

# Fiber Laser Cutters P C Model WS-F

RELIABILITY • EFFICIENCY • PRECISION

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Open table laser cutters in PRO version. It is characterized by high speed and the best parameters. The freestanding control cabinet is not exposed to damage and disturbances related to the work of the device

Available power options

Raycus / IPG - from 1kW

Work field size [mm]

3000x1500 • 4000x2000 • 6000x2000

# Model WS-F

**High-performance lasers** equipped with a stable operating system, which provides best cutting results. The plotter has a **double cooling system**, lubrication system and **dust extraction system**. Models WS-F are **stable**, **efficient** and **durable** due to construction with significant vibration reduction, which is characterized by **rigidity**, **stability** and **high shock resistance**. The machine also has automatic height adjustment, which always maintains a constant focal distance from the material to be processed, ensuring that the power is ideally transferred to the cutting line but moreover autofocusing the focal length, which greatly accelerates the production process.

#### Main features

- The use of a gantry construction with an integrated cast section of the girder increases rigidity, durability and shock resistance
- High laser efficiency and stable operating system make the best possible cutting effects
- Device includes perfect cooling system, lubrication system and dust removal system which provides stable work and durability
- Machine has automatic heigth adjustment to maintain a constant focal length and stable cutting quality
- Specialistic CAD/CAM software for automatic programming and nesting function, which allows you make best adjustments distribution of elements on the sheet and maximizing the use of the material
- Access to the CNC system via the Ethernet interface enables communication and remote monitoring of the device during the cutting process



# **Technical Data**

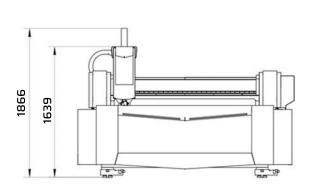
M	odel WS-F				
Brand	Weni Solution				
Working field	3000×1500mm / 4000×2000mm / 6000×2000mm				
X- axis range	1500mm / 2000mm / 2000 mm				
Y- axis range	3000mm / 4000mm / 6000mm				
Z- axis range	200mm				
Addressed resolution	0,001mm				
X/Y axis positioning accuracy	0.03mm				
X/Y axis repeatability	0.02mm				
X/Y axis maximum speed	100m/min				
Z axis maximum speed	375mm/sec				
Maximum acceleration	1.5G				
Maximum platform load	900kg				
Closed Case	optional / IP54 class				
Head type	Raytools				
Autofocus	YES				
Source type	Raycus / IPG				
Servo-motors	Schneider				
Drive transmission	WMH Herion				
Guides	THK / HIWIN				
Electrical installation	Omron				
Pneumatics	Airtac				
Head screw drive	PMI				
Operating system	Windows 7 or higher				
Communication	Ethernet TCP/IP				
Screen	LCD 17" or bigger				
Software	СурСит				
Nesting function	YES / PRO NESTING				
Transmission gear lubrication system	automatic				
Maximum gas pressure in the installation	3000 kPa (30 bar)				
Beam type	aluminium / cast <0.373mrad				
Voltage stabilizer	YES				
Cooling	Dual Cool System / 13L/min				
Manual controller	YES / Wi Fi - wireless				
Laser power	Raycus: 500W-12000W / IPG: 500W-12000W				
Operating range temperature	10-45°C				
Laser class	4				
Quality	ISO9001, CE				
Voltage	> 1000W 1-phase / 220V 50Hz (voltage fluctations >10%)				
Dimensions (length * width * height)	4500*2290*2100 / 5650*2900*2100 / 7951*3570*2000				
Total weight	2580kg / 4125kg / 5600kg				



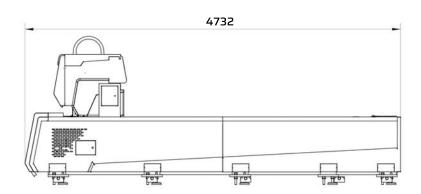
# **Technical Drawing model WS3015F**

The values given are in [mm]

