

# STEULER

Plastic | Linings

Together with our subsidiaries and representatives, Steuler offers a worldwide network to our clients that develops and implements comprehensive system solutions.

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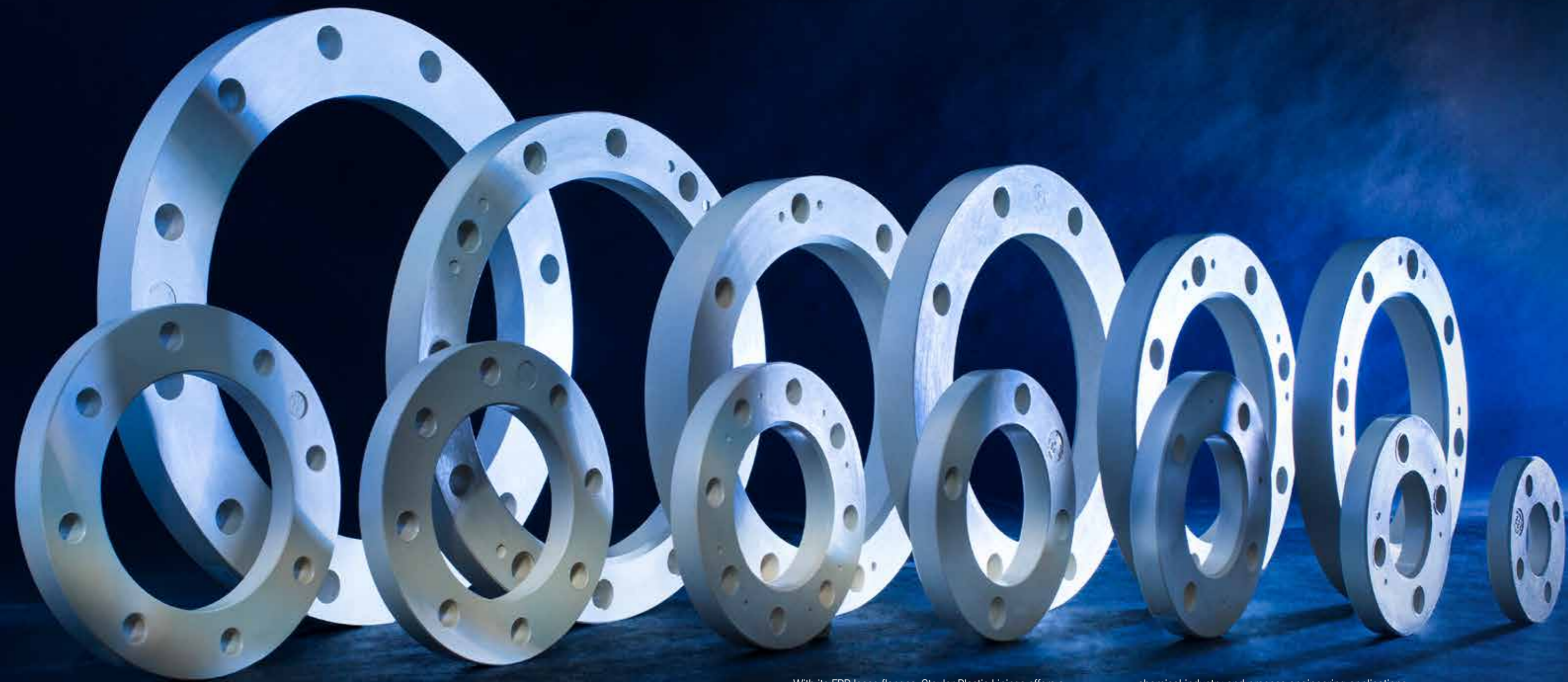
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**STEULER** Plastic | Linings

**LOOSE FLANGES** MADE  
FROM GLASS-FIBRE  
REINFORCED PLASTIC

FOCUS ON PROGRESS





# LOOSE FLANGES

## FOR YOUR NEEDS

With its FRP loose flanges, Steuler Plastic Linings offers a system for connecting pipes in a sealed, but removable manner. The contact pressure at the sealing surfaces and the gasket are critical for ensuring a watertight joint. Flanges for pipes are designated according to their nominal pressure rating (PN) and standardised within the EN 1092 standards series.

Steuler designs the FRP flanges in accordance with the standard required by the customer (e.g. DIN, ASME, Covestro company standard, etc.). These connecting elements are also characterised by outstanding resistance to high chemical and thermal stress. The systems offer a suitable method for connecting pipes and vessels, such as those used in the

chemical industry and process engineering applications. Steuler loose flanges possess superior physical properties, including high flexural strength, low specific weight and high impact strength.

Our development and production departments have set themselves the goal of developing and supplying the most efficient and effective materials, products and technologies for the application in question. Steuler draws on its wealth of experience and expertise to deliver innovative, cost-effective solutions. And always with the goal of providing the very best to the customer: during processing, during use and for the long-time operation.



**Dimensional tolerances:**

- ø D** permissible deviation ±1 mm (DN 25-250), ±3 mm (DN 300-500), ±5 mm (DN 600)
- ø d1** permissible deviation +1 mm
- ø K** permissible deviation ±1,6 mm (DN 25-600)
- b** permissible deviation +2 mm (DN 25-500)
- x** permissible deviation +0,5 mm

The specified characteristic values are average values; they were determined according to the currently applicable DIN regulations. They may not necessarily be applicable to other sizes or used as acceptance specifications. All information is provided according to the best of our knowledge at the time of issue and does not constitute a guarantee of specific features. Subject to technical alteration without notice.



