

Full laser cutting and engraving guidance

(Valid for Endurance lasers)

2.1W laser

Type of material	Material thickness in mm for cutting	Optimal laser cutting speed	Amount of passes	Optimal engraving speed	Lens type
WOOD & PLYWOOD	1-2	100-150	2-10	100-500	Regular
RUBBER	1-2	100-200	3-8	50-150	Regular
STONE	n/a	n/a	n/a	n/a	Regular
PLASTIC	1-2	50-250	3-10	100-300	Regular
LEATHER	1-2	150-250	3-10	50-500	Regular
PAPER	1	250-500	1-3	150-500	Regular
GLASS	n/a	n/a	n/a	n/a	Regular
HARD WOOD	n/a	n/a	n/a	n/a	Regular
ANODISED MATERIAL	n/a	n/a	n/a	n/a	Regular
ACRYLIC	1-2	100-250	3-10	50-250	Regular
CARDBOARD	1-2	100-250	1-10	50-250	Regular
CLOTH	1-2	200-300	1-5	100-250	Regular
FOOD/ CAKES/ CHOCO	1-2	100-400	2-3	100-250	Regular
STAINLESS STEEL	n/a	n/a	n/a	n/a	Regular
COPPER	n/a	n/a	n/a	n/a	Regular
ALUMINUM	n/a	n/a	n/a	n/a	Regular
BALSA	1-2	100-200	3-10	50-250	Regular
MDF	1-2	100-250	3-10	100-250	Regular

3.5W

Type of material	Material thickness in mm for cutting	Optimal laser cutting speed	Amount of passes	Optimal engraving speed	Lens type
WOOD & PLYWOOD	2-3	150-250	1-8	100-750	Regular
RUBBER	1-3	150-250	2-6	50-250	Regular
STONE	n/a	n/a	n/a	50-200	Regular
PLASTIC	2-3	150-250	2-8	100-400	Regular
LEATHER	1-3	150-400	2-8	50-600	Regular
PAPER	1-3	250-1000	1-2	150-600	Regular
GLASS	n/a	n/a	n/a	50-100	Regular
HARD WOOD	1-2	n/a	n/a	n/a	Regular
ANODISED MATERIAL	n/a	n/a	n/a	n/a	Regular
ACRYLIC	2-3	100-400	2-8	50-350	Regular
CARDBOARD	1-3	100-400	1-8	50-350	Regular
FELT / FABRIC	1-3	200-500	1-3	100-350	Regular
FOOD/ CAKES/ CHOCO	1-2	100-500	1-2	100-600	Regular
STAINLESS STEEL	n/a	n/a	n/a	n/a	Regular

COPPER	n/a	n/a	n/a	n/a	Regular
ALUMINUM	n/a	n/a	n/a	n/a	Regular
BALSA	1-3	100-400	2-8	50-350	Regular
MDF	1-3	100-400	2-8	100-350	Regular

5.6W

Type of material	Material thickness in mm for cutting	Optimal laser cutting speed	Amount of passes	Optimal engraving speed	Lens type
WOOD & PLYWOOD	3-5	100	3-6	100-750	Regular
RUBBER	2-5	150-250	2-10	50-400	Regular
STONE	n/a	n/a	n/a	50-300	Regular
PLASTIC	2-5	150-250	3-10	100-500	Regular
LEATHER	2-5	150-400	2-10	50-750	Regular
PAPER	2-5	250-1000	1-2	150-1000	Regular
GLASS	n/a	n/a	n/a	50-150	Regular
HARD WOOD	2-3	50-100	5-50	50-250	Regular
ANODISED MATERIAL	n/a	n/a	n/a	n/a	Regular
ACRYLIC	3-5	100-200	3-10	50-500	Regular
CARDBOARD	2-5	100-150	2-15	50-500	Regular
FELT / FABRIC	2-5	200-500	2-10	100-500	Regular
FOOD/ CAKES/ CHOCO	2-5	100-500	1-2	100-750	Regular
STAINLESS STEEL	n/a	n/a	n/a	n/a	Regular
COPPER	n/a	n/a	n/a	n/a	Regular
ALUMINUM	n/a	n/a	n/a	n/a	Regular
BALSA	3-5	100-200	3-10	50-500	Regular
MDF	3-5	100-200	3-10	100-500	Regular

5.6W

Type of material	Material thickness in mm for cutting	Optimal laser cutting speed	Amount of passes	Optimal engraving speed	Lens type
WOOD & PLYWOOD	3-5	100-200	3-15	200-750	G2
RUBBER	2-5	150-250	2-7	100-400	G2
STONE	n/a	n/a	n/a	100-300	G2
PLASTIC	2-5	150-250	2-8	200-500	G2
LEATHER	2-5	150-400	2-7	100-750	G2
PAPER	2-5	250-1000	1-2	250-1000	G2
GLASS	n/a	n/a	n/a	150-150	G2
HARD WOOD	2-3	50-100	3-20	100-300	G2
ANODISED MATERIAL	n/a	n/a	n/a	n/a	G2
ACRYLIC	3-5	100-200	2-10	100-500	G2
CARDBOARD	2-5	150-250	2-8	100-500	G2
FELT / FABRIC	2-5	200-500	2-7	250-500	G2
FOOD/ CAKES/ CHOCO	2-5	100-500	1-2	300-750	G2