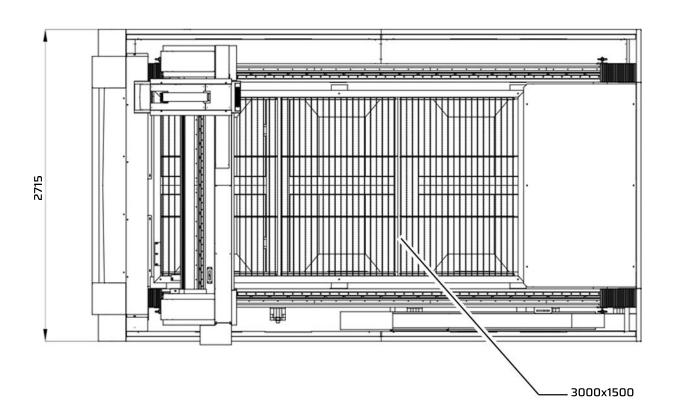
#### 1.Front view



#### 2. Side view



#### 3. Top view

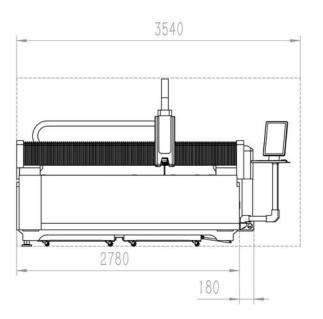




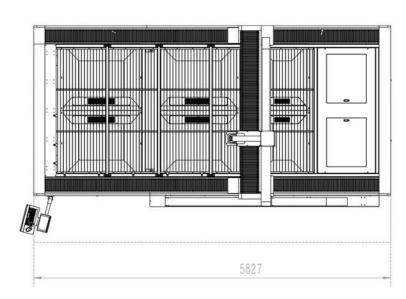
# **Technical Drawing model WS4020F**

The values given are in [mm]

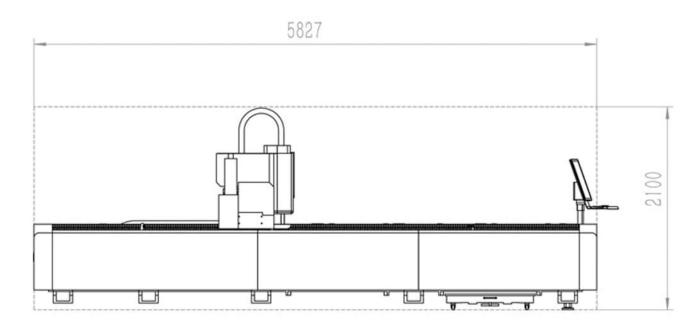
#### 1.Front view



2. Top view

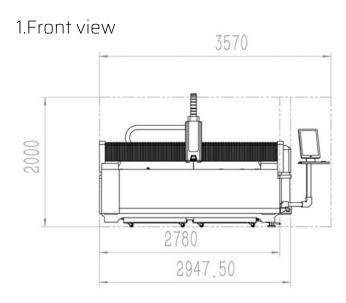


3. Side view

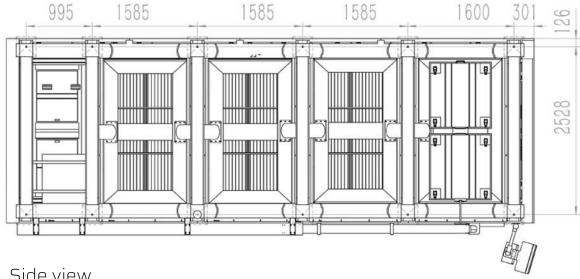


# **Technical Drawing model WS6020F**

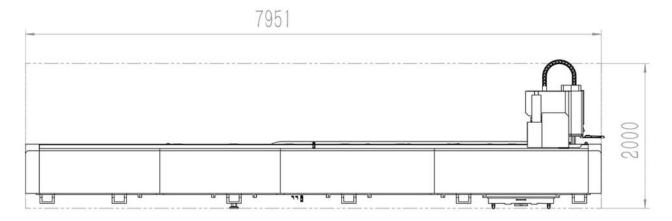
The values given are in [mm]



