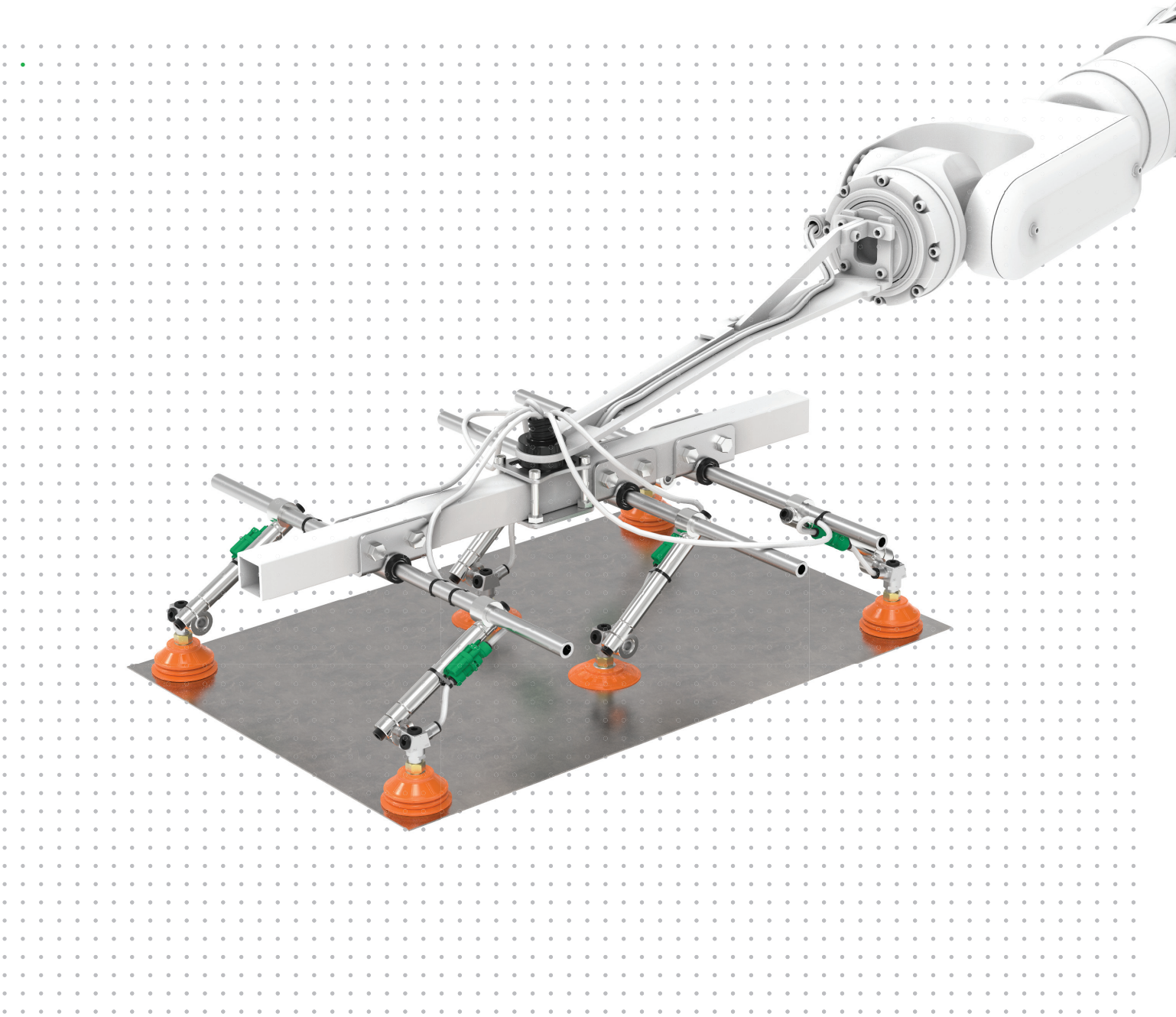


Improve productivity with state of the art friction cups for oily surfaces

DURAFLEX® FRICTION CUPS



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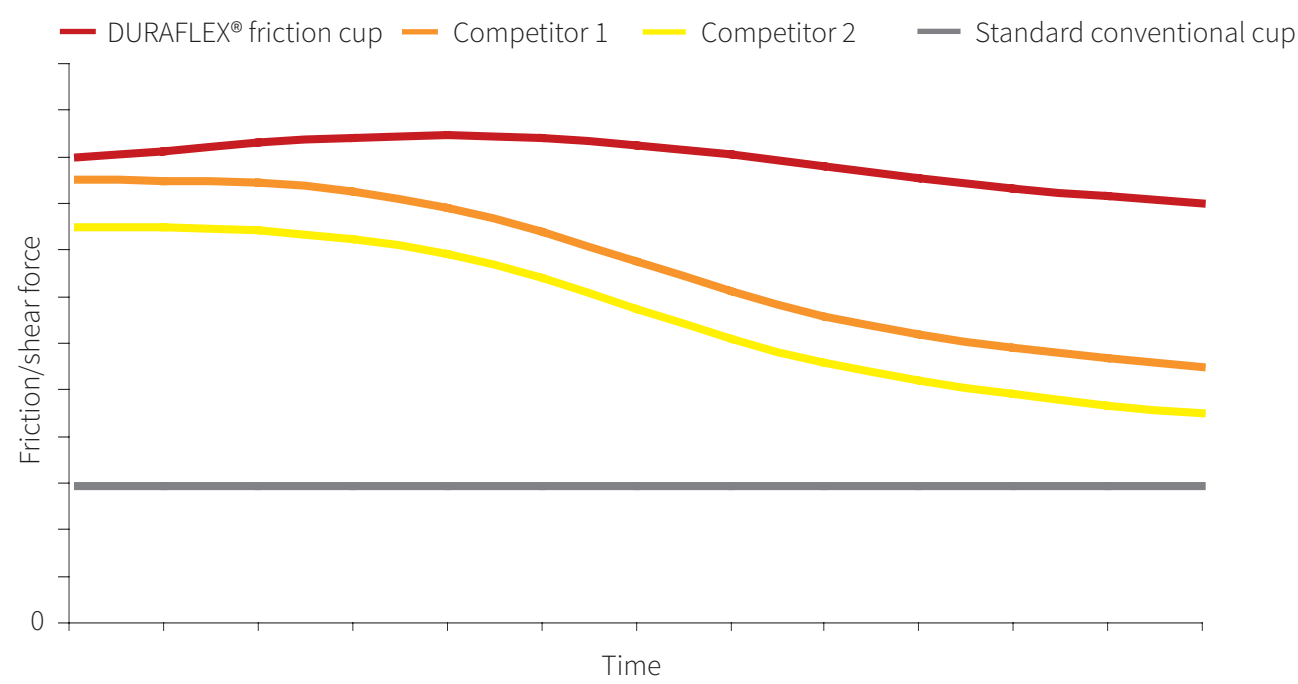


DURAFLEX® Friction Cups

Improve productivity with state of the art friction cups for oily surfaces

- The friction cups are a great asset to achieve maximum strokes per minute
- Longer cup life (> 1,000,000 cycles)
- Same performance during entire life-time
- Probably the best grip on fast moving oily sheets, available on the market
- Outstanding elastic memory
- Available with plastic fittings to reduce weight

Suction cup friction/shear force on oily sheet metal surfaces



BFF
For flat and curved metal surfaces. Integrated level compensation.



BFFT
For thin metal sheets, down to 0.6mm thickness. Integrated level compensation.



BXF
Suitable for application where great level compensation is needed.



DCF
For high speed press lines. Excellent grip on convex and concave metal surfaces.



FCF
For slightly domed or flat metal surfaces.



