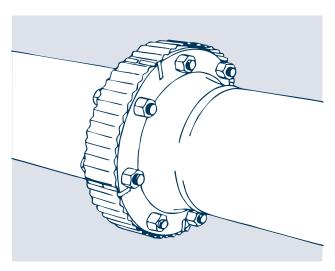
## SPLATTER-SHIELD STRIPS

Dangerous, hot or pressurised media are transported through pipelines in many branches of industry. Wherever these pipelines are connected to each other with bolted flanges, there is a danger that a leakage of the dangerous medium will occur, leading to an accident.

This can involve acids or alkalis, high-pressure steam or boiling water, high-pressure hydraulic oil or heat-carrying oil, compressed air or water, to name the most important sources of danger.

#### Design and operation

Splatter-shield strips in Profile BWQ are made from 0.2 mm thick stainless steel strip of material 1.4541. They are corrugated at right angles to the length. When used with a flange connection, the corrugation along the strip creates many small openings to the outside.



This means that the dangerous medium cannot stream out directly onto a person standing in front of the flange connection. Instead, the stream of acid, alkali or water will hit the interior of the splatter-shield strip and then flow at low pressure through the opening.

Selection criteria for a splatter-shield strip for a 4 mm thick gasket

The strip width b <sub>S</sub> as	s relates to the flange thickness is:  10-23 24-26 27-39 40-44 45-78				
Flange thickness b [mm]	10-23	24-26	27-39	40-44	45-78
Strip width b <sub>S</sub>	40	40 (60)	60	60 (100)	100

The length of the splatter shield strip $L_S$ is determined as follows:					
Single wrap		$LS = \pi \cdot D + 50 \text{ mm}$ $LS = 1,1 \cdot \pi \cdot D \text{ mm}$			
Double wrap	D < 320 mm D > 320 mm	$LS = 2 \cdot \pi \cdot D + 50 \text{ mm}$ $LS = 2,05 \cdot \pi \cdot D \text{ mm}$			

#### Number of security fastener required

To correctly attach the splatter-shield strips you need the following number of security fasteners, as a security fastener must be attached just before the outer end of the wrapping.

Diameter D [mm]	Security fasteners	Diameter D [mm]	Security fasteners	
		1194 - 1273	16	
10 - 50	2	1274 - 1353	17	
65 - 100	3	1354 - 1432	18	
125 - 150	4	1433 - 1511	19	
175 - 200	5	1512 - 1591	20	
225 - 250	6	1592 - 1671	21	
275 - 300	7	1642 - 1750	22	
350 - 600	8	1751 - 1830	23	
635 - 715	9	1831 - 1909	24	
716 - 795	10	1910 - 1989	25	
796 - 875	11	1990 - 2069	26	
876 - 955	12	2070 - 2148	27	
956 -1035	13	2149 - 2228	28	
1036 -1115	14	2229 - 2307	29	
1116 -1193	15	2308 - 2387	30	

#### Installation

For security, a flange of approx. 1,1  $\cdot$  D  $\cdot$   $\pi$  mm, but D  $\cdot$   $\pi$  + 50 mm as a minimum for small flanges, is required, so that there is sufficient overlap. From PN 100, particularly with water or other heavy liquids, there should be a double wrapping of the flange. For this 2,05  $\cdot$  D  $\cdot$   $\pi$  mm. is required. To securely attach it, the splatter-shield strip with security fasteners Profile BWS, which is wrapped around the flange, is secured to the flange in such a way that, starting at the overlap, one end of the security fastener is bent downwards towards the flange plate and one end is bent upwards by 180°.

### Supplied as:

We supply splatter-shield strips for all profile sizes in rolls of 25 m each. This includes security fasteners from stainless steel material 1.4541, Profile BWS 40, BWS 60 or BWS 100.

