

Fiber Laser Stainless Steel Cutting Machine

Fiber laser stainless steel cutting machine can cut a variety of metal sheet, mainly suitable for stainless steel, carbon steel, manganese steel, galvanized sheet, all kinds of alloy plate, rare metal and other materials fast cutting. Widely used in: kitchen appliances, sheet metal chassis, rack equipment, lighting hardware, advertising signs, auto parts, display equipment, all kinds of metal products, sheet metal cutting processing and other industries.

1. Product Introduction

Fiber laser stainless steel cutting machines are one of the latest developments in laser cutting technology, offering unprecedented speed and precision to the metalworking industry. But like most terms in manufacturing, fiber laser cutting sounds very complicated. So what exactly is it? Fiber laser cutting machines use an active fiber to generate a laser beam that is delivered to the machine's cutting head via a delivery fiber. The epithermal laser is focused into a narrow beam and used to cut metals of various thicknesses. Due to its enhanced strength and efficiency, fiber optic technology is used in a range of infrastructure and manufacturing applications. Next, we will introduce SUNNA fiber laser stainless steel cutting machine in detail.

Sunna Fiber Laser Stainless Steel Cutting machine adopts the advanced Raycus fiber laser, available to cutting most of the metal sheet materials. Integrated design of machines tool accessories, fast disassemble and installation; funnel collection of both left side and right side, space-saving, energy saving, and low cost. Movable Gantry machine tool structure, to ensure long-time stability and security; Import servo systems and CNC systems, with good compatibility, strong stability, convenient maintenance and excellent processing capacity.



2. Product Parameter (Specification)

Model	SN-1530F
Transmission	TAIWAN RAIL AND RACK
Control Software	Cypcut Control System
Cutting accuracy	0.01mm
Fiber Laser Head	Raytools Cutting head
Gross Power	15KW
Machine Weight	14000KG
Voltage	380V
Laser Type	Fiber Laser
Working Area	3000x1500mm
Air Supply	O2, N2, AIR
Cooling System	WATER COOLING
Driving System	YASKAWA SERVO MOTOR
Automatic Grade	Automatic
Phase	Three phase
Acceleration Speed	1G
Application	Mild Steel, Carbon Steel, Stainless Steel, Aluminum, Brass sheet tube cutting
Cutting Thickness	12mm MS, 5mm SS, 3mm Alunminum brass
Power Source	MAX
Working Speed	140m/min
Autofocus	Yes

What is the Maximum Cutting Thickness ?

	1KW	1.5KW	2KW	3KW	4KW
CS(mm)	0.4-12	0.4-16	0.4-18	0.4-20	0.4-25

SS(mm)	0.4-5	0.4-6	0.4-8	0.4-12	0.4-12
Aluminum (mm)	0.4-3	0.4-5	0.4-6	0.4-8	0.4-12
Brass (mm)	0.4-3	0.4-5	0.4-6	0.4-6	0.4-8

