RMT KYSON FALCON 510

TECHNICAL SCHEME

ABOUT RMT

Revolution Machine Tools (RMT), founded by long time industry leader Kyle Jorgenson, is a metal fabrication machine tools company. RMT's design team has created the most innovative and precise tools in the North American market today. We have partnered with leading manufacturers to build our designs to our stringent specifications in state of the art manufacturing facilities.

Kyle Jorgenson started in the Machine Tool industry working with his father, Roger Jorgenson, who founded Jorgenson Machine Tools in 1974. Roger taught Kyle how important relationships and customer service are and Kyle has built his reputation on those principles. RMT is supported by an ever expanding team of industry professionals, which include design, marketing, service and support, who have these same values and respect Kyle's vision. Together, they are creating a revolution in the Machine Tool industry.

RMT's main focus is in large cutting, forming, and rolling machines for the metal fabrication industry.
RMT's research and development team has created the most innovative, fast, durable and accurate machines in the industry. Our machines are all backed by a strong warranty and an outstanding service team dedicated to keeping your machines operational. We understand the time value of money and how expensive downtime can be.

RMT offers several innovative machines including Fiber Lasers, Press Brakes, Plate Rolls, Ironworkers, Angle Rolls, Shears, Structural Steel Drills, Hydraulic Presses, Band Saws, and much more. All RMT product designs are built for durability, precision, repeatability, and speed.

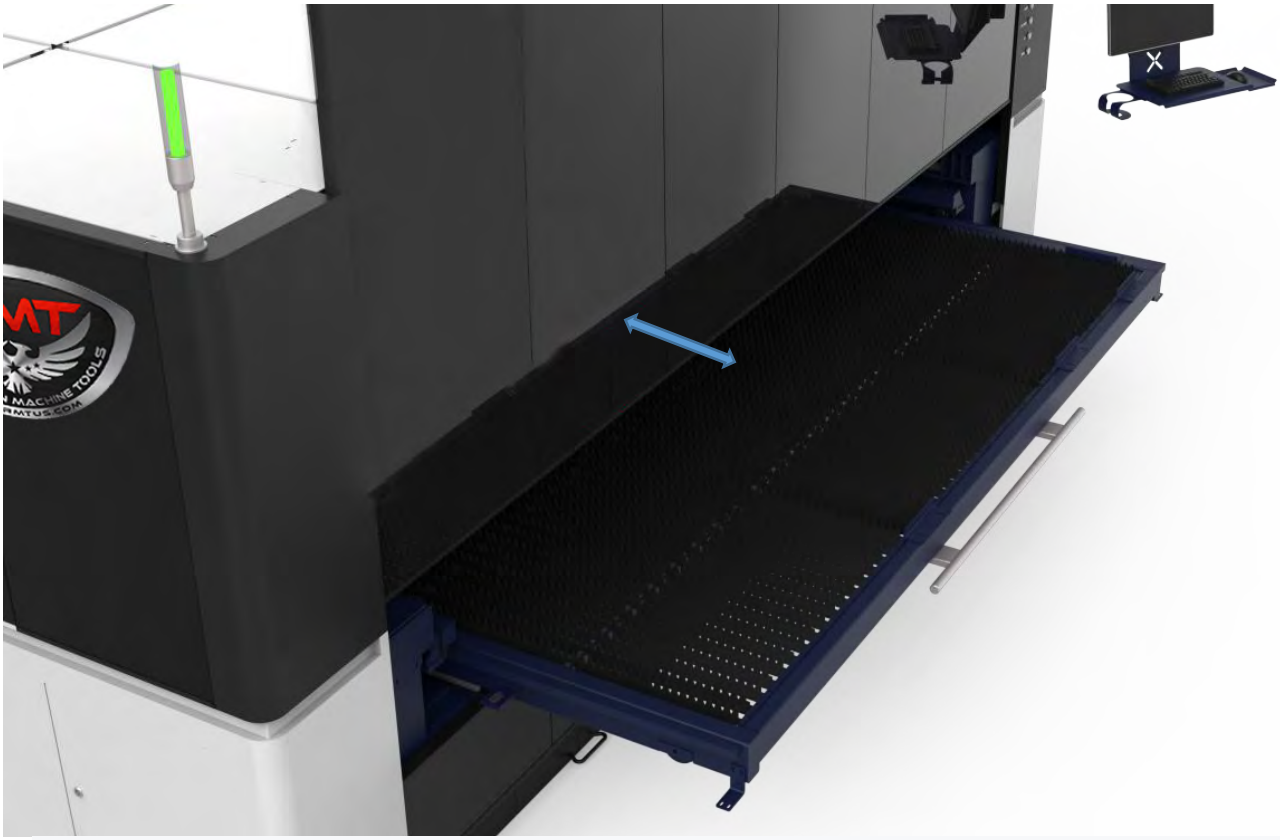
Kyson Falcon 510

(All pictures shown are reference only)

