MFSC-500 Cutting data

Material	Thickness (mm)	Speed (m/min)	Power (W)	Focus	Gas	Pressure (bar)	Cutting height (mm)	Nozzle Type and Specifications
Stainess steel	1	13~14	500	0~-1	N2	20.00	0.5	Single Layer：1.0/1.2/1.5
	2	2.6~2.9	500	-1.5~-2	N2	20.00	0.5	Single Layer：1.5/2.0
	3	0.9~1.1	500	-2.5~-3	N2	20.00	0.5	Single Layer：2.0/2.5/3.0
	4	0.5~0.6	500	-3.5~-4	N2	20.00	0.5	Single Layer：3.0
Alminium	1	2.5~2.7	500	-0.5~-1	N2	20.00	0.5	Single Layer：1.0/1.2/1.5
Brass	1	2.3~2.5	500	0~-0.5	N2	20.00	0.5	Single Layer：1.0/1.2/1.5
Carbon Steel	1	15~16	500	0~-1	N2	20.00	0.5	Single Layer：1.0
	2	3.5~4.5	500	2~3	O2	0.6~0.9	1.5	Double Layer：2.0
	3	2.0~2.2	500	2~3	O2	0.6~0.9	1.5	Double Layer：2.0
	4	1.5~1.6	500	2~3	O2	0.6~0.9	1.5	Double Layer：2.5
	5	0.9~1.1	500	2~3	O2	0.6~0.9	1.5	Double Layer：2.5
	6	0.6~0.7	500	2~3	O2	0.6~0.9	1.5	Double Layer：3.0

Comments：

1.In these cutting data，the output fiber core of 500W fiber laser is 50um；

2.The cutting data adopts Raytools cutting head，the optical ratio is 100/125（collimation/focal lengthof focusing lens）；

MFSC-800 cutting data

Material	Thickness (mm)	Speed (m/min)	Power (W)	Focus	Gas	Pressure (bar)	utting height (mm	Nozzle Type and Specifications
Stainess steel	1	17~19	800	0~-1	N2	20.00	0.5	Single Layer : 1.0/1.2/1.5
	2	5.3~5.6	800	-1.5~-2	N2	20.00	0.5	Single Layer : 1.5/2.0
	3	1.8~2	800	-2.5~-3	N2	20.00	0.5	Single Layer : 2.0/2.5/3.0
	4	1.1~1.3	800	-3.5~-4	N2	20.00	0.5	Single Layer : 3.0
	5	0.4~0.5	800	-3.5~-4	N2	20.00	0.5	Single Layer : 3.5/4.0
Alminium	1	6.5~7	800	-0.5~-1	N2	20.00	0.5	Single Layer : 1.0/1.2/1.5
	2	0.8~1	800	-1~-1.5	N2	20.00	0.5	Single Layer : 1.5/2.0
Brass	1	6~6.5	800	0~-0.5	N2	20.00	0.5	Single Layer : 1.0/1.2/1.5
	2	0.6~0.8	800	-1~-1.5	N2	20.00	0.5	Single Layer : 1.5/2.0
Carbon Steel	1	20~21	800	0~-1	N2	20.00	0.5	Double Layer : 1.0
	2	6~7	800	4.5~5.5	O2	0.6~0.9	0.8	Double Layer : 1.0
	3	2.3~2.5	800	2~3	O2	0.6~0.9	1.5	Double Layer : 2.0
	4	1.8~2.0	800	2~3	O2	0.6~0.9	1.5	Double Layer : 2.5
	5	1.3~1.4	800	2~3	O2	0.6~0.9	1.5	Double Layer : 2.5
	6	1~1.1	800	2~3	O2	0.6~0.9	1.5	Double Layer : 3.0
	8	0.7~0.8	800	2~3	O2	0.6~0.9	1.5	Double Layer : 3.0
	10	0.5~0.6	800	2~3	O2	0.6~0.9	1.5	Double Layer : 3.0

Comments :

1.In these cutting data , the output fiber core of 500W fiber laser is 50um ;

2.The cutting data adopts Raytools cutting head , the optical ratio is 100/125 (collimation/focal lengthof focusing lens) ;

3.The data is just for reference due to the differences of equipments and environments the customers adopts.