3.Fiber Laser Stainless Steel Cutting Machine Feature

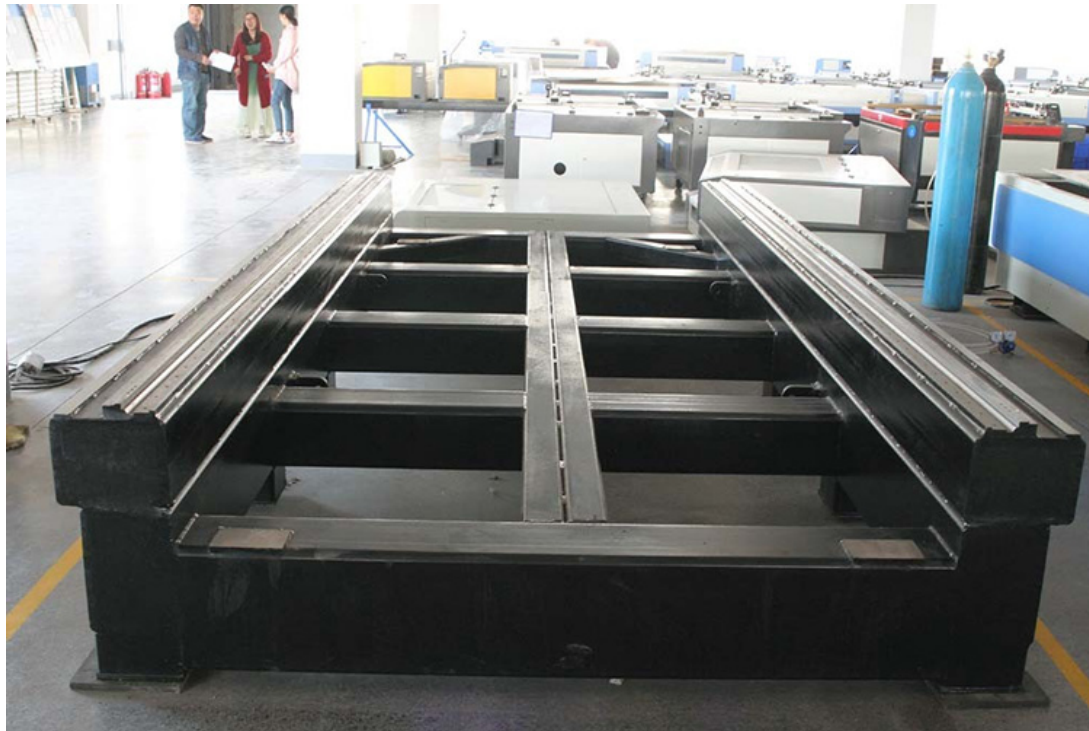
- 1.Original packaging fiber laser, good beam quality, stable performance, without reflection lens and light path adjustment, maintenance free essentially, 100,000 hours working time
- 2.Sunna High rigidity machine bed, adopts exclusive standard annealing processing with high-temperature NC electric resistance furnace, ensure long-time stable precision of the machine tool
- 3.Sunna High transformation efficiency of fiber laser, which up to 30%, saving the working power consumption by a large margin, achieves low operating costs
- 4.Adopts the imported original guide transmission and servo motors, high precision and cutting speed.
- 5.Smooth cutting edge, little deformation
- 6.Low power consumption, energy saving, overall power consumption 1/3-1/5 of the same power YAG machines, 3 times sheet metal cutting speed
- 7.Laser generated without gas, air can be used to cut sheet metal

4. Fiber Laser Pipe Cutting Machine for Metal Sheet Main

Parts Introduction

CAST-IRON BED, ANTI-VIBRATION, STABLE, NO DEFORMATION

- The Sunna main frame adopts the gantry structure welded by all steel plates to ensure the long-term stability without deformation.
- Improve the stability and rigidity of the Y-axis beam.
- Using gantry rack double guide rail, double servo drive structure.
- Ensure the high precision and high dynamic performance of Y-axis beam movement. --Y-axis beam runs smoothly at high speed, greatly reducing gas consumption.