MODEL FEATURES

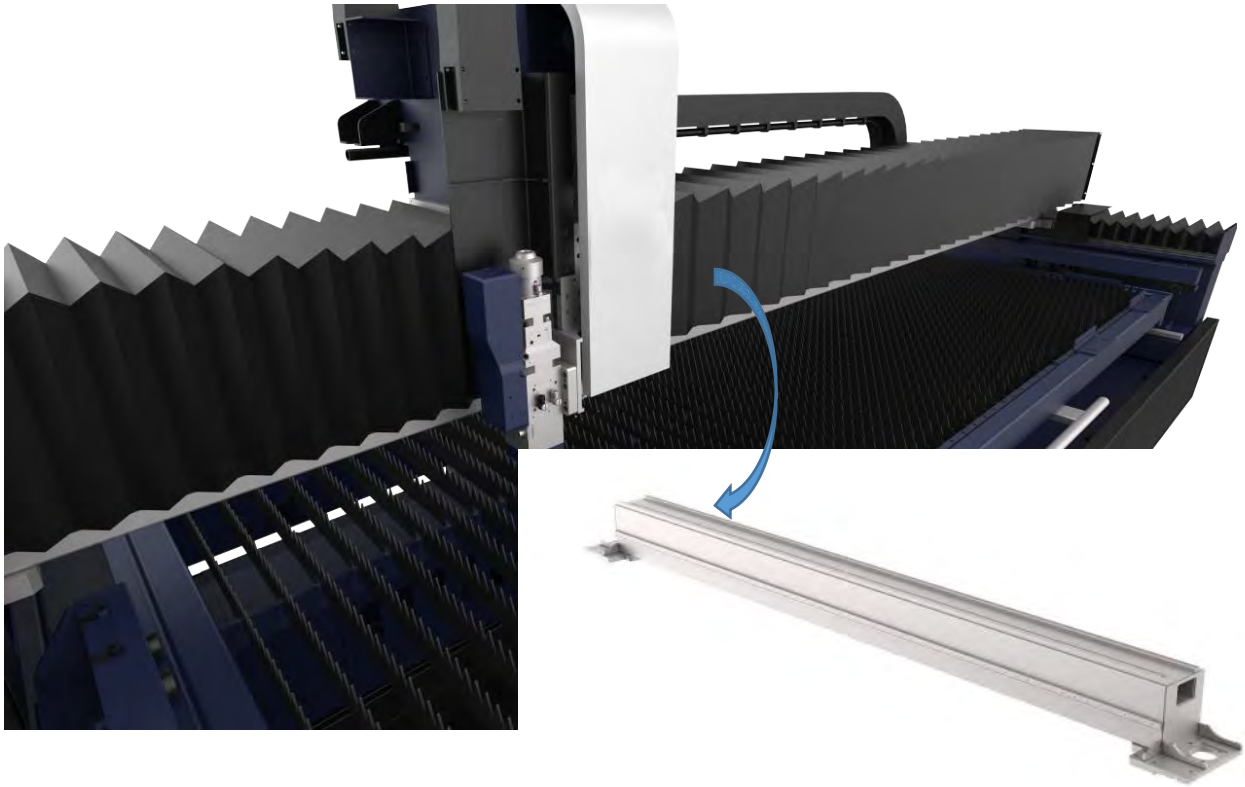
- The mechanical structure adopts gantry style to ensure stable performance and operation. Its small floor space can fulfill the loading requirements for standard container .
- Processing platform is 120" x 60", which meets the requirements of inch format.
- Fully enclosed structure, electrical controlled door, better protection for personnel safety.
- The drawer type worktable with the positioning mechanism can facilitate easy loading and unloading of materials.
- Standard sectional suction, effective environmental protection.
- Extruded aviation aluminum beam structure,higher rigidity, better dynamic performance
- Professional CNC control system, with laser power adjustment function, can guarantee the cutting quality and the operation is simple and convenient;
- This model adopts AC servo motor drive system. The machine movement mechanism adopts gear and rack double drive to ensure high speed, high precision and high reliability of the equipment;
- The gas system adopts integrated control type, advanced design, full import of pneumatic components, and can simultaneously access three different auxiliary gases. The customer selects the auxiliary gas according to the actual situation. High-pressure gas circuit design improves the cutting ability of hard-to-cut materials such as stainless steel.
- High-quality, high-efficiency fiber laser resonator, low processing costs, energy saving and environmental-friendly.

