CUTTING, POSITIONING & WELDING EQUIPMENT

VERSAGRAPH EXTREME

CNC PLASMA/OXY-FUEL CUTTING MACHINE



Koike Aronson, Inc./Ransome



COMPANY

Koike Aronson, Inc./Ransome is headquartered in Arcade, NY. We are a proud supplier of advanced cutting machines, welding positioning equipment,

portable cutting/welding machines, and gas apparatus. Our knowledgeable staff can assist you with virtually all your needs in metal fabrication. Koike Aronson/Ransome cutting machines can be customized to fit most requirements, and our welding and positioning equipment can be made to accept work pieces of nearly any size.



Our manufacturing area consists of a machine shop, saw shop, two assembly shops, a burn shop, and a weld shop. Handling nearly all manufacturing in-house helps us maintain our extremely high quality. Our factory uses 5S, a lean tool directive, that increases productivity through tidiness and improved organizational practices. We have the capacity to run three shifts with approximately 100 employees per shift. Machining capabilities range anywhere from a small nut to a large weldment. Most importantly, we use our own products to build our customers' machines.

The Engineering Department is comprised of

mechanical, electrical, and software engineers with over 250 combined years of design, process, and technical experience. Their knowledge allows us to apply proven designs to customer needs and to develop new technology for custom applications. AutoCAD, SolidWorks, and Cosmos software are used to optimize designs for standard products and to create custom solutions for specialized equipment. Our electrical and

World Class Service Support

World Class Service Support
We have the technicians, training, and engineering support to keep your machine running like new for years to come.

mechanical systems are designed to industrial standards for strength, reliability, and safety.

The Business Unit and Customer Service Representatives of Koike Aronson/Ransome offer our customers well over 170 years of combined experience. They work with our many distributors and manufacturer sales representatives to make sure you get quality products and the right equipment for your application. We encourage feedback, and are ready to work with you to keep your machine productive for many years.

The dedicated service technicians of

our Field Service Department work as a team to keep machines running at top performance. This starts with sending pre-installation documentation to prepare our customers for machine delivery, installation, and training. Our website is filled with helpful information including the KAR Club, which offers numerous tips on troubleshooting, tuning your machine, and machine maintenance.



For Other Downloads, please scan here with your smartphone

Made in USA. At Work Worldwide



Koike Customer Visit Program See How Koike Can Make Metal More Profitable For You

Koike Aronson's Customer Visit Program was introduced to provide those looking to purchase equipment the opportunity to come visit us, meet our people, and tour our complete manufacturing facility.

Your visit to our facility is on us. All expenses paid for including: airfare, transportation, room and meals.

Call a Koike Representative for details and schedule your appointment today!
Phone: (585) 492-2400
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MANUFACTURING PROCESSES



LOGISTICS



ASSEMBLING



SAWING / MACHINING



BURNING



WELDING/FABRICATING

PAINTING

VERSAGRAPH EXTREME

Extreme Durability

Extreme Reliability



Shown: Klean Sweep slag removal table, Bevel Head, operator platform are optional.

Koike Aronson, Inc./Ransome has created an extra heavy-duty, gantry, thermal cutting machine using the latest design methods such as Finite Element Analysis (FEA) to assure this machine can operate in the most challenging environments. The Versagraph Extreme series utilizes the latest technologies to provide unmatched speed, accuracy, versatility, reliability and durability in a thermal cutting machine.

The Versagraph Extreme can be fully customized to fit your production needs and increase your productivity. Multiple plasma stations, oxy-fuel stations, marking options as well as full contour plasma beveling, which is controlled through a very easy to use operator interface. Steel Service Centers, Heavy Fabricators, Equipment Manufacturers and Shipbuilders are just a few of our markets.



We Make Metal More



STANDARD EQUIPMENT



Edge Connect TC - CNC Controller

- Windows®10 Embedded
- Intel J1900 Quad -core MCU or equivalent
- 120GB SSD Hard Drive or better
- 4 GB DDR3 or better
- 19 inch Glass Touchscreen with 1366x768
 Native resolution
- IntelliTouch Pro PCAP (Projected Capacitive touch technology)
- 2 USB 2.0 Ports
- Built in Wireless Communication
- Two Plasma Station Operator Console
- Forward and backup on path function
- Skip to pierce or Skip part function
- Part Program Support
- Remote Help
- Supports Networking
- Auto Gas Support
- DXF Input
- Simple Shape Nesting
- Select-able Process Parameter table
- Cut Pro Wizard
- Pronest CNC version included (single part nesting)
- Optional multiple part nesting available upon request
- Sure Cut technologies applied (True hole, Rapid Part and True Bevel when applicable)



Koike - Engineered Main Electrical Enclosure

No proprietary components are designed into the Koike main electrical enclosure. Only "Off-the-Shelf" components are structured for this design. This main electrical enclosure incorporates Sercos-III interface for fast communication between the CNC and electrical components. 18 Amp Bosch/Rexroth drives are used to give the HP required to achieve 1400 IPM rapid traverse speed. Power requirement is 480/3/60 @ 30 Amp.