STAINLESS STEEL	n/a	n/a	n/a	n/a	G2
COPPER	n/a	n/a	n/a	n/a	G2
ALUMINUM	n/a	n/a	n/a	n/a	G2
BALSA	3-5	100-200	2-7	100-500	G2
MDF	3-5	100-200	2-8	150-500	G2

8W

Type of material	Material thickness in mm for cutting	Optimal laser cutting speed	Amount of passes	Optimal engraving speed	Lens type
WOOD & PLYWOOD	5-8	100-250	3-25	100-1000	Regular
RUBBER	3-8	150-300	2-10	50-500	Regular
STONE	1-2	n/a	n/a	50-400	Regular
PLASTIC	3-8	150-300	3-10	100-600	Regular
LEATHER	3-8	150-500	2-10	50-1000	Regular
PAPER	3-8	250-1500	1-2	150-1500	Regular
GLASS	n/a	n/a	n/a	50-250	Regular
HARD WOOD	3-5	50-150	5-40	100-1000	Regular
ANODISED MATERIAL	n/a	n/a	n/a	50-150	Regular
ACRYLIC	3-8	100-500	3-10	50-750	Regular
CARDBOARD	2-8	200-750	2-15	50-750	Regular
FELT / FABRIC	2-8	200-750	2-10	100-750	Regular
FOOD/ CAKES/ CHOCO	2-8	100-750	1-2	100-750	Regular
STAINLESS STEEL	n/a	n/a	n/a	n/a	Regular
COPPER	n/a	n/a	n/a	50-250	Regular
ALUMINUM	n/a	n/a	n/a	n/a	Regular
BALSA	3-8	100-300	3-10	50-700	Regular
MDF	3-8	100-400	3-10	100-900	Regular

8W

Type of material	Material thickness in mm for cutting	Optimal laser cutting speed	Amount of passes	Optimal engraving speed	Lens type
WOOD & PLYWOOD	5-8	100-250	2-15	200-1200	G2
RUBBER	3-8	150-300	2-8	150-500	G2
STONE	1-2	n/a	n/a	150-400	G2
PLASTIC	3-8	150-300	2-7	200-600	G2
LEATHER	3-8	150-500	2-8	150-1000	G2
PAPER	3-8	250-1500	1-2	250-1500	G2
GLASS	n/a	n/a	n/a	150-250	G2
HARD WOOD	3-5	50-150	3-20	150-1000	G2
ANODISED MATERIAL	n/a	n/a	n/a	150-150	G2
ACRYLIC	3-8	100-500	2-8	150-750	G2
CARDBOARD	2-8	200-750	2-9	150-750	G2
FELT / FABRIC	2-8	200-750	2-8	200-750	G2

FOOD/ CAKES/ CHOCO	2-8	100-750	1-2	200-750	G2
STAINLESS STEEL	n/a	n/a	n/a	n/a	G2
COPPER	n/a	n/a	n/a	100-250	G2
ALUMINUM	n/a	n/a	n/a	n/a	G2
BALSA	3-8	100-300	2-7	100-700	G2
MDF	3-8	100-400	2-8	200-900	G2

8.5W+

Type of material	Material thickness in mm for	Optimal laser cutting speed	Amount of passes	Optimal engraving speed	Lens type
WOOD & PLYWOOD	5-8	50-100	1-10	250-1500	G2
RUBBER	3-8	200-300	2-6	250-600	G2
STONE	1-2	n/a	n/a	200-500	G2
PLASTIC	3-8	200-300	2-6	250-750	G2
LEATHER	3-8	200-500	2-6	250-1200	G2
PAPER	3-8	400-1500	1	500-1500	G2
GLASS	n/a	n/a	n/a	250-400	G2
HARD WOOD	3-5	50-150	3-15	250-1200	G2
ANODISED MATERIAL	n/a	n/a	n/a	150-250	G2
ACRYLIC	3-8	200-700	2-7	250-750	G2
CARDBOARD	2-8	250-750	2-7	250-750	G2
FELT / FABRIC	2-8	250-750	2-6	300-750	G2
FOOD/ CAKES/ CHOCO	2-8	200-750	1	300-750	G2
STAINLESS STEEL	n/a	n/a	n/a	n/a	G2
COPPER	n/a	n/a	n/a	150-250	G2
ALUMINUM	n/a	n/a	n/a	n/a	G2
BALSA	3-8	200-400	2-6	250-1000	G2
MDF	3-8	200-500	2-7	300-1200	G2