3/16 CG 5/32 CONSULT Ш IZ IS FACTORY CG 1/8 PROFILE WIRE C 1/8 NOT RECOMMENDED CG 3/32 WITHOUT FACTORY APPROVAL C 3/32 CG 1/16 MATERIAL LARGER THAN 4" MAY REQUIRE EXTRA SUPPORT C 1/16 AND/OR SKID BARS з" 6" 1 " 1-1/2" 4" 5" 7" 8" 28 1/4" 1/2" 2" MESH MATERIAL TOP SIZE NOTES

1.) BASED ON 50 POUNDS PER CUBIC FOOT

2.) As in all screen applications, impact of falling material and velocity and volume must be held to a minimum. Consult with your screen application engineer.

OPEN AREA CHART

Open Area Chart, available under services/resource center on our website Conn-Weld.com

															Ir. Tuff-Soreea							
				FINE												Openings Conn-Weld		PASS THRU = 1 DDGPM / FT ² OF OPEN AREA				
		MICRONS	WiRE				"C" PROFILE		Round Hole									Square Hole	Ref. Tyler Mesh	INCHES		
			"A" DIM.				"А" Diм.															
мм	INCHES		0.03	0.045	0.03	1/16"	3/32"	1/16"	3/32"	1/8"	3/32"	0.11	1/8"	5/32"	3/16"	1/4"	мм	INCHES	1			
	0.001	25	3.2	2.2	3.2	1.6	1.1	1.6	1.1	0.8	1.1	0.9	0.8	0.6	0.5	0.4		0.001			400	0.0015
	0.002	50	6.3	4.3	6.3	3.2	2.2	3.2	2.2	1.6	2.2	1.8	1.6	1.3	1.1	0.8		0.002			250	0.0024
	0.003	75 100	9.1 11.8	6.3	9.1 11.8	4.8	3.2 4.3	4.8	3.2	2.4 3.2	3.2 4.3	2.7	2.4	1.9	1.6	1.2		0.003			150	0.0029
1/8	0.004	100	11.8	8.2	11.8	6.2 7.7	4.3	6.2	4.3 5.3	3.2	4.3	4.3	3.2	2.5	2.1	1.6	1/8	0.004			150	0.0041
1/6	0.006	125	16.7	11.3	16.7	9.1	6.3	9.1	6.3	4.8	6.3	5.2	4.7	3.7	3.1	2.3	1/4	0.006			80	0.0069
	0.007	177	18.3	13.5	18.9	10.4	7.2	10.4	7.2	5.5	7.2	6	5.5	4.3	3.6	2.3		0.007			65	0.0082
1/5	0.008	200	21.1	15.1	21.1	11.8	8.2	11.8	8.2	6.2	8.2	6.8	6.2	4.9	4.1	3.1	1/5	0.008			60	0.0097
1/4	0.01	250	25	18.2	25	14.3	10	14.3	10	7.7	10	8.3	7.6	6	5.1	3.8	1/4	0.01			48	0.0116
1/3	0.013	330	30.2	22.4	30.2	17.8	12.6	17.8	12.6	9.8	12.6	10.6	9.7	7.7	6.6	4.8	1/3	0.013			42	0.0138
2/5	0.016	400	34.8	26.2	34.8	21.1	15.1	21.1	15.1	11.8	15.1	12.7	11.7	9.3	8	6	2/5	0.016			35	0.0164
	0.018	450	37.5	28.6	37.5	23.1	16.7	23.1	16.7	13	16.7	14.1	12.9	10.3	8.9	6.7		0.018			32	0.0195
1/2	0.02	500	40	30.8	40	25	18.2	25	18.2	14.3	18.2	15.4	14.2	11.4	9.8	7.4	1/2	0.02	1/32		28	0.0232
3/5	0.024	620	44.4	34.8	44.4	28.6	21.1	28.6	21.1	16.7	21.1	17.9	16.6	13.3	11.5	8.8	3/5	0.024			24	0.0276
3/4	0.03	750	50	40	50	23.3	25	33.3	25	20	25	21.4	19.9	16.1	14	10.7	3/4	0.03	3/64		20	0.0328
1	0.04	1000	57.1	47.1	57.1	40	30.8	40	30.8	25	30.8	26.7	24.8	20.4	17.8	13.8	1	0.04			16	0.039