Powerful AC Servo Drives and Ultra Low Backlash Planetary Gearboxes

Powerful 6 HP drives, for X and Y-Axis is engineered for precise, smooth and accurate motion for excellent cut quality.



Large Diameter Drive Pinions

Large diameter pinions offer accurate and smooth machine motion and are designed to achieve 1400 IPM rapid traverse speeds.



Drive System Engagement

Precisely engages the pinion into the rack using dual precision linear bearings. Makes for a long life and accurate machine motion.



Large Heavy Duty Rail System

The floor mounted rail systems provides a very rigid foundation for the large 37 KG triple machined rail. This is necessary for very accurate and smooth machine motion. This large heavy duty rail system can be easily expanded to accommodate additional cutting lengths or additional machines on a common rail.



Large heavy-duty main saddle rollers provide stability for heavy loads while achieving smooth motion.

Large Brass Rail Scrappers

Provide excellent scrapping of debris to keep machine motion smooth and stable.



STANDARD EQUIPMENT





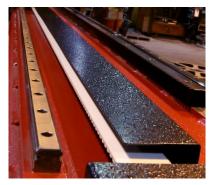


Rail Axis Cable Carrier

Can be mounted on the floor or overhead (optional)

A sealed design keeps hoses and cables protected from harsh environments.

Cross Axis Cable CarrierA sealed design keeps hoses and cables protected from harsh environments.







Heavy Duty Cross Axis Linear Bearings

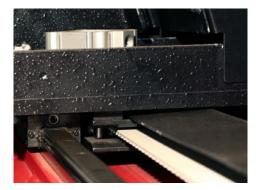
Precision linear bearings provide smooth and very accurate motion while providing very heavy load capacities.

Machine Tool Testing

All machines tested to ISO 230-2 standards. Machine Motion Accuracy: .015" Accuracy .005" Repeatability (compensated machine motion in 72"; measured with laser interferometer).

Cable and Hose Management

All cable and hoses are properly installed to eliminate twisting and fraying during machine motion.



Slave Carriage Band Clamp

Allows easy and accurate placement and spacing of tools such as oxy-fuel and plasma torches.

MARKING OPTIONS



PLASMA SYSTEMS & OPTIONS



Hypertherm HyPerformance/HyDefinition Plasma Systems

HyPerformance Plasma cuts fine-feature parts with superior quality and consistency while eliminating cost of secondary operations. The quick disconnect torch makes changing consumables fast and easy. Long consumable life, dross free edges, minimum angularity and high system reliability maximize productive "arc-on-time".

HyPerformance Plasma combines fast cutting speeds, rapid process cycling, quick changeovers and high reliability to maximize productivity. 130 amp to 800 amp systems are available to meet your production demands.

Hypertherm Conventional LongLife Air and Oxygen Plasma Systems

Heavy-Duty production tools with cost reducing LongLife technology for dramatically longer consumable life and much lower operating costs. The quick disconnect torch makes changing consumables fast and easy. Impressive cut speeds, consistent cut quality and exceptional consumable life gives this plasma system a reliable performance across a wide range of industrial applications.

Laser Pointer

Allows operator a visual indicator for plate alignment and torch positioning.



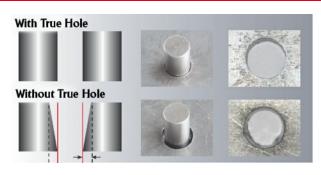
3D-LT Bevel Unit with Koike HD Sensor-THC Height Control True focal point technology. This

head is designed so motors and gearboxes are receiving maximum protection from the cutting environment. No electrical wires or components near the heat, smoke and dust involved with the cutting process. Designed for simplified alignment and lower maintenance costs.

Continuous 360° rotation. Accuracy +/- .5 Degrees Bevel Angle Capability:

Negative bevel angle: 50°

Bevel Types include: X, Y, V, and K Bevels



TrueHole™ Ready

TrueHole™ Technology founded by Hypertherm® produces a significantly better hole quality than what has been previously possible before using plasma. This technology was developed for mild steel from gauge to 1" (25 mm) and has been optimized from a 1:1 to a 2:1 diameter to thickness ratio.