#### 2. Top view



#### 3. Side view





### **IPG Photonics®**

Parameter	Model IPG YRL
Laser Power	0,5kW - 12kW
Working mode	CW/modular
Frequency (Hz)	0 -50000
Wave length (nm)	1070 ± 10
Fluent power control(%)	10 - 100
Laser Stabilization	± 0,5 %
Laser beam quality (M²)	< 1.1
Laser beam parameter (mm x mrad)	0.37
Cooling method	Water
Operating temperature (C°)	10 - 40
Moistness(%)	< 65





**IPG Photonics** is a leading producer of laser generators in the whole world. Years of experience guarantee the highest quality and the best parameters of laser beam. Broad distribution network and maintenance facilities guarantee perfect technical support for our products. Warranty and post-warranty repairs are implemented by the laboratory in our plant. YLR series laser generators are available in versions from 500W up to 2000W and YLS series from 2000W -up to 12000W.

## Wuhan Raycus<sup>®</sup>

Parameter	Model Raycus RFL			
Laser Power	0,5kW - 12kW			
Working mode	CW/modular			
Frequency (Hz)	0 -50000			
Wave length (nm)	1080 ± 10			
Fluent power control(%)	10 - 100			
Laser Stabilization	< 3 %			
Laser beam quality (M²)	< 1.3			
Laser beam parameter (mm x mrad)	< 0.50			
Cooling method	Water			
Operating temperature (C°)	10 - 40			
Moistness(%)	< 70			



Wuhan Raycus Fiber Laser Technologies Co., Ltd. is the leader in production of laser generators in the Asian market. Wuhan Raycus has an international team of specialists conducting development research, which enables to improve and develop laser generators. Service and technical support departments are a big advantage of the company, and all the repairs of equipment are conducted directly at the client's place. **RFL series laser generators** are available in the version from 500W up to 12000W.



# **AUTO FOCUS**

FREE YOUR HANDS, ENJOY AUTOMATIC FOCUS ADJUSTMENT





#### Raytools Laser Heads®

Produced in Switzerland and designed mainly for industrial uses.

Specialistic **plate-tight cover** prevents contamination of the collimative lens, which significantly increases **liveliness** of the lens and that translates into precision and efficency of the laser beam.

Head is equipped with supplemental upper protective glass for the collimating unit. At the same time, the lower structure of the protective glass was also fully modernized by us. We added additional **dust cover** to maximize security of the lens.

Double protection structure increases the user's simplicity in case of replacing optical elements of the laser head, and the risk of lens contamination is almost zero.





#### Schneider Electric® Servomotors

The Lexium motor series includes AC LXM servo drives cooperating with BCH2 servomotors.

#### It's mostly characterized by:

- Reduced start-up time
- Increased profitability
- Improved efficiency

Lexium servo motors and drives are part of Machine Struxure. Latest generation of **MachineStruxure™** is an ituitive solution deisgned for machine automation with all the necessary functions to improve **productivity** and **increasing Your profits**. An alternative concept for machine manufacturers, which provides benefits throughout the entire life cycle of the machine on many levels.





# When **others** stop...

# You have got voltage stabilizer

All **Weni Solution**® are equipped with a voltage stabilizer in standard which ensures that the device is protected against any electrical damage. Voltage regulation problems account for more than 90% of failures due to poor power supply in many countries. Our high-voltage voltage stabilizers provide protection against voltage drops, overvoltages or power cuts.

Stabilizer has a wide input voltage tolerance and is designed to provide the highest reliability in hostile environments where high quality power supply cannot be guaranteed.

You work!

## Iron cast device frame

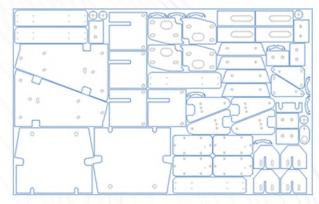


## Nesting - Economical technology

**Nesting technology** (Nested Based Manufacturing or NBM) - significantly **shortens** and **improves** the production process. Espacially for curvilinear cuts.

The possibility of positioning whole sheet plates allows to use raw material more efficiently, which means reducing the amount of waste.