# **SPLATTER-SHIELD STRIPS**

Nominal flange diameter	·	PN	6 DIN 2527, 2631	DIN 2641			DIN 2527 2632, 2566	PN 10 DIN 2642	DIN 2653, 2673	DIN 2576	DIN 28115
DN	A (Stck.)	L <sub>S</sub> (mm) 290	b <sub>S</sub> (mm) 40	b <sub>S</sub> (mm) 40	A (Stck.)	L <sub>S</sub> (mm) 335	b <sub>S</sub> (mm) 40	bs (mm) 40	b <sub>S</sub> (mm) 40 (60)	b <sub>S</sub> (mm) 40	bs (mm)
15 20	3 3	305 335	40 40	40 40	3	350 380	40 40	40 40	40 (60) 40 (60)	40 40	
25	3	365	40	40	3	415	40	40	60	40	40
32	4	430 460	40 40	40	4	490 525	40	40	60 60	40	40
50	4	490	40	40	4	575	40	40	60	40	40
65 80	5	555 660	40	40	5	640 695	40 40	40	60 60	40	40
100 125	5 6	730 830	40 40	40 40	6	765 865	40 40	40 40	60 60	40	40 40
150	6	920	40	40	7	985	40	40	60	40	40
200 250	7 8	1110	40	40	7 8	1175	40 (60) 40 (60)	40 (60) 40 (60)	60 (100) 60 (100)	40 (60) 40 (60)	40 (60)
300	8	1525	40	40 (60) 40 (60)	8	1540	40 (60)	10 1007	100	40 (60)	
350 400	8	1700 1870	40 40	60	8 8	1750 1955	40 (60) 40 (60)		100 100	60	
500 600	9	2230 2610	40 (60) 40 (60)	60 60	10	2320 2700	60 60		100	60	
700	11	2975	40 (60)	60 (100)	12	3095	60		100		
900	13 14	3370 3715	40 (60) 40 (60)	60 (100) 100	13 15	3510 3855	60 60		S S		
1000	15 18	4065 4860	40 (60) 60	100	16 19	4255 5030	60 60		fasterners		
1400	21	5635	60	100	22	5790	60 (100)		las.		
1600 1800	23 26	6325 7070	60 60	-	25	7310	100		longer		
2000	29	7830	60	1	30	8035	100		<u>o</u>		
Nominal flange diameter		PN 16 DIN 2527, 256 2633	DIN 28115		2527, 2634		DIN 28115		2527, 2	PN 40 DIN 2635 2656	DIN 28115
DN 10	A Ls (mrr 3 .335	i) bs (mm)	b <sub>S</sub> (mm)	A Ls (mm 3 335	bs (mm) 40	b <sub>S</sub> (mm) 60	bs (mm)	A Ls (n	m) b <sub>s</sub> (m	m) b <sub>s</sub> (mm	) b <sub>s</sub> (mm)
15 20	3 335 3 350 3 380	40		3 335 3 350 3 380	40	60		3 38	50 40	60	
25	3 415	40	40	3 415	40	60	40	3 4	5 40	60	40
32 40	4 490 4 525	40	40	4 490 4 525	40	60 60	40	4 49	25 40	60	40
50 65	4 575 5 640	40	40	4 575 5 640	40	60	40	5 64			40
100	5 690 6 765	40 40	40 (60) 40 (60)	5 695 6 815	40 (60) 40 (60)	60 (100) 60 (100)	40 (60)	5 69 6 81	90 40 (6	60 (100	) 40 (60)
125	6 865	40	40 (60)	6 935	40 (60)	100		6 93	35 40 (6	30) 100	,
150 200	7 985 7 1175	40 (60)	60	7 1040 8 1245	60	100		7 104 8 130			_
250 300	8 1400 8 1590	40 (60) 60		8 1470 8 1680	60	100		8 155 8 178	55 60	100	
350	8 1800	60		8 1920	60	100		8 200	100	longer	
400 500	8 2005 9 2475	60		8 2145 10 2525	60 (100)	longer fasterners		9 228			
700	11 2905 12 3145	60		11 2925 13 3320	100			- (df. ) - (lbo)			
800	13 3545	60		14 3750	100			7			
1000	15 3890 16 4340		1	15 4100 17 4565 PN 100	100		PN 160		1	PN 250	1