MFSC-1000 cutting data

Material	Thickness (mm)	Speed (m/min)	Power (W)	Focus	Gas	Pressure (bar)	Cutting height (mm)	Nozzle Type and Specifications
Stainess steel	1	21~23	1000	0~-1	N2	20.00	0.5	Single Layer：1.0/1.2/1.5
	2	6.5~7	1000	-1.5~-2	N2	20.00	0.5	Single Layer：1.5/2.0
	3	2.3~2.5	1000	-2.5~-3	N2	20.00	0.5	Single Layer：2.0/2.5/3.0
	4	0.8~1	1000	-3.5~-4	N2	20.00	0.5	Single Layer：3.0
	5	0.6~0.7	1000	-3.5~-4	N2	20.00	0.5	Single Layer：3.5/4.0
	6	0.5~0.6	1000	-5~-5.5	N2	20.00	0.5	Single Layer：3.5/4.0
Alminium	1	19~21	1000	-0.5~-1	N2	20.00	0.5	Single Layer：1.0/1.2/1.5
	2	4.5~5	1000	-1~-1.5	N2	20.00	0.5	Single Layer：1.5/2.0
	3	1.8~2	1000	-2.5~-3	N2	20.00	0.5	Single Layer：2.0/2.5/3.0
Brass	1	16~18	1000	0~-0.5	N2	20.00	0.5	Single Layer：1.0/1.2/1.5
	2	3~3.5	1000	-1~-1.5	N2	20.00	0.5	Single Layer：1.5/2.0
	3	1.1~1.3	1000	-2~-2.5	N2	20.00	0.5	Single Layer：2.0/2.5/3.0
Carbon Steel	1	24~26	1000	0~-1	N2	20.00	0.5	Single Layer：1.0
	2	8~9	1000	4.5~5.5	O2	0.6~0.9	0.8	Double Layer：1.0
	3	2.8~3	1000	4.5~5.5	O2	0.6~0.9	0.8	Double Layer：1.0
	4	2.2~2.4	1000	2~3	O2	0.6~0.9	1.5	Double Layer：2.5
	5	1.5~1.7	1000	2~3	O2	0.6~0.9	1.5	Double Layer：3.0
	6	1.2~1.4	1000	2~3	O2	0.6~0.9	1.5	Double Layer：3.0
	8	1.0~1.1	1000	2~3	O2	0.6~0.9	1.5	Double Layer：3.0
	10	0.75~0.85	1000	2~3	O2	0.6~0.9	1.5	Double Layer：3.0
	12	0.6~0.65	1000	2~3	O2	0.6~0.9	1.5	Double Layer：3.0

Comments：

1.In these cutting data，the output fiber core of 500W fiber laser is 50um；

2.The cutting data adopts Raytools cutting head，the optical ratio is 100/125（collimation/focal lengthof focusing lens）；

3.The data is just for reference due to the differences of equipments and environments the customers adopts.

MFSC-1500 cutting data

Material	Thickness (mm)	Speed (m/min)	Power (W)	Focus	Gas	Pressure (bar)	Cutting height (mm)	Nozzle Type and Specifications
Stainess steel	1	32~35	1500	0~-1	N2	20.00	0.5	Single Layer : 1.0/1.2/1.5
	2	9~10	1500	-1.5~-2	N2	20.00	0.5	Single Layer : 1.5/2.0
	3	4.2~4.5	1500	-2.5~-3	N2	20.00	0.5	Single Layer : 2.0/2.5/3.0
	4	2.1~2.3	1500	-3.5~-4	N2	20.00	0.5	Single Layer : 3.0
	5	1.6~1.8	1500	-3.5~-4	N2	20.00	0.5	Single Layer : 3.5/4.0
	6	1.0~1.2	1500	-5~-5.5	N2	20.00	0.5	Single Layer : 3.5/4.0
	8	0.5~0.6	1500	-6~-7	N2	20.00	0.5	Single Layer : 4.0
Alminium	1	30~32	1500	-0.5~-1	N2	20.00	0.5	Single Layer : 1.0/1.2/1.5
	2	8~9	1500	-1~-1.5	N2	20.00	0.5	Single Layer : 1.5/2.0
	3	3.8~4.2	1500	-2.5~-3	N2	20.00	0.5	Single Layer : 2.0/2.5/3.0
	4	2~2.2	1500	-3.5~-4	N2	20.00	0.5	Single Layer : 3.0
	5	0.8~1.0	1500	-3.5~-4	N2	20.00	0.5	Single Layer : 3.5/4.0
Brass	1	25~27	1500	0~-0.5	N2	20.00	0.5	Single Layer : 1.0/1.2/1.5
	2	7~8	1500	-1~-1.5	N2	20.00	0.5	Single Layer : 1.5/2.0
	3	2.7~3	1500	-2~-2.5	N2	20.00	0.5	Single Layer : 2.0/2.5/3.0
	4	1.5~1.7	1500	-3~-3.5	N2	20.00	0.5	Single Layer : 3.0
Carbon Steel	1	34~37	1500	0~-1	N2	20.00	0.5	Single Layer : 1.0
	2	12~14	1500	4.5~5.5	O2	0.6~0.9	0.8	Double Layer : 1.0
	3	2.9~3.2	1500	4.5~5.5	O2	0.6~0.9	0.8	Double Layer : 1.0
	4	2.4~2.6	1500	4.5~5.5	O2	0.6~0.9	0.8	Double Layer : 1.0
	5	1.8~2.0	1500	2~3	O2	0.6~0.9	1.5	Double Layer : 3.0
	6	1.6~1.8	1500	2~3	O2	0.6~0.9	1.5	Double Layer : 3.0
	8	1.1~1.3	1500	2~3	O2	0.6~0.9	1.5	Double Layer : 3.0
	10	0.9~1.0	1500	2~3	O2	0.6~0.9	1.5	Double Layer : 3.0
	12	0.8~0.9	1500	2~3	O2	0.6~0.9	1.5	Double Layer : 3.0
	14	0.6~0.7	1500	2~3	O2	0.6~0.9	1.5	Double Layer : 4.0
	16	0.5~0.6	1500	2~3	O2	0.6~0.9	1.5	Double Layer : 4.0

