

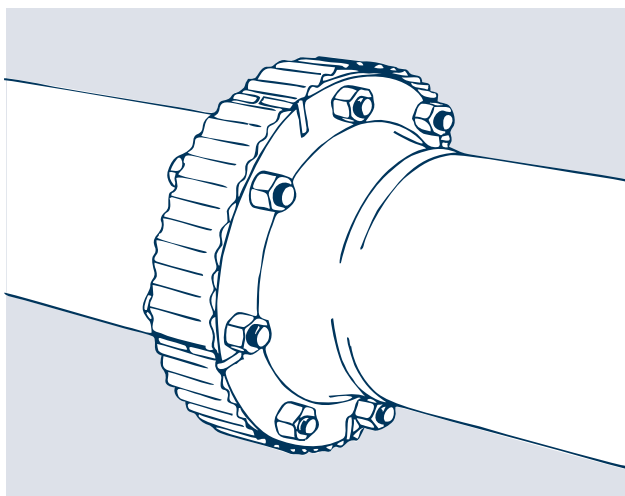
# SPLATTER-SHIELD STRIPS

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 $b_S$ as relates to the flange thickness is:					
Flange thickness b [mm]	10-23	24-26	27-39	40-44	45-78
Strip width $b_S$	40	40 (60)	60	60 (100)	100

The length of the splatter shield strip  $L_S$  is determined as follows:

Single wrap	$D < 160$ mm	$L_S = \pi \cdot D + 50$ mm
	$D > 160$ mm	$L_S = 1,1 \cdot \pi \cdot D$ mm
Double wrap	$D < 320$ mm	$L_S = 2 \cdot \pi \cdot D + 50$ mm
	$D > 320$ mm	$L_S = 2,05 \cdot \pi \cdot D$ 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
10 - 50	2	1194 - 1273	16
65 - 100	3	1274 - 1353	17
125 - 150	4	1354 - 1432	18
175 - 200	5	1433 - 1511	19
225 - 250	6	1512 - 1591	20
275 - 300	7	1592 - 1671	21
350 - 600	8	1642 - 1750	22
635 - 715	9	1751 - 1830	23
716 - 795	10	1831 - 1909	24
796 - 875	11	1910 - 1989	25
876 - 955	12	1990 - 2069	26
956 - 1035	13	2070 - 2148	27
1036 - 1115	14	2149 - 2228	28
1116 - 1193	15	2229 - 2307	29
		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  $180^\circ$ .

## 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.