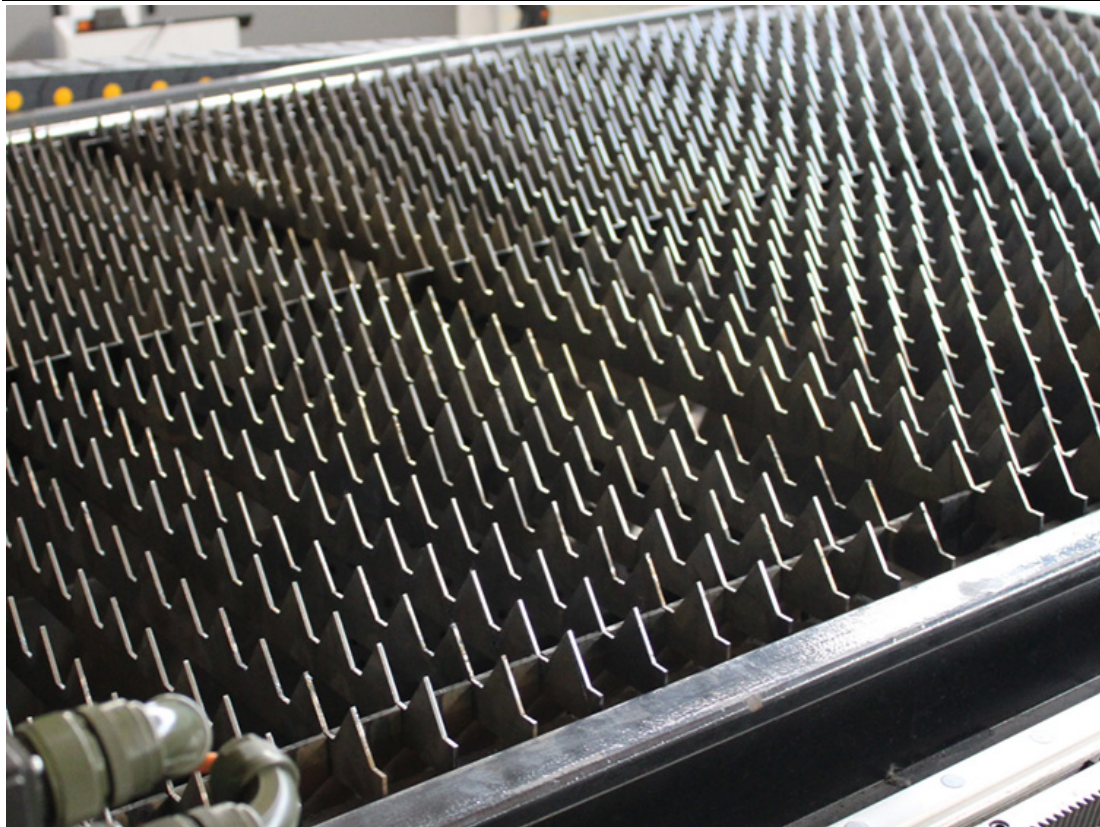


SERRATE WORKING PLATFORM

--The Sunna steel serrated table can withstand heavier work pieces and has only a small area to touch the workpiece when cutting,

maximizing the melting of the table surface by the heat of the laser.

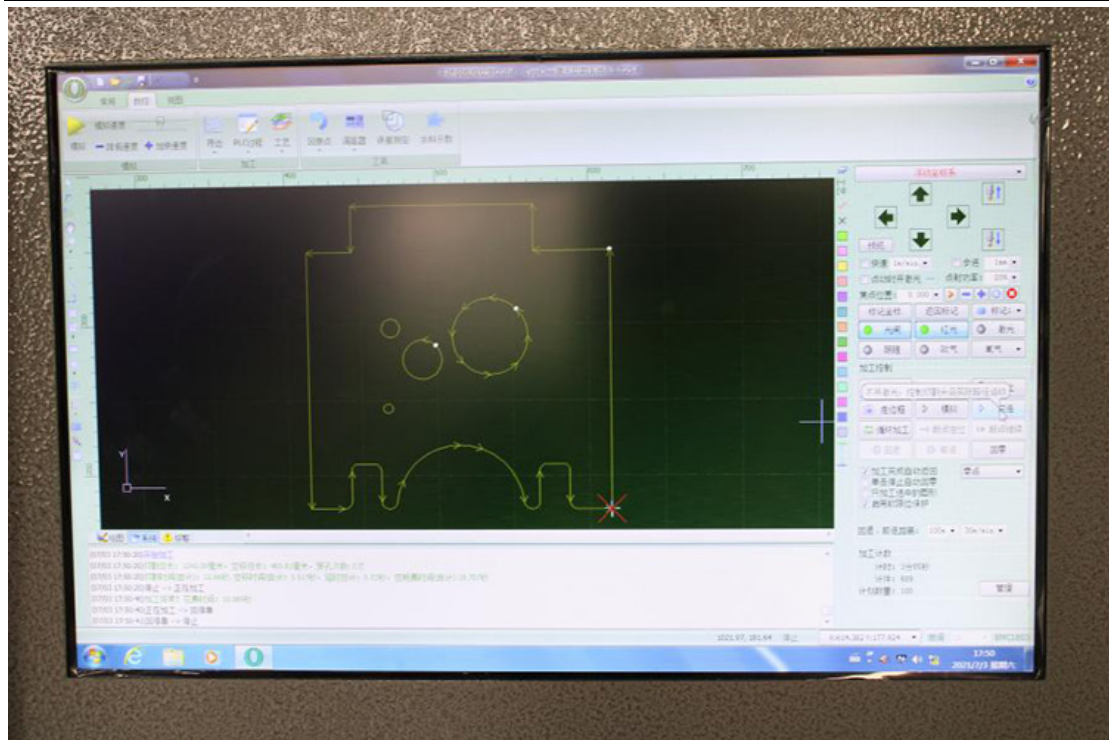
--Each piece is independent for easy replacement and maintenance.