1-1/4 1-3/8	0.05	1250 1410	62.5 64.7	52.6 55	62.5 64.7	45.5 47.8	35.7 37.9	45.5 47.8	35.7 37.9	29.4 31.4	35.7 37.9	31.3 33.3	29.2 31.2	24.3	21.3 22.9	16.7 18	1-1/4 1-3/8	0.05	1/16		14	0.045
1-3/8	0.055	1410	64.7 66.7	55	64.7 66.7	47.8	37.9	47.8	37.9	31.4	37.9	33.3	31.2	26.1 27.8	22.9	18	1-3/8	0.055	5/64		12	0.0555
1-5/8	0.065	1500	68.4	59.1	68.4	52	41.9	52	41.9	35.1	41.9	37.1	34.9	27.8	24.5	20.6	1-5/8	0.065	3/32		9	0.078
1-3/4	0.005		70	60.9	70	53.8	43.8	53.8	43.8	36.8	43.8	38.9	36.6	31	27.5	21.9	1-3/4	0.005	7/64		8	0.093
2	0.08		72.7	64	72.7	57.1	47.1	57.1	47.1	40	47.1	42.1	39.8	33.9	30.2	24.2	2	0.08	1/8		7	0.11
2-1/4	0.09		76	66.7	75	60	50	60	50	42.9	50	45	42.7	36.6	32.7	26.5	2-1/4	0.09	9/64	3/32		
2-1/2	0.1		76.9	69	76.9	62.5	52.6	62.5	52.6	45.5	52.6	47.6	45.2	39.1	35.1	28.6	2-1/2	0.01	5/32		6	0.131
2-3/4	0.11		78.6	71	78.6	64.7	55	64.7	55	47.8	55	50	47.6	41.4	37.3	30.6	2-3/4	0.11	11/64			
3	0.12		80	72.7	80	66.7	57.1	66.7	57.1	50	57.1	52.2	49.8	43.5	39.3	32.4	з	0.12	3/16	5/32	5	0.156
	9/64		82.4	76	82.4	70.1	61	70.1	61	54	61	56.1	53.8	47.5	43.3	36.1		9/64	7/32		4	0.185
	3/16		86.2	81	86.2	75.8	67.6	75.5	67.6	61	67.6	63	60.8	54.6	50.3	42.9		3/16	1/4	3/16		
	7/32		88	83	88	78.5	70.9	78.5	70.9	64.6	70.9	66.5	64.4	58.4	54.2	46.7		7/32	5/16	1/4	3	0.263
	1/4		89.3	84.7	89.3	80.6	73.5	80.6 83.9	73.5	67.6 72.3	73.5	69.4 74	67.4	61.6	57.5	50		1/4	3/8	5/16	2-1/2	0.312
	3/8		91.2 92.6	87.4 89.3	91.2 92.6	83.9	77.6 80.6	83.9	77.6 80.6	75.8	77.6 80.6	77.3	72.1	66.7 70.6	62.8 67	60		3/8	7/16	3/8		
	7/16		92.6	90.7	92.6	87.9	82.9	87.9	82.9	78.5	82.9	79.9	78.3	73.7	70.3	63.6		7/16	9/16	3/8		
	1/2		943	91.7	94.3	89.3	84.7	89.3	84.7	80.6	84.7	82	80.5	76.2	73	66.7		1/2	5/8	1/2		
	9/16		94.9	92.6	94.9	90.4	86.2	90.4	86.2	82.4	86.2	83.6	82.3	78.3	75.3	69.2		9/16	11/16	./2		
	5/8		95.4	93.3	95.4	91.2	87.4	91.2	87.4	83.9	87.4	85	83.8	80	77.2	71.4		5/8	3/4	5/8		
	11/16		95.8	93.8	95.8	92	88.4	92	88.4	85.1	88.4	86.2	85	81.5	78.8	73.3		11/16	13/16			
	3/4		96.2	94.3	96.2	92.6	89.3	92.6	89.3	86.2	89.3	87.2	86.1	82.8	80.2	75		3/4	7/8	3/4		
	7/8		96.7	95.1	96.7	93.6	90.7	93.6	90.7	87.9	90.7	88.8	87.9	84.9	82.5	77.8		7/8	1	7/8		
	1		97.1	95.7	97.1	94.3	91.7	94.3	91.7	89.3	91.7	90.1	89.2	86.5	84.4	80		1	1-1/4	1		
	1-1/4		97.7	96.5	97.7	95.4	93.3	95.4	93.3	91.2	93.3	91.9	91.2	88.9	87.1	83.3		1-1/4	1-1/2	1-1/4		
	1-1/2		98	97.1	98	96.2	94.3	96.2	94.3	92.6	94.3	93.2	92.5	90.6	89	85.7		1-1/2	1-3/4	1-1/2		
	1-3/4		98.3	97.5	98.3	96.7	95.1	96.7	95.1	93.6	95.1	94.1	93.5	91.8	90.4	87.5		1-3/4	2	1-3/4		