Nominal flange diameter DN	DIN 2	2636		single wrap wrap	m) b <sub>s</sub> (mm)		single doub wrap wra	р		single dou wrap wr	ар
10	3 36	nm) b <sub>s</sub> (mm) 65 40	A L	365 680	40	3	365 68			L <sub>S</sub> (mm) L <sub>S</sub> (i	100
15 25	4 49	80 40 90 40 (60)	3 4	380 710 490 930	40 (60)	3	380 71 490 93		4		70 40 (60) 95 60
32 40		40 40 (60) 90 40 (60)	5	540 1025 590 1120		4	590 112	20 60	5	640 12	15 60
50	5 62	25 40 (60)	5	675 1280	60	5	675 128	30 60	5	695 13	10 60
65 80	5 74	10 60 45 60	6	765 1435 795 1500	60	5 6	765 143 795 150	00 60	6	795 15 885 16	
100	6 86 7 102	65 60 20 60	7	920 1715 1090 2030		7 1	920 171			1040 19 1175 21	
150 200	8 120 8 143	00 60 (100)	8 8	1230 2290 1490 2770	60 (100)	8 1	1230 229 1490 277	0 100	8 8	1350 25 1680 31	16 100
250	8 162	25 100	8	1750 3255	100	8 1	780 332	20 100	8	2025 37	
300 350	8 183	75 100	8 8	2025 3770 2265 4220		8 2	2025 377	100			
400	9 232	20   100	Raise	d face		1	l l	Raised fa	ce		
Nominal flange	ANSI Class 150	С	blind t ass 300	flange Class 400	single	Class 600 dou	ıble [	blind flan Class 900 single	double	Class 150	0 double
diameter NPS	• It : It			A 1/	wrap	wr	ар	wrap	wrap	wrap	wrap
1/2		40 3 3	mm) b <sub>s</sub> (mm) 50 40		40 3 3	50 650	40 4	L <sub>s</sub> (mm) L <sub>s</sub> (m 430 81	0 40	4 430 8	(mm) b <sub>S</sub> (mm) 310 40
- 3/4 1	3 360	40 4 4	20 40 40 40	4 420 4 440		20 790 40 830	40 4 40 4	460 87 520 99	0 40 (60)		370 40 (60) 990 60
	4 420	40 4 4	70 40	4 470	40 4 4	70 890	40 4	550 105	60	4 550 10	050 60
11/4	4 450	40 5 5	40 40 70 40	5 570 40	(60) 5 5	40 1030 70 1090	40 (60) 5	615 117 750 141	0 60	5 750 14	170 60 410 60
11/4 11/5 2	4 530	40 5 6	60 40 (60) 25 60		60 5 6 60 5 7	60 1250 25 1370	60 5 60 6	845 159 925 173	0 60 (100)	5 845 15	730 100
11/4 11/5 2 21/5 3	4 530 5 615 5 660 40	(60) 5 7			60 6 7	90 1490	60				
11/4 11/2 2 21/2 3 31/2	4 530 5 615 5 660 40 5 750 40	(60) 5 7 (60) 6 7	90 60	6 790		45 1770	60 7	1010 1 100	0 60/100	7 1075 20	005 100
11/4 11/5 2 21/5 3 31/2 4 5	4 530 5 615 5 660 40 5 750 40 6 790 40 6 880 40	0 (60) 5 7 0 (60) 6 7 0 (60) 6 8 0 (60) 7 9	90 60 80 60 65 60	6 880 7 965	60 7 9 60 8 11		60 7 60 (100) 8		0 100	8 1295 24	005 100 415 100
11/4 11/2 2 21/2 3 3 31/2 4 5 6 8	4 530 5 615 5 660 40 5 750 40 6 790 40 6 880 40 7 970 40 8 1190	0 (60) 5 7 0 (60) 6 7 0 (60) 6 8 0 (60) 7 9 0 (60) 7 11 60 8 13	90 60 80 60 65 60 00 60 20 60 (100)	6 880 7 965 7 1100 60 8 1320	60 7 9 60 8 11 (100) 8 12 100 8 14	45 2130 30 2295 50 2700	60 (100) 8 100 8 100 8	1210 225 1320 245 1625 303	50 100 55 100 80 100	8 1295 24 8 1365 25 8 1670 3	415 100 540
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