Comments :

1.In these cutting data , the output fiber core of 500W fiber laser is 50um ;

2.The cutting data adopts Raytools cutting head , the optical ratio is 100/125 (collimation/focal lengthof focusing lens) ;

3.The data is just for reference due to the differences of equipments and environments the customers adopts.

MFMC-2000 cutting data

Material	Thickness (mm)	Speed (m/min)	Power (W)	Focus	Gas	Pressure (bar)	Cutting height (mm)	Nozzle Type and Specifications
Stainess steel	1	30~32	2000	0~-1	N2	20.00	0.5	Single Layer : 1.0/1.2/1.5
	2	10~11	2000	-1.5~-2	N2	20.00	0.5	Single Layer : 1.5/2.0
	3	5~6	2000	-2.5~-3	N2	20.00	0.5	Single Layer : 2.0/2.5/3.0
	4	3~3.5	2000	-3.5~-4	N2	20.00	0.5	Single Layer : 3.0
	6	1.3~1.5	2000	-5~-5.5	N2	20.00	0.5	Single Layer : 3.5/4.0
	8	0.5~0.6	2000	-6~-7	N2	20.00	0.5	Single Layer : 4.0
Alminium	1	18~20	2000	-0.5~-1	N2	20.00	0.5	Single Layer : 1.0/1.2/1.5
	2	6~7	2000	-1~-1.5	N2	20.00	0.5	Single Layer : 1.5/2.0
	3	3~4	2000	-2.5~-3	N2	20.00	0.5	Single Layer : 2.0/2.5/3.0
	4	1.6~1.9	2000	-3.5~-4	N2	20.00	0.5	Single Layer : 3.0
	6	0.5~0.6	2000	-5~-5.5	N2	20.00	0.5	Single Layer : 3.5/4.0
Brass	3	2.8~3.2	2000	-2~-2.5	N2	20.00	0.5	Single Layer : 2.0/2.5/3.0
	4	1.5~1.7	2000	-3~-3.5	N2	20.00	0.5	Single Layer : 3.0
Carbon Steel	3	3~3.2	2000	4.5~5.5	O2	0.6~0.9	0.8	Double Layer : 1.0
	6	2~2.2	2000	2~3	O2	0.6~0.9	1.5	Double Layer : 3.0
	8	1.3~1.5	2000	2~3	O2	0.6~0.9	1.5	Double Layer : 3.0
	10	0.9~1.0	2000	2~3	O2	0.6~0.9	1.5	Double Layer : 3.0
	12	0.8~0.9	2000	2~3	O2	0.6~0.9	1.5	Double Layer : 3.0
	14	0.7~0.8	2000	2~3	O2	0.6~0.9	1.5	Double Layer : 4.0
	16	0.6~0.7	2000	2~3	O2	0.6~0.9	1.5	Double Layer : 4.0
	18	0.5~0.6	2000	2~3	O2	0.6~0.9	1.5	Double Layer : 4.0
	20	0.4~0.5	2000	2~3.5	O2	0.6~0.9	1.2~1.5	Double Layer : 4.0

Comments :