CYPCUT CONTROL SYSTEM

--Support AI, DXF, PLT, Gerber, LXD and other formats, and accept the Cypcut international standard G code generated by MaterCam, Type3, Wentai and other software.

--To use the easiest way to set the lead, slotted compensation, micro connection, bridge-connection, lead inside or outside, lead seal without gap and so on.

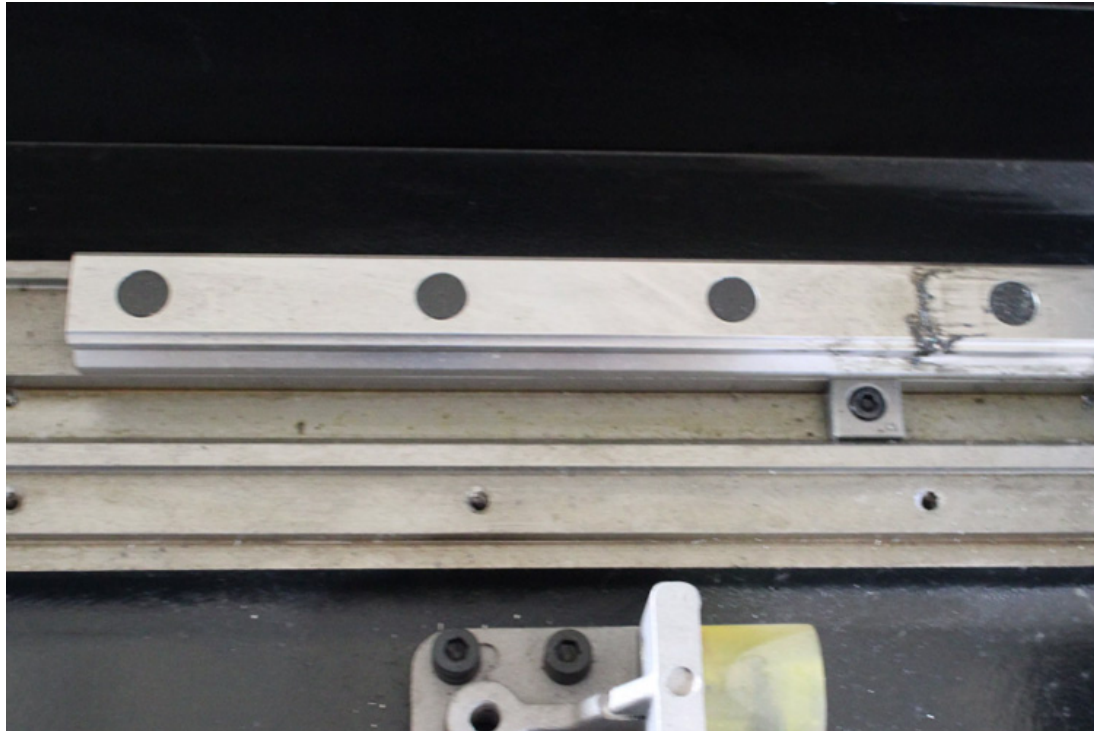


GEARS, RACKS, GUIDES

--The guide rail and rack are calibrated by a precision collimator with an accuracy of $\pm 0.02\text{mm}$

--Using Taiwan YYC rack, grinding on all sides. And there is a positioning pin design to prevent the rack from shifting