Nesting provide optimal usage of the material. In addition cutting simulation function allows you to plan your production accordingly. Test operations before the actual processing will also determine the time and costs needed to complete the task.



Example of the element arrangement on work field

## CypCut - Software for fiber lasers

**Cyp Cut laser cutting control system** is a package of system software designed for flat laser cutting, including laser cutting, common system functions and control of laser processing etc. It is avialiable in two languages - English and Polish.

Most of its functions are used in graphics processing, parameter adjustments, customized cutting process editing, simulation and cutting process control.



#### CypCut software which is a part of every our device allows operators to:

- Setting up and saving technological parameters for the tasks
- Performing cutting in automatic mode
- Optimizing the displacement of elements
- Preventing the head from passing over the cut-out areas
- Controlling the number of components, details and waste
- Inserting automatic workpiece support bridges in the sheet
- Autonesting an autonomous mode of stacking elements by filling the sheet
- Saving and editing drawings in \*. lxd, \*. dxf and other formats.

## **Financing**



#### **VAT 0% or VAT 23%**

We offer a purchase with a VAT rate of 0% (so-called intra-community delivery). Devices are delivered from countries in EU, so an active VAT payer has the right to purchase the above mentioned rate of 0%.

The application of the 23% VAT rate will take place at the domestic delivery, i.e. that the device will be delivered from a warehouse in the country (Poland). If the VAT number is inactive or a domestic delivery is required, a VAT invoice will be issued at a rate of 23%.



#### TIME = MONEY

Most of the devices require an order for production or adjusting to the individual needs of the customer, so payment can be made in stages.

The spliting of payments in time doesn't include any additional fees and allows our customers to invest in development the most friendly and flexible way.

To agree on the details, please contact one of our sales representative.



#### **LEASING**

#### **MANY POSSIBILITIES**

As a trusted partner of the leading banks on the market, We've successfully accomplished many contracts, which only confirms our references.

We cooperate with banks and partners such as: Alior Bank, Pekao Leasing, Getin Bank, EFL, Raiffeisen Bank, X-leasing.

Thanks to constant cooperation, formalities are kept to a minimum, which significantly speeds up the entire procedure and ultimately affects delivery time.



#### **MULTICURRENCY**

To meet the comfort and convenience of each of our clients, we offer the option of making deposits in the following currencies:

- Polish Zloty PLN
- Euro EUR
- United States Dolar USD
- British Funt GBP

For the sake of your financing, we have accounts in the above currencies, which means that there are no frequent currency conversion problems in our transactions.













# Service & Technical Support



We provide **free telephone assistance** with alarms deactivation and minor breakdowns. We have complex spare parts storage which significantly accelerates service work. We warrant 24H service time reaction (on working days) from the written notification of the accident.

#### We offer:

- Carrying out periodic inspections of laser cutters
- Warranty and post-warranty repair service
- Conservation and adjusment in our products
- Replacement of internal and external optics
- Optics calibration and mirrors cleaning
- Exchange or regeneration of drive systems
- Setting the cutting parameters
- Measurement of effectiveness in Co2 lasers,
- Repairs and regeneration of cooling system and pneumatics

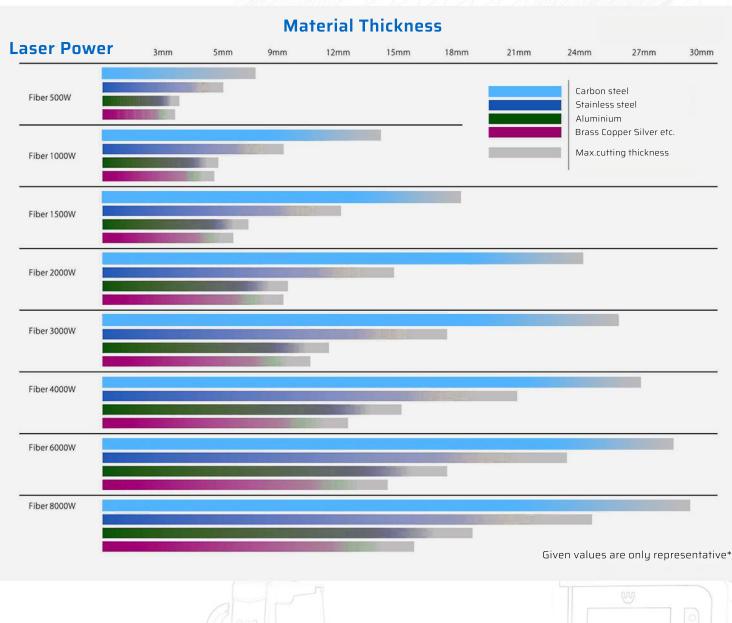
Our professionals are at your disposal - they serve you with their knowledge and experience.