1.In these cutting data，the output fiber core of 500W fiber laser is 50um ;

2.The cutting data adopts Raytools cutting head，the optical ratio is 100/200 (collimation/focal lengthof focusing lens) ;

MFMC-3000 cutting data

Material	Thickness (mm)	Speed (m/min)	Power (W)	Focus	Gas	Pressure (bar)	Cutting height (mm)	Nozzle Type and Specifications
Stainess steel	1	35~37	3000	0~-1	N2	20.00	0.5	Single Layer：1.0/1.2/1.5
	2	13~15	3000	-1.5~-2	N2	20.00	0.5	Single Layer：1.5/2.0
	3	7~8	3000	-2.5~-3	N2	20.00	0.5	Single Layer：2.0/2.5/3.0
	4	4.5~5.5	3000	-3.5~-4	N2	20.00	0.5	Single Layer：3.0
	6	1.7~1.9	3000	-5~-5.5	N2	20.00	0.5	Single Layer：3.5/4.0
	8	0.8~1.0	3000	-6~-7	N2	20.00	0.5	Single Layer：4.0
	10	0.6~0.7	3000	-7.5~-8.5	N2	20.00	0.5	Single Layer：4.0
Alminium	1	30~33	3000	-0.5~-1	N2	20.00	0.5	Single Layer：1.0/1.2/1.5
	2	10~12	3000	-1~-1.5	N2	20.00	0.5	Single Layer：1.5/2.0
	3	5.5~5.9	3000	-2.5~-3	N2	20.00	0.5	Single Layer：2.0/2.5/3.0
	4	2.8~3.2	3000	-3.5~-4	N2	20.00	0.5	Single Layer：3.0
	6	0.7~0.8	3000	-5~-5.5	N2	20.00	0.5	Single Layer：3.5/4.0
	8	0.5~0.6	3000	-6~-7	N2	20.00	0.5	Single Layer：4.0
Brass	3	4.5~5	3000	-2~-2.5	N2	20.00	0.5	Single Layer：2.0/2.5/3.0
	4	3~3.5	3000	-3~-3.5	N2	20.00	0.5	Single Layer：3.0
	6	1~1.2	3000	-5~-5.5	N2	20.00	0.5	Single Layer：3.5/4.0
Carbon Steel	3	3.5~3.7	3000	4.5~5.5	O2	0.6~0.9	0.8	Double Layer：1.0
	6	2.3~2.5	3000	4.5~5.5	O2	0.6~0.9	0.8	Double Layer：1.2
	8	1.8~2.0	2200~2400	2~3	O2	0.6~0.9	1.5	Double Layer：3.0
	10	1.5~1.7	2200~2400	2~3	O2	0.6~0.9	1.5	Double Layer：3.0
	12	1.2~1.4	2200~2400	2~3	O2	0.6~0.9	1.5	Double Layer：3.0
	14	1~1.1	2200~2400	2~3	O2	0.6~0.9	1.5	Double Layer：4.0
	16	0.85~0.9	2200~2400	2~3	O2	0.6~0.9	1.5	Double Layer：4.0
	18	0.7~0.75	2200~2400	2~3	O2	0.6~0.9	1.5	Double Layer：4.0
	20	0.6~0.65	2200~2400	2~3.5	O2	0.6~0.9	1.2~1.5	Double Layer：4.0

Comments：

1.In these cutting data，the output fiber core of 500W fiber laser is 50um；

2.The cutting data adopts Raytools cutting head，the optical ratio is 100/200（collimation/focal lengthof focusing lens）；