OBF
For narrow, curved or flat metal surfaces. Integrated level compensation.



OCF
For narrow, slightly domed and flat metal surfaces.

Ordering information

Name	3/8" NPT	G1/4"		G3/8"					M10x1.5	T-slot
	female	female	male	female	female plastic	female, 17 mm thread	male	male, 1/8" NPSF female	male	
BFF30P	0206915	0206918	–	0206908	0206599	–	–	0201821	–	0206924
BFF40P	0122278	0206940	–	0118992	0205617	0200697	0118991	–	0121427	0206925
BFF60P	0122279	0206941	–	0118995	0124742	0200699	0118994	–	0121428	0206933
BFF80P	0206882	0207259	0209104	0207255	0207256	0207261	–	0207257	0207260	0207258
BFF110P	0206881	0207215	0209103	0207211	0207212	0207217	–	0207213	0207216	0207214
BFF80TP	0206689	0206694	0209101	0206690	0206691	0207263	–	0206692	0207262	0206693
BFF110TP	0206695	0206700	0209102	0206696	0206697	0207204	–	0206698	0207202	0206699
BFFT23P	0210558	0210559	0210560	0210555	0210170	0210556	0210557	–	0210561	0210562
BFFT35P	0210567	0210568	0210569	0210564	0210325	0210565	0210566	–	0210570	0210571
BFFT50P	0206519	0206791	0207698	0206522	0206523	0209190	–	0206521	0207666	0206524
BFFT70P	0206525	0206792	0207699	0206527	0206528	0209191	–	0206526	0207667	0206529
BFFT90P	0206530	0206793	0207700	0206532	0206533	0209192	–	0206531	0207669	0206534
BFFT105P	0210575	0210576	0210577	0210572	0210315	0210573	0210574	–	0210578	0210579
BFFT120P	0210583	0210584	0210585	0210580	0210352	0210581	0210582	–	0210586	0210587
BXF60P	0207750	0207751	0207752	0207748	0207530	0209305	0207749	–	0207753	0207747
BXF75P	0209311	0209312	0209313	0209308	0209307	0209309	0209310	–	0209314	0209315
BXF90P	0207743	0207744	0207745	0207741	0207531	0209356	0207742	–	0207746	0207740
BXF105P	0209427	0209428	0209429	0209424	0209378	0209425	0209426	–	0209430	0209431
DCF30P	0210591	0210592	0210593	0210588	0210171	0210589	0210590	–	0210594	0210595
DCF40P	0210599	0210600	0210601	0210596	0210330	0210597	0210598	–	0210602	0210603
DCF52P	0210607	0210608	0210609	0210604	0210491	0210605	0210606	–	0210610	0210611
DCF65P	0206535	0206794	0207678	0206537	0206538	0209185	–	0206536	0207654	0206539
DCF80P	0210615	0210616	0210617	0210612	0210516	0210613	0210614	–	0210618	0210619
DCF90P	0206540	0206795	0207679	0206542	0206543	0209186	–	0206541	0207655	0206544
DCF100P	0210623	0210624	0210625	0210620	0210172	0210621	0210622	–	0210626	0210627
DCF110P	0206545	0206796	0207680	0206547	0206548	0209187	–	0206546	0207660	0206549
FCF25P	0206916	0206919	–	0206909	0206895	–	–	0201827	–	0206926
FCF35P	0122282	0206921	–	0118981	0206893	0200652	0119913	–	0121431	0206927
FCF50P	0122283	0206936	–	0118986	0206606	0200685	0118985	–	0121432	0206929
FCF75P	0122284	0206937	–	0118429	0124718	0200687	0118423	–	0121433	0206930
FCF100P	0122285	0206938	–	0118432	0124669	0200690	0118430	–	0121385	0206931
FCF125P	0122286	0206939	–	0118437	0124787	0200693	0118435	–	0121435	0206932
OBF15×35P H	0207571	0207579	0207581	0207577	0207587	0209500	0207585	–	0207583	0207575
OBF15×35P L	0207589	0207594	0207595	0207593	0207598	0209501	0207597	–	0207596	0207592
OBF15×65P	0207599	0207607	0207609	0207605	0207615	0209502	0207613	–	0207611	0207603
OBF35×90P	0122287	–	–	0119123	–	0200694	0119121	–	0121436	–
OBF50×140P	0122288	–	–	0119127	–	–	0119125	–	0121437	–
OBF65×170P	0122289	–	–	0119131	–	–	0119129	–	0121438	–
OBF30×60P	0207736	0207737	0207738	0207734	0207617	0209490	0207735	–	0207739	0207733
OCF20×50P	0207729	0207730	0207731	0207727	0207618	0209497	0207728	–	0207732	0207726
OCF20×80P	0121859	–	–	0122455	–	–	0121847	–	–	–
OCF30×90P	0122459	–	–	0121786	–	–	0122456	–	–	–
OCF40×110P	0121865	–	–	0122860	–	–	0122457	–	–	–