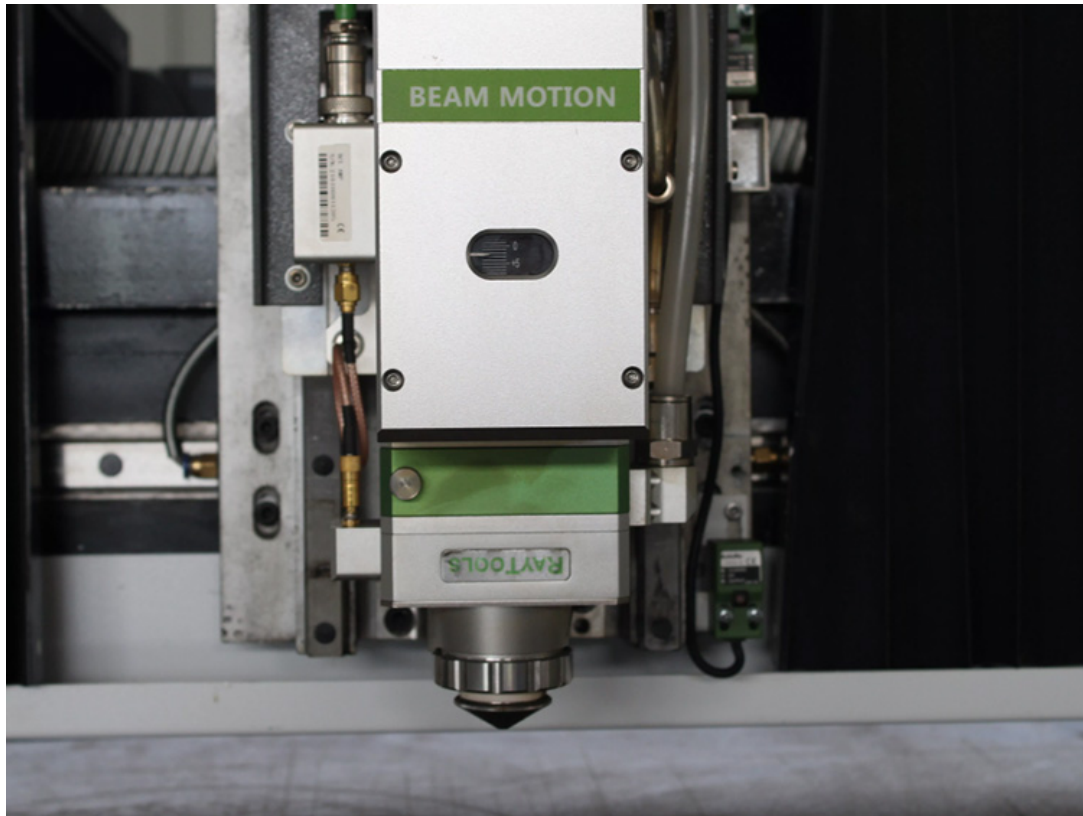
--Using Taiwan HIWIN guide rail, and use oblique pressure block design to prevent displacement of guide rail



SWITZERLAND RAYTOOLS AUTO-FOCUS LASER CUTTING HEAD

--AUTOFOCUS: Through the built-in drive unit of the servo motor, the focusing lens is driven by the linear mechanism to automatically change the position in the focusing range.

--EFFICIENT: Reading the saved cutting parameters through the operating system can quickly change the focus position of the laser head, eliminating manual operation and improving efficiency by 30%