(Fully enclosed structure, electrical controlled door, better protection for personnel safety)



(The drawer type worktable with the positioning mechanism can facilitate easy loading and unloading of materials)

(Integrated electrical cabinet and gas cabinet, to maximize floor space saving purpose)



(Aviation aluminum beam structure,higher rigidity, better dynamic performance)

Equipment Configuration List

Name	Quantity	Model/ Specifications
Special precision cutting head for fiber	1 set	Klinge
Precise rack	3 sets	Alpha
Reducer (including gears)	3 sets	Alpha
High speed servo motor and drive	4 sets	Panasonic
High precision linear guide rail (tool)	3 sets	HIWIN/PMI
Precision ball screw	1 set	HIWIN/TBI
Numerical control system	1 set	ALPHAT
Electric control	1 set	Schneider
Gas circuit control	1 set	Parker
Mechanical platform and accessories of tool	1 set	RMT
Water chilling unit	1 set	Standard configuration

Technical Parameters and Specification Description

Performance index	Parameter
Cutting area (length×width)	120" x 60"
Positioning precision of X/Y axis	±0.001"
Repetitive positioning precision of X/Y axis	±0.001"
Maximum speed	328 ft/min
Maximum accelerated speed	1.0G
Tool weight	9259 lbs
Maximum load of workbench	441 lbs
Machine overall dimensions (length*width*height)	191" × 89" × 83"

Note: This configuration table is valid before June 30, 2020. Due to ongoing production Development specifications can change at any time -

Operation Requirement

Content	
Electricity:(Industrial stabilizer is suggested) (1)Voltage: 230V or 480V (2)Frequency: 60Hz (3)Voltage stability + 5% (4)Voltage regulation: <2%	Assist gas： Purified dry compressed air and high purity oxygen (O2) and nitrogen (N2) purity not less than 99.9%
Sheet metal： Homogeneous, smooth and clean.	Compressed air supply device (1)Pressure：14 bar (2)Volume：264 gallons

Sample Cutting Display



Installation and Training

1.Installation and Debugging

The numerical control fiber laser cutting machine is installed and operated according to two national standards including GB7247-87 Radiation Safety of Laser Product, Equipment Classification and Requirements and User Guide and GB10320-88 Electrical Safety of Laser Equipment and Facilities.

(1) After the Contract takes effect, we understand the geological position of the plant installation of the demander as soon as possible to determine the specific equipment installation position, and provide the equipment installation guide within seven (7) working days after the Contract takes effect.

(2) Prior to installation and debugging, the demander shall construct the equipment foundation according to the equipment installation guide provided by us to ensure that the installati on site allocation complies with the equipment installation requirements.

(3) After the demander completes the equipment installation guide and the cargo is delivered to the delivery site, our personnel will install and debug the equipment with the necessary tools and be responsible for completing the equipment installation, debugging, technical index test, trial c utting, training, acceptance and delivery to the

demander withi n five days. The demander shall provide necessary coordination and assistance for equipment installation and debugging by our engineer.

(4) All expenses relating to installation and debugging and personnel dispatched are borne by us and the demander provides the machine for unloading and personnel's accommodation.

(5) All equipment provided in the Contract is installed and debugged by us. After the equipment is installed And debugged,wewill perform self-inspection for it. After various technical indexes comply with the technical requirements of the Contract, thesupplier and demander may accept and use the equipment.