**FRP LOOSE FLANGE  
ACCORDING TO DIN 16966-6**

Flange connection dimensions  
according to DIN EN 1092-1

Nominal diameter		Dimensions							Nominal pressure rating (strength)	Nominal pressure rating (flange connection dimension)
Inch	mm	ø D	b	ø K	ø d1	x	ø d2	Number of holes	PN	PN
1"	25	115	14	85	51	3,5	14	4	16	16
1¼"	32	140	15	100	59	3,5	18	4	16	16
1½"	40	150	16	110	69	3,5	18	4	16	16
2"	50	165	18	125	83	3,5	18	4	16	16
2½"	65	185	20	145	96	3,5	18	4	10	16
3"	80	200	22	160	112	3,5	18	8	10	16
4"	100	220	24	180	134	4,5	18	8	10	16
5"	125	250	27	210	161	4,5	18	8	10	16
6"	150	285	30	240	189	4,5	22	8	10	16
8"	200	340	32	295	238	6,0	22	8	6	10
10"	250	395	34	350	294	6,0	22	12	6	10
12"	300	445	36	400	344	6,0	22	12	6	10
14"	350	505	38	460	388	7,0	22	16	4	10
16"	400	565	42	515	442	7,0	26	16	4	10
20"	500*	670	47	620	545	7,0	26	20	4	10
24"	600*	780	51	725	650	8,0	30	20	2,5	10

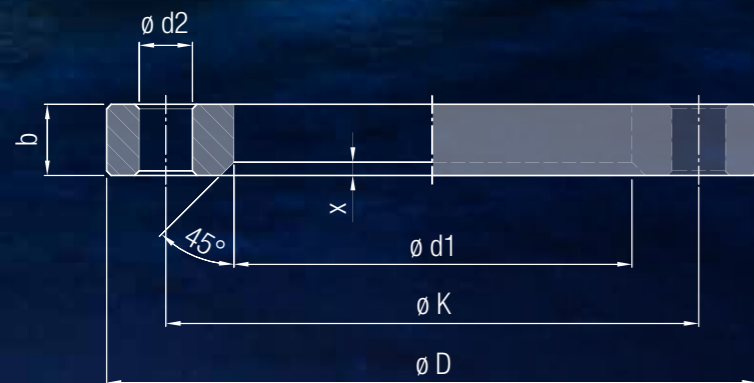
**FRP LOOSE FLANGE ACCORDING TO  
COVESTRO COMPANY STANDARD**

Flange connection dimensions  
according to DIN EN 1092-1

Nominal diameter		Dimensions							Nominal pressure rating (strength)	Nominal pressure rating (flange connection dimension)
Inch	mm	ø D	b	ø K	ø d1	x	ø d2	Number of holes	PN	PN
1"	25	115	14	85	50,5	3,5	14	4	10	40
1¼"	32	140	15	100	58,5	3,5	18	4	10	40
1½"	40	150	16	110	68,5	3,5	18	4	10	40
2"	50	165	18	125	82,5	3,5	18	4	10	16
2½"	65	185	20	145	95,5	3,5	18	4	10	16
3"	80	200	22	160	111,5	3,5	18	8	10	16
4"	100	220	24	180	133,5	4,5	18	8	10	16
5"	125	250	27	210	160,5	4,5	18	8	10	16
6"	150	285	33	240	188,5	4,5	22	8	10	16
8"	200	340	41	295	238	6,0	22	8	10	10
10"	250*	395	51	350	294	6,0	22	12	10	10
12"	300*	445	59	400	344	6,0	22	12	10	10
14"	350*	505	63	460	388	7,0	22	16	10	10
16"	400*	565	72	515	442	7,0	26	16	10	10

**FRP LOOSE FLANGE ACCORDING TO  
ASME B16.5 CLASS 150**

Nominal diameter		Dimensions							Nominal pressure rating (strength)	Nominal pressure rating (flange connection dimension)
Inch	mm	ø D	b	ø K	ø d1	x	ø d2	Number of holes	PN	PN
1"	25	108	14	79,4	51	3,5	16	4	16	150
1¼"	32*	117	15	89	59	3,5	16	4	16	150
1½"	40*	127	16	98,4	69	3,5	16	4	16	150
2"	50	152	18	121	83	3,5	19	4	16	150
2½"	65*	178	20	140	96	3,5	19	4	10	150
3"	80	190	22	152	113	3,5	19	4	10	150
4"	100	229	24	190	134	4,5	19	8	10	150
5"	125*	254	27	216	163	4,5	22	8	10	150
6"	150	279	30	241	189	4,5	22	8	10	150
8"	200	343	32	298	238	6,0	22	8	6	150
10"	250	406	34	362	295	6,0	26	12	6	150
12"	300	483	36	432	350	6,0	26	12	6	150
14"	350*	533	38	476	389	7,0	29	12	4	150
16"	400*	597	42	540	443	7,0	29	16	4	150
20"	500*	698	47	635	546	7,0	32	20	4	150
24"	600*	813	51	749	650	8,0	32	20	2,5	150



\* Following consultation