MFMC-4000 cutting data

Material	Thickness (mm)	Speed (m/min)	Power (W)	Focus	Gas	Pressure (bar)	Cutting height (mm)	Nozzle Type and Specifications
Stainess steel	1	40~43	4000	0~-1	N2	20.00	0.5	Single Layer : 1.0/1.2/1.5
	2	19~21	4000	-1.5~-2	N2	20.00	0.5	Single Layer : 1.5/2.0
	3	11~13	4000	-2.5~-3	N2	20.00	0.5	Single Layer : 2.0/2.5/3.0
	4	6.5~7	4000	-3.5~-4	N2	20.00	0.5	Single Layer : 3.0
	6	2.2~2.5	4000	-5~-5.5	N2	20.00	0.5	Single Layer : 3.5/4.0
	8	1.5~1.7	4000	-6~-7	N2	20.00	0.5	Single Layer : 4.0
	10	0.8~0.9	4000	-7.5~-8.5	N2	20.00	0.5	Single Layer : 4.0
Alminium	1	35~37	4000	-0.5~-1	N2	20.00	0.5	Single Layer : 1.0/1.2/1.5
	2	15~17	4000	-1~-1.5	N2	20.00	0.5	Single Layer : 1.5/2.0
	3	6.5~7	4000	-2.5~-3	N2	20.00	0.5	Single Layer : 2.0/2.5/3.0
	4	4.5~4.8	4000	-3.5~-4	N2	20.00	0.5	Single Layer : 3.0
	6	2~2.2	4000	-5~-5.5	N2	20.00	0.5	Single Layer : 3.5/4.0
	8	1~1.2	4000	-6~-7	N2	20.00	0.5	Single Layer : 4.0
	10	0.5~0.6	4000	-7.5~-8.5	N2	20.00	0.5	Single Layer : 4.0
Brass	3	6.5~6.8	4000	-2~-2.5	N2	20.00	0.5	Single Layer : 2.0/2.5/3.0
	4	4.5~4.7	4000	-3~-3.5	N2	20.00	0.5	Single Layer : 3.0
	6	1.3~1.5	4000	-5~-5.5	N2	20.00	0.5	Single Layer : 3.5/4.0
	8	0.7~0.8	4000	-6~-7	N2	20.00	0.5	Single Layer : 4.0
Carbon Steel	3	4.0~4.3	4000	4.5~5.5	O2	0.6~0.9	0.8	Double Layer : 1.0
	6	2.5~2.7	4000	4.5~5.5	O2	0.6~0.9	0.8	Double Layer : 1.2
	8	2~2.3	4000	5.5~6	O2	0.6~0.9	0.6~0.8	Double Layer : 1.2
	10	1.8~2.0	2200~2400	2~3	O2	0.6~0.9	1.5	Double Layer : 3.0
	12	1.5~1.6	2200~2400	2~3	O2	0.6~0.9	1.5	Double Layer : 3.0
	14	1.2~1.4	2200~2400	2~3	O2	0.6~0.9	1.5	Double Layer : 4.0
	16	1.0~1.1	2200~2400	2~3	O2	0.6~0.9	1.5	Double Layer : 4.0
	18	0.9~1.0	2200~2400	2~3	O2	0.6~0.9	1.5	Double Layer : 4.0
	20	0.65~0.7	2200~2400	2~3.5	O2	0.6~0.9	1.2~1.5	Double Layer : 4.0
	22	0.55~0.6	2200~2400	2~3.5	O2	0.6~0.9	1.2~1.5	Double Layer : 4.0

Comments :

1.In these cutting data , the output fiber core of 500W fiber laser is 50um ;

2.The cutting data adopts Raytools cutting head , the optical ratio is 100/200 (collimation/focal lengthof focusing lens) ;

MFMC-6000 cutting data

Material	hickness (mm)	Speed (m/min)	Power (W)	Focus	Gas	Pressure (bar)	utting height (mm)	Nozzle Type and Specifications
Stainess steel	14	0.9~1.0	6000	-9~-10	N2	20.00	0.5	Single Layer : 4.0
	16	0.8~0.85	6000	-10~-11	N2	20.00	0.5	Single Layer : 4.0
	20	0.5~0.6	6000	-11~-13	N2	20.00	0.5	Single Layer : 5.0
Alminium	16	0.5~0.6	6000	-9~-10	N2	20.00	0.5	Single Layer : 4.0
Brass	16	0.5~0.6	6000	-9~-10	N2	20.00	0.5	Single Layer : 4.0
Carbon Steel	8	2.5~2.6	6000	5.5~6.5	O2	0.6~0.9	0.6~0.8	Double Layer : 1.2
	10	2.2~2.3	6000	5.5~6.5	O2	0.6~0.9	0.6~0.8	Double Layer : 1.2
	12	1.8~1.9	6000	6~7	O2	0.6~0.9	0.6~0.8	Double Layer : 1.2
	20	0.6~0.65	2200~2400	2~3.5	O2	0.6~0.9	1.2~1.5	Double Layer : 4.0
	22	0.55~0.6	2200~2400	2~3.5	O2	0.6~0.9	1.2~1.5	Double Layer : 4.0
	25	0.5~0.55	2200~2400	2~3.5	O2	0.6~0.9	1.2~1.5	Double Layer : 5.0

Comments :

1.In these cutting data，the output fiber core of 500W fiber laser is 50um；

2.The cutting data adopts Raytools cutting head，the optical ratio is 100/200（collimation/focal lengthof focusing lens）；