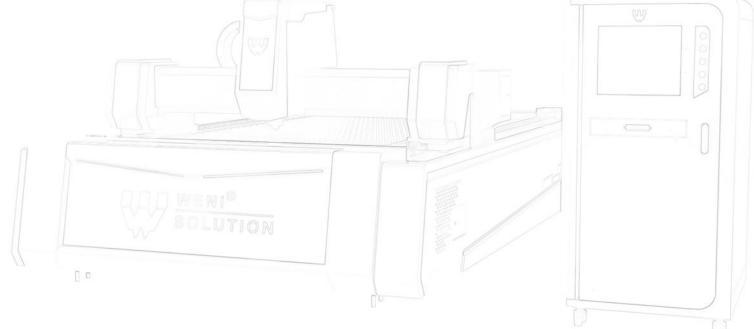
Advanced training programme and practise course allows to prepare operators for **quick** and **efficent** work and to avoid many problems resulting from improper handling of the tool. Trainings are carried out at the customer's place, which significantly **reduces costs**.





# Table of cutting ranges







## **Cutting parameters** - Weni Solution Fiber Lasers

Material	Material Laser Power											
Material Type	Material Thickness	500W	1000W	2000W	3000W	4000W	6000W	8000W				
Carbon Steel	1mm	8.0 - 13 m/min	15 - 24 m/min	24 - 30 m/min	30 - 42 m/min	40 - 55 m/min	60 - 80 m/min	70 - 90 m/mir				
	2mm	3.0 - 4.5 m/min	5.0 - 7.5 m/min	5.5 - 8.0 m/min	7.0 - 9.0 m/min	8.0 - 10 m/min	9.0 - 12 m/min	10 - 13 m/min				
	3mm	1.8 - 3.0 m/min	2.4 - 4.0 m/min	3.5 - 4.8 m/min	4.0 - 6.5 m/min	4.5 - 6.5 m/min	4.0 - 7.0 m/min	4.0 - 7.0 m/mi				
	4mm	1.3 - 1.5 m/min	2.0 - 2.4 m/min	2.8 - 3.5 m/min	3.5 - 4.5 m/min	4.0 - 5.0 m/min	4.2 - 5.5 m/min	4.7 - 5.5 m/mi				
	5mm	0.9 - 1.1 m/min	1.8 - 2.0 m/min	2.5 - 3.0 m/min	3.0 - 3.5 m/min	3.0 - 4.2 m/min	3.5 - 4.2 m/min	3.8 - 4.5 m/mi				
	6mm	0.6 - 0.9 m/min	1.4 - 1.6 m/min	1.8 - 2.6 m/min	2.5 - 3.2 m/min	3.0 - 3.5 m/min	3.0 - 4.0 m/min	3.3 - 4.2 m/mi				
	8mm		0.8 - 1.2 m/min	1.2 - 1.8 m/min	1.8 - 2.6 m/min	2.0 - 3.0 m/min	2.2 - 3.2 m/min	2.5 - 3.5 m/mi				
	10mm	-	0.6 - 1.0 m/min	1.1 - 1.3 m/min	1.4 - 2.0 m/min	1.5 - 2.5 m/min	1.8 - 2.5 m/min	2.2 - 2.7 m/mi				
	12mm	-	0.5 - 0.8 m/min	0.9 - 1.2 m/min	1.2 - 1.6 m/min	1.4 - 2.0 m/min	1.6 - 2.0 m/min	1.8 - 2.1 m/mir				
	14mm		_	0.7 - 0.8 m/min	0.9 - 1.4 m/min	1.0 - 1.6 m/min	1.5 - 1.8 m/min	1.7 - 1.9 m/mir				
	16mm			0.6 - 0.7 m/min	0.8 - 1.2 m/min	0.8 - 1.5 m/min	0.8 - 1.5 m/min	0.9 - 1.7 m/mii				
	18mm	-	_	0.4 - 0.6 m/min	0.7 - 1.0 m/min	0.8 - 1.1 m/min	0.9 - 1.2 m/min	0.9 - 1.2 m/mi				
	20mm	<u>.</u>		-	0.6 - 0.8 m/min	0.7 - 1.0 m/min	0.8 - 1.1 m/min	1.0 - 1.5 m/mir				
	22mm				0.4 - 0.6 m/min	0.6 - 0.8 m/min	0.7 - 0.9 m/min	0.8 - 1.0 m/mi				
		-	-	-	0.4 - 0.6 11/111111							
	25mm	-	·	-	-	0.3 - 0.5 m/min	0.4 - 0.6 m/min	0.5 - 0.7 m/mi				
	1mm	8.0 - 13 m/min	118 - 25 m/min	24 - 30 m/min	30 - 42 m/min	40 - 55 m/min	60 - 80 m/min	70 - 90 m/mi				
	2mm	2.4 - 5.0 m/min	7.0 - 12 m/min	10 - 17 m/min	18 - 21 m/min	20 - 30 m/min	30 - 42 m/min	40 - 55 m/mi				
	3mm	0.6 - 0.8 m/min	1.8 - 2.5 m/min	4.0 - 6.5 m/min	8.0 - 12 m/min	12 - 18 m/min	18 - 24 m/min	30 - 38 m/mi				
