

VDI 3400 | Agie Charmilles Textures and Draft Requirements



TRUE POSITION PLASTICS
WWW.TRUEPOSITIONPLASTICS.COM

Textured surfaces require additional draft to prevent drag or scuffing during ejection. As surface roughness increases, more draft is needed to allow smooth part release and protect both the molded surface and the texture detail.

Note: Draft requirements for materials not listed should be determined by comparing to the closest material type in surface friction and shrinkage behavior (e.g., PBT $\approx$ PA).

Note: Glass-reinforced materials require greater draft angles due to higher surface friction and reduced shrink.

VDI 3400 Charmilles	Ra (μm)	Ra (μin)	Recommended Draft Angle ($^\circ$)		
			PA (Nylon)	PC (Polycarbonate)	ABS
12	0.40	16.0	0.0	1.0	0.5
15	0.56	22.4	0.5	1.0	0.5
18	0.80	32.0	0.5	1.0	0.5
21	1.12	44.8	0.5	1.0	0.5
24	1.62	63.0	0.5	1.5	1.0
27	2.20	88.0	1.0	2.0	1.5
30	3.20	125.0	1.5	2.0	2.0
33	4.50	180.0	2.0	3.0	2.5
36	6.30	250.0	2.5	4.0	3.0
39	9.00	360.0	3.0	5.0	4.0
42	12.60	500.0	4.0	6.0	5.0
45	17.00	710.0	5.0	7.0	–