Thermal cutting - Classification of thermal cuts - Geometrical product specification and quality tolerances

Limit deviations for nominal dimensions according to the ISO 9013 standard tolerance class 2 Autogenous cutting and plasma cutting.

	Nominal dimensions							
Work piece thickness	>0<3	≥3<10	≥10<35	≥35 <125	≥125 <315	≥315 <1000	≥1000 <2000	≥2000 <4000
>0≤1	±0.1	±0.3	±0.4	±0.5	±0.7	±0.8	±0.9	±0.9
>1≤3.15	±0.2	±0.4	±0.5	±0.7	±0.8	±0.9	±1	±1.1
>3.15≤6.3	±0.5	±0.7	±0.8	±0.9	±1.1	±1.2	±1.3	±1.3
>6.3≤10	-	±1	±1.1	±1.3	±1.4	±1.5	±1,6	±1.7
>10≤50	-	±1.8	±1.8	±1.8	±1.9	±2.3	±3	±4.2
>50≤100	-	-	±2.5	±2.5	±2.6	±3	±3.7	±4.9
>100≤150	-	-	±3.2	±3.3	±3.4	±3.7	±4.4	±5.7
>150≤200	-	-	±4	±4	±4.1	±4.5	±5.2	±6.4
>200≤250	-	-	-	-	-	±5.2	±5.9	±7.2
>250≤300	-	-	-	-	-	±6	±6.7	±7.9

The tolerance limit of the diameter at the cutting edge for the thickness of material.

Cut thickness	Δa (mm)
≤ 3	0.1
> 3 to 6	0.3
> 6 to 10	0.6
> 10 to 20	1.0
> 20 to 40	1.5
> 40 to 100	2.0
> 100 to 150	3.0
> 150 to 200	5.0
> 200 to 250	8.0
> 250 to 300	10.0