Determining open area:

If you desire ½ mm opening width C 3/32 wire, the chart will show you that this would be 18.2% open area. To determine this percentage, read down the Conn-Weld column at left to ½ mm (or .020 inches) then read straight across to the "C" Profile section under "A" dimension for 3/32.

CONN-WELD INDUSTRIES, LLC.

URETHANE

Marth White was provided

l Istria-Au Conn-Weld's Urethane is made of the highest quality materials in the industry to suit the most abrasive applications whether wet screening or dry screening.

Urethane panels available in a variety of opening and thickness:

- 0.25mm to 2" slotted openings
- Non-blinding openings for better screen filtration
- High open area panels for better screening capability
- 1' x 1' panels available in a variety of thicknesses from 30mm to 50mm
- Up to 2' x 4' open cast molded urethane panels for larger media

Special features enhance filtration:

- Red panel has restrictive flow to slow material for better filtration.
- Blue panel is manufactured with large end-dam to reduce flow of media over screen helping better filter material.
- Green panel keeps material over screen openings using side-guides.



2" x 10" large opening, 50mm thick panel

- A variety of boltless urethane assemblies available:
- Pin-style makes for simple installation using durable plastic pins keeping panels secure.
- Be sure to ask about Conn-Weld Tufflok Systems.
- Conn-Weld custom manufactures hold-down devices.

CONN-WELD INDUSTRIES, LLC.

PERFORATED PLATE

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Conn-Weld's Perforated Plate brings screening strength and efficiency to our vibrating screens in numerous applications. Computer Automated Design (CNC) combined with precision manufacturing assure your specific screen type and opening is achieved. Renowned for being resistant to plugging and sustaining size accuracy, our perforated plate is available in many selections.



Options:

□ Material: AR, mild steel, stainless steel (others available

- □ Thickness: 1/4, 3/8, ½
- Openings: ¼" up to 12"
- □ Hold-down systems: Bolt-in and C-Type clamp
- □ Types: Round, slotted, square

CONN WELD

CONN-WELD INDUSTRIES, LLC.

CONN-WELD'S TIME SAVING SCREEN HOLD-DOWN SYSTEM

PANELOK





The **PANELOK** systems are easy to install and easier to maintain!

Conn-Weld understands the effect that high maintenance costs and down-time have on your plant operations. That's why we developed the PANELOK Screen Hold-Down Systems.

Side hold-downs are manufactured from an extremely abrasive resistant material replacing existing wooden hold-downs *without* side plate modification.





High durable foam rubber securely seal all screen seams.

Designed for simple installation and replacement of individual screen panels.

Dam retainers double as a screen clamping lock strip.

Screen panels clamp uniformly Self-protective design prevents wear Designed to use existing bucker bars and standard bucker rubber





Profile screens are built according to the same industry standards you have come to expect from all your Conn-Weld screen products