Values valid for steel sheet with surface finish Ra 1 and press oil content of 2–3 g/m².
*Dry metal sheet/Oily metal sheet. **Height range includes fittings.

Lifting forces and measurements

Lifting forces vertical to the surface. N at	Friction/shear forces parallel to the surface. N at	Maximum vertical movement	General dimensions in mm.	
			X	Y**
60 -kPa	60 -kPa	mm		
24/23*	11/5.5*	5	30	28.6–38.0
43/45*	60/35*	7	45	32.0–51.5
77/82*	90/76*	10	61	36.0–55.3
176/174*	201/110*	14	85.3	46–56
279/284*	298/235*	21	115	53–72.5
176/174*	201/110*	14	85.3	36.5–56
279/284*	298/235*	21	115	53–72.5
19/17*	15/9*	5	23	18.1–39.1
42/37*	30/16*	8	35	20.6–41.6
105/104*	122/61*	11	53	27.2–46.7
172/165*	176/110*	14	73	31.7–51.2
184/184*	273/171*	21	93	41–60.5
315/310*	298/170*	23	105	43.7–63.2
338/335*	414/212*	26	120	51.1–70.6
88/82*	47/43*	31.7	60	52.6–72.1
115/117*	73/71*	40.1	75	66.5–85.8
169/168*	84/92*	46.2	90	75.9–95.4
217/238*	105/125*	55.5	105	89.1–108.6
30/26*	17/12*	4	30	18.7–39.7
43/40*	27/19*	6	40	20.4–41.4
72/65*	51/36*	7	52.1	25.4–46.4
143/141*	146/100*	9	67.5	28.2–47.7
179/165*	129/90*	10	80.1	26.7–46.2
255/222*	256/183*	13	92.5	41.6–51.7
249/238*	269/188*	12	100.4	33.5–53
315/313*	377/286*	16	112.5	40.6–59.8
19/19*	7/5*	2	25	28–36
42/34*	30/26*	2.5	35	28.5–47.8
78/72*	77/52*	3.6	50	30.6–49.9
171/163*	166/104*	4.5	75	31–41
347/236*	337/139*	6	100	36–45
475/405*	445/194*	8.2	126	42–51.2
25/19*	21/5*	2.9	36	38.7–53.4
25/19*	21/5*	2.9	36	23.4–37.1
41/31*	31/7*	2.9	66	23.4–37.1
140/108*	125/105*	11	105	39–47.9
325/246*	328/271*	13	157	47–55.8
397/403*	437/538*	15	187	54–62.8
60/43*	74/32*	7	60	32.3–43.6
45/51*	28/57*	3	54	29.3–39.3
75/82*	78/35*	3	84	27–30.1
111/115*	107/51*	4	92.5	26.5–29.5
178/185*	167/54*	5	113	32.5–35.5