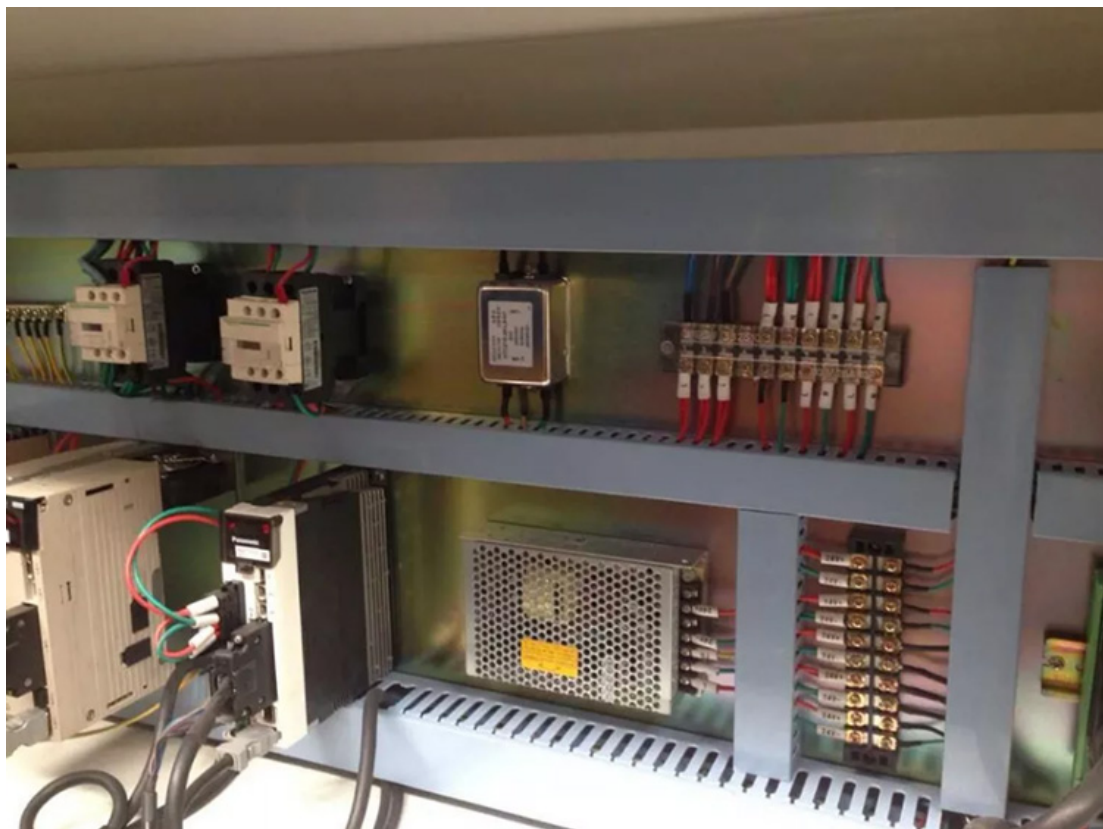
FAMOUS BRAND LASER SOURCE

- We have professional sales and technician who can suggest you the most suitable laser source, depending your target price.
- Stable performance and high cost performance
- The fiber launch is stable, with long service life of nearly 100,000 hours
- It can run continuously 24 hours a day to meet the requirements of industrial continuous production



CONTROL CABINET

All the electrical components are housed and wired in a doubled-doored electrical enclosure. This allows for easy access and service when needed. All wiring is tagged so that when service is required, the customer can easily navigate the cabinet



HIGH QUALITY SERVO MOTOR

Composed of: servo drives and the servos move in all axes. With this motor, the machine can realize high-precision machining at high speed.



WATER CHILLER

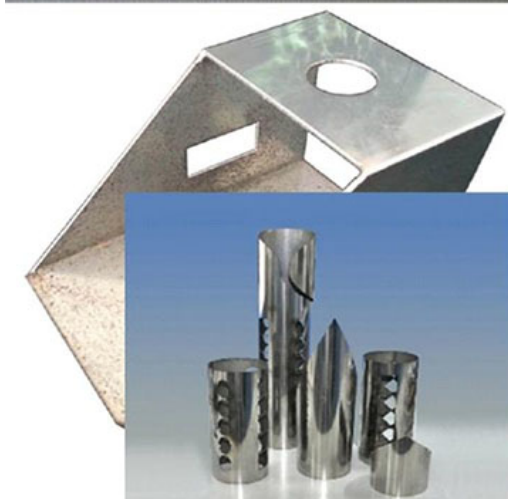
The function of the water cooler is to reduce the temperature of the laser generator and prevent the laser from being burned out. We only use brand-name water coolers with reliable quality.



5. Application

Fiber Laser Stainless Steel Cutting Machine is suitable for stainless steel, carbon steel, silicon steel, aluminum alloy, titanium alloy, galvanized steel, pickle plate, aluminum-plating Zinc plate, metallic copper and other metals.

Specially used for cutting 0.5-30mm carbon steel sheets (pipes), 0.5-15mm stainless steel sheets, galvanized steel(pipes), electrolytic zinc-coated steel sheet(pipes), silicon steel(pipes) and other kinds of thin metal sheets and pipes. Range of pipe diameters: 20-220mm.





Fiber Laser Cutting Machine After Sales Service:

A.SUNNA INTL will supply fiber laser cutters with training videos and user's manuals in English for installing, operation, maintenance and trouble-shooting, and shall give technical guide by e-mail,whatsapp,wechat,telegram,teamviewer,telephone and so on, when you meet some problems of installation, using or adjusting.

B.You can come to our factory for training. SUNNA will offer professional guide. Direct and effective face-to-face training. Here we have assembled equipments, all sorts of tools and testing facility,we will also provide accommodation during training period.
Training Time: 1-10 working days.

C.Engineers service machinery overseas

SUNNA has excellent machines and excellent service. We cover all aspects of machine software and show you helpful tips and tricks so that you can get the best out of your machine as soon as possible. In addition, we'll cover basic maintenance and how to keep your machine in good running condition.