	4mm	-	1.2 - 1.3 m/min	3.0 - 4.5 m/min	6.09.0 m/min	8.0 - 12 m/min	10 - 18 m/min	18 - 24 m/mii				
	5mm	-	0.6 - 07 m/min	1.8 - 2.5 m/min	3.0 - 5.0 m/min	4.0 - 6.5 m/min	8.0 - 12 m/min	12 - 17 m/mir				
	6mm	-	-	1.2 - 2.0 m/min	3.0 - 4.3 m/min	4.0 - 6.5 m/min	6.0 - 9.0 m/min	8.0 - 14 m/m				
itainless Steel	8mm	-	-	0.7 - 1.0 m/min	1.5 - 2.0 m/min	1.8 - 3.0 m/min	4.0 - 5.0 m/min	6.0 - 8.0 m/m				
oralliess Sieer	10mm	-	-	-	0.8 - 1.0 m/min	0.8 - 1.5 m/min	1.8 - 2.5 m/min	3.05.0 m/m				
	12mm	-	-	-	0.5 - 0.8 m/min	0.6 - 1.0 m/min	1.2 - 1.8 m/min	1.8 - 3.0 m/m				
	16mm	-	-	-	-	0.5 - 0.8 m/min	0.6 - 0.8 m/min	1.2 - 1.8 m/mi				
	20mm	-	-	-	-	-	0.5 - 0.8 m/min	0.6 - 0.7 m/m				
	30mm	-	-	-	-	-	-	0.4 - 0.5 m/m				
	1mm	4.0 - 5.5 m/min	6.0 - 10 m/min	20 - 25 m/min	25 - 40 m/min	40 - 55 m/min	55 - 65 m/min	80 - 90 m/m				
	2mm	0.7 - 1.5 m/min	2.8 - 3.6 m/min	7.0 - 10 m/min	10 - 18 m/min	15 - 20 m/min	25 - 35 m/min	35 - 50 m/mi				
	3mm		0.7 - 1.5 m/min	4.0 - 6.0 m/min	7.0 - 10 m/min	10 - 15 m/min	13 - 18 m/min	21 - 30 m/mi				
	4mm	-		2.0 - 3.0 m/min	4.0 - 5.5 m/min	8.0 - 10 m/min	10 - 12 m/min	13 - 18 m/mi				
	5mm			1.2 - 1.8 m/min	3.0 - 4.0 m/min	5.0 - 7.0 m/min	6.0 - 10 m/min	9.0 - 12 m/m				
Aluminium	6mm		-	0.7 - 1.0 m/min	1.5 - 2.5 m/min	3.5 - 4.0 m/min	4.0 - 6.0 m/min	4.5 - 8.0 m/m				
,	8mm			-	0.7 - 1.0 m/min	1.5 - 2.0 m/min	2.0 - 3.0 m/min	4.0 - 6.0 m/m				
	10mm				-	0.8 - 1.0 m/min	1.0 - 2.1 m/min	2.2 -3.0 m/m				
	12mm			-		0.6 - 0.8 m/min	0.8 - 1.4 m/min	1.5 - 2.0 m/m				
	16mm			-			0.6 - 0.9 m/min	1.0 - 1.6 m/m				
	20mm	-					-	0.6 - 0.9 m/m				
	1mm	4.0 - 5.5 m/min	6.0 - 10 m/min	14 - 16 m/min	25 - 35 m/min	35 - 45 m/min	50 - 60 m/min	70 - 85 m/m				
	2mm	0.5 - 1.0 m/min	2.8 - 3.6 m/min	4.5 - 6.5 m/min	10 - 15 m/min	10 - 15 m/min	25 - 30 m/min	30 - 40 m/m				
	3mm	-	0.5 - 1.0 m/min	2.5 - 3.5 m/min	5.0 - 8.0 m/min	7.0 - 10 m/min	12 - 18 m/min	15 - 24 m/mi				
			0.5 - 1.0 111/111111									
	4mm	-	-	1.5 - 2.0 m/min	3.5 - 5.0 m/min	5.0 - 8.0 m/min	8.0 - 10 m/min	9.0 - 15 m/mi				
Brass	5mm			1.4 - 1.6 m/min	2.5 - 3.2 m/min	3.5 - 5.0 m/min	6.0 - 7.0 m/min	7.0 - 9.0 m/m				
	6mm		-	-	1.2 - 2.0 m/min	1.5 - 2.5 m/min	3.5 - 4.5 m/min	4.5 - 6.5 m/m				
	8mm	•	•	-	0.7 - 0.9 m/min	0.8 - 1.5 m/min	1.6 - 2.2 m/min	2.4 - 4.0 m/m				
	10mm	•	•	-	•	0.5 - 0.8 m/min	0.8 - 1.4 m/min	1.5 - 2.2 m/mi				
	12mm	-	-	•	•	-	0.6 - 0.8 m/min	0.8 - 1.5 m/mi				
	16mm						-	0.6 - 0.8 m/m				