2.Personnel Training

Before the equipment is shipped, the demander may dispatch 1-2 operator(s) to our factory or exhibition hall for one-week training. The specific time is subject to the confirmation with our Customer Service Department. Training contents include laser principles, equipment structure, process description, equipment maintenance, laser safety protection, operation procedure and simple troubleshooting, etc. The trainee shall be the mechanical, electrical or optical assistant engineer or engineer, be familiar with the computer o peration and AutoCAD drawing, who must pass the assessment of equipment operation, fundamental laser principles, laser safety protection, maintenance, etc. organized by our Company prior to induction.

3.Training Process

After the Contract takes effect and the Documentary Department places the production order, our indoor customer service staff makes an appointment.

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At the appointed time, the trainee checks in to our reception desk, with unified accommodation arrangement and daily necessities distributed.

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The Process Training Department provides training for 6 days.

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Course-completion exam

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Certificate and souvenir issuing

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Material archiving

4.Packaging, Transportation and Equipment Acceptance

(1) Standard packaging for long-distance motor transportation,dampproof, anti-rust and vibration resistance, suitable for overall hoisting and the hoisting gravity and position are indicated.

(2) Transportation mode: Motor transportation. We are fully responsible for it, including freight and insurance.

(3) A detailed packing list, certificate of quality, equipment specification and all other documents and materials are put into the packaging box. The packing list is attached outside the packaging box and the certificate of quality is put into the packaging box.

After completing the equipment installation, debugging and self-inspection, we accept it on the demander's site, including:

1. Inspection and acceptance of the quantity, model, specification, function, technical indexes, etc. of all goods.
2. Perform laser cutting and machining for the typical specimen approved by both parties.
3. Both parties record the acceptance information and evaluate the acceptance result. The performance may be assessedafter signature and approval by both parties.

Notes:

1. Provided that the fault of the auxiliary facility on site (power source, peripheral environment, etc.) and environment do not comply with the requirements of normal equipment operation, which results in the interruption of the test or acceptance, the demander shall immediately recover it, so as to ensure the normal operation conditions of the equipment.
2. Provided that the equipment is in shortage, damaged or does not comply with the Contract terms and quality standard during acceptance,we will be responsible for supplementing or replacing it and all expenses caused thereby are borne by us.

5.List of Accompanying Documents

Certificate of quality of tool	One copy
Packing list of tool	One copy
Spare parts	One copy

After-Sales Services

The warranty period of this complete equipment(excluding such vulnerable parts and consumable as optical device, lens,etc.) is one year after the equipment is accepted. We will help the demander coordinate the after-sales services of the auxiliary equipment. Our after-sales service engineer will provide the corresponding call support and necessary on-site service according to the problems reported by the customer. The c all and network response time is within 2h and then we will provide services (except man-made damage or force majeure).

Within the warranty period of the equipment, for the fault caused by the quality of the equipment component, we will maintain or replace the component free of charge and provide free service at the same time (except optical device, vulnerable parts and damage caused by the user's misoperation).

For replacement of the optical devices (including optical device and vulnerable parts), no matter whether they are within the warranty period, they shall be purchased from us to ensure your normal equipment use. Meanwhile, we will be responsible for maintaining them. We will terminate the free warranty service in

In case of any damage and fault caused by fittings which are not purchased from us and the warranty period will be terminated.

Within the warranty period, we will not provide warranty for the following articles: Nozzle, ceramic article, support bar for cutting, filter element and component, protective lens, O-ring, all lubricating oil, transmission fiber, collimating lens, focus lens, other optical lenses, SMA line and reducing valve.

The professional trained engineer provides users all over the world with technical support and services via the network, who mainly intuitively identifies the faults quickly online from a long distance with such social software as QQ, WeChat,Teamviewer, etc. and timely deals with them, so as to ensure that the user may better use the equipment.

With the unified fault reporting system via RMT Service - hotline, email/WeChat/Skype,we provide users with fault reporting services and consulting services in terms of the technology, parts,warranty extension, maintenance, etc. Through national unified fault reporting,a particular person is responsible for accepting the fault information reported to avoid mutual forwarding for several times, and thus delaying the maintenance time. Therefore,we may adjust the service team members and mode of service according to the actual situation in different areas.

The professional, careful and improved pre-sales, on-sales and after- sales service systems provide guarantee for the user's continuous machining. There are installation guide, maintenance guide, unloading guide, training guide, etc.