Doc. nr: FRM-0137 (00)

DD tolerances optical components

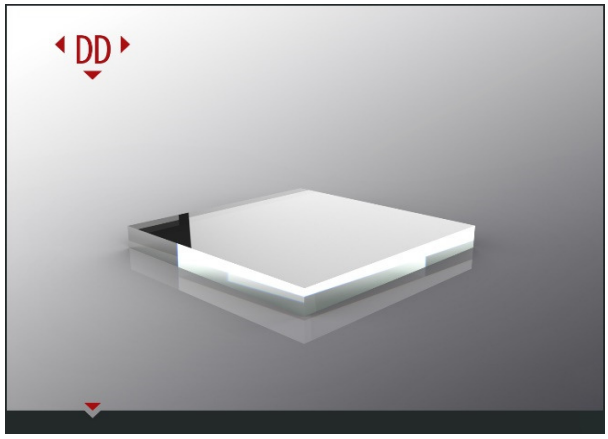
DUTCH DIAMOND GROUP

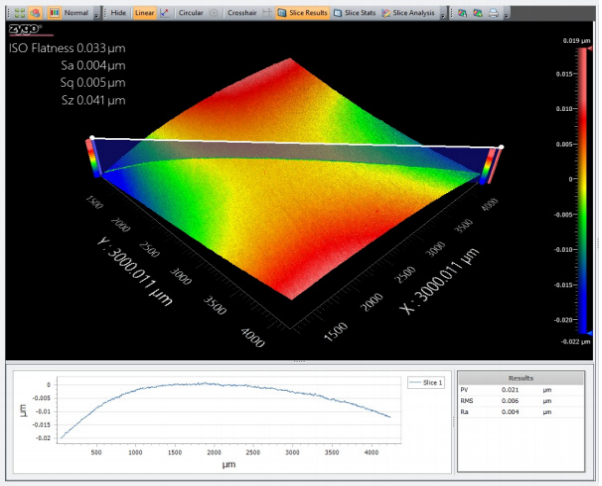
Crystallographic orientation		Available dimensions	Thickness
Top face	*Side face*		
[100]	[100]	max. 15x15 mm	max. 2,4 mm
[100]	[110]	max. 30x30 mm	max. 2,4 mm

DD's standard tolerances*

Size	Roughness	Flatness	Parallelism
2 x 2 x 0,1 mm	< 20 nm	< 0,5 µm	< 5 µm
2 x 2 x 0,5 mm	< 10 nm	< 0,3 µm	< 5 µm
2 x 2 x 1 mm	< 5 nm	< 0,2 µm	< 5 µm
3 x 3 x 0,1 mm	< 20 nm	< 0,5 µm	< 5 µm
3 x 3 x 0,5 mm	< 10 nm	< 0,3 µm	< 5 µm
3 x 3 x 1 mm	< 5 nm	< 0,2 µm	< 5 µm
5 x 5 x 0,1 mm	< 30 nm	< 0,5 µm	< 5 µm
5 x 5 x 0,5 mm	< 20 nm	< 0,3 µm	< 5 µm
5 x 5 x 1 mm	< 10 nm	< 0,2 µm	< 5 µm
5 x 5 x 2 mm	< 5 nm	< 0,1 µm	< 5 µm
7 x 7 x 0,2 mm	< 30 nm	< 0,5 µm	< 10 µm
7 x 7 x 0,5 mm	< 20 nm	< 0,3 µm	< 10 µm
7 x 7 x 1 mm	< 10 nm	< 0,2 µm	< 10 µm
7 x 7 x 2 mm	< 5 nm	< 0,1 µm	< 10 µm
10 x 10 x 0,5 mm	< 20 nm	< 0,3 µm	< 20 µm
10 x 10 x 1 mm	< 10 nm	< 0,2 µm	< 20 µm
10 x 10 x 2 mm	< 5 nm	< 0,1 µm	< 20 µm
12 x 12 x 0,5 mm	< 20 nm	< 0,3 µm	< 30 µm
12 x 12 x 1 mm	< 10 nm	< 0,2 µm	< 30 µm
12 x 12 x 2 mm	< 5 nm	< 0,1 µm	< 30 µm
15 x 15 x 0,5 mm	< 20 nm	< 0,4 µm	< 40 µm
15 x 15 x 1 mm	< 10 nm	< 0,3 µm	< 40 µm
15 x 15 x 2 mm	< 5 nm	< 0,2 µm	< 40 µm
20 x 20 x 0,5 mm	< 20 nm	< 0,5 µm	< 50 µm
20 x 20 x 1 mm	< 10 nm	< 0,4 µm	< 50 µm
20 x 20 x 2 mm	< 5 nm	< 0,3 µm	< 50 µm
25 x 25 x 0,5 mm	< 20 nm	< 0,5 µm	< 60 µm
25 x 25 x 1 mm	< 10 nm	< 0,4 µm	< 60 µm
25 x 25 x 2 mm	< 5 nm	< 0,3 µm	< 60 µm
30 x 30 x 0,5 mm	< 20 nm	< 0,5 µm	< 70 µm
30 x 30 x 1 mm	< 10 nm	< 0,4 µm	< 70 µm
30 x 30 x 2 mm	< 5 nm	< 0,3 µm	< 70 µm

For measurements, the following applies:
Roughness Sa measured @ area 1x1 mm
Flatness measured @ area 1x1 mm





Other dimensions or geometries on request, round and rectangular shapes are possible as well within the square sizes as shown above.

* Smaller tolerances are possible, please ask us about our capabilities and let yourself be surprised.