# Work of Weni Solution team





















Fiber Lasers • Fiber Markers • Co2 Lasers • Flatbed plotters

ALL MACHINES AND PRODUCTS THAT **WENI SOLUTION** ARE FLAGSHIP MODELS
DESIGNED AND PRODUCED BY OUR ENGINEERS BASED ON **MANY YEARS OF EXPERIENCE**AND **OPINIONS OF OUR CUSTOMERS** 

CUSTOMERS WHO CHOOSE OUR BRAND RECEIVE A QUALITY GUARANTEE AT A REASONABLE PRICE, FULL SERVICE AND TECHNICAL SUPPORT.

WENI SOLUTION AS ONE OF THE FEW BRANDS IN THE INDUSTRIAL EQUIPMENT MARKET
OFFERS EVEN UP TO 5 YEARS OF WARRANTY ON EVERY OUR DEVICE

PRECISE MEASUREMENTS OF EACH ELEMENT AND LASER CALIBRATION CARRIED OUT
BY OUR TECHNICIANS GUARANTEE THE RELIABILITY OF OUR DEVICES





WE ALSO GUARANTEE AFTER-WARRANTY AND PERMANENT SERVICE
REPLENISHED BACKUP OF **SPARE** AND **OPERATIONAL** PARTS

OUR TECHNICIANS SERVE THEIR **KNOWLEDGE** AND **EXPERIENCE**PROVIDING TECHNICAL SUPPORT AT THE HIGHEST LEVEL POSSIBLE















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