Koike Integrated Sensor THC Torch Height Control

- 12" (340.8 mm) Lifter Travel
- 1,000 IPM Programmable Lifter Speed
- Adjustable stroke retract between cuts
- Dynamic positioning.

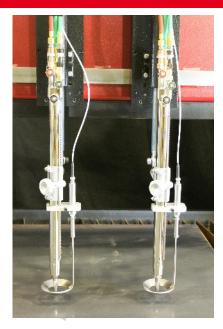
Collision Detection Mount

- Magnetic integral breakaway for collision detection and system shutdown
- Primary Ohmic contact plate sensing for clean plate
- Secondary plate sensing means for scaled/rusty plate
- Primary and secondary means for lifter homing



Manual Plasma Bevel Station Bevel in the rail axis only. Non-contour mechanical adjustment from +/- 0 - 45°.

OXY-FUEL SYSTEMS & OPTIONS



Oxy-Fuel Torch Stations (Up to 10 stations available)

Model "G" motorized lifter, 6-inch (150 mm) or 12" (300 mm) stroke at 40 IPM. All stations are controlled from the Operator Console.

Capacitive height control (shown) allows exact tip to work piece standoff distance (optional). Automatic ignition (not shown) allows tip ignition automatically through a program or can be executed manually from the Operator Console.



Slave Station Selection Switch

Allows the slave stations to be manually placed in the work area. A pneumatic switch clamps the station to the endless loop Kevlar belt allowing the station to follow the master drive station.



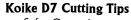
Koike Twin Tip Holder

Coverts a single oxy-fuel cutting torch into dual cutting torches. Allows strip cutting and a closer distance between small parts.



Koike Torch Bevel Head Attachment

The bevel head attachment is used in place of a Koike cutting tip. It is used for bevel cutting operations, including top and bottom bevel cuts.



Safer Operation

Koike's 100 Series tips are designed to reduce backfires to keep the operator and torch safe

- High Quality
 - Each tip is thoroughly tested to ensure consistent high-quality cutting in every tip
- Faster Cutting
- Our high-speed divergent tip increases cutting speed by 20-28% over standard tips
- Gas Savings
- Gas consumption is reduced up to 26%.
- Durable
- A stainless steel cutting oxygen liner results in the tip lasting up to five times longer over standard tips
- Lifetime Torch Warranty



Servo Gas Control with Auto Ease-On

Allows high-lo preheat for fast preheating of plate and superior cutting quality. Features auto ease-on pierce control for cut oxygen. Allows for precise piercing on thicker plate. Dome loaded regulators provide precise flame adjustment.

In addition to the benefits of the Servo Gas Control, it also allows multiple torch thick plate cutting and includes a main beam electric blower fan and heavyduty heat shields to deflect heat and sparks.

TABLE OPTIONS



Water Cutting Table

The Koike water cutting table is an economic solution to reducing smoke, sparks and dust into the environment.

- Constructed out of 1/4" thick steel the table offers a heavy duty design with re-enforced side walls for extra durability.
- Has a steel tank air bladder allows raising and lowering the water level with air.
- Table allows 6" thick plate and under to be leveled to the table for more accurate cutting.
- 1/8" thick slats are spaced 3" apart and curved to help stop small parts from falling into table and prevent straight line cutting along a slat. This feature reduces slag along the bottom of parts and prolongs the life of the slats.
- Easy lift lugs allows you to lift the whole slat and pan assembly or each individual component of this assembly. As an example: it allows for the lifting of slats and the holder for easy access to collector pans.



- Production
 No need to stop production to remove your slag.
- Simple Operation
 Either remove slag by pressing a button or can be programmed to run in set intervals.
- Collection Options
 Either choose to have your slag dumped into a container embedded into the floor or conveyed into a portable slag container.



Fume Extraction Unit

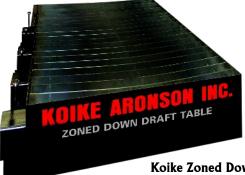
- Ledge-less construction Eliminates dust build-up and accommodates wash down environments.
- Compact design Minimizes floor space.
- Powerful performance Proprietary ExtraLife™ Filter Cleaning System provides 30% more cleaning energy.
- Cost savings
 Fewer filter change outs, reduced filter disposal costs, less energy usage.
- Reliability
 Exceptional results for over 20 years and counting.



Safety Light Curtain

Safeguards personnel from the potential dangers of moving machinery. Will shut-off machine if anything comes within the path of the light curtain while in motion.

Also available Pull Rope E-Stop design



Koike Zoned Downdraft Cutting Table

- Modular designed
 Provides ability to add space as you need it
- Simple Operation Slat frames and slag pans easily remove for cleaning
- Multiple Zones Provide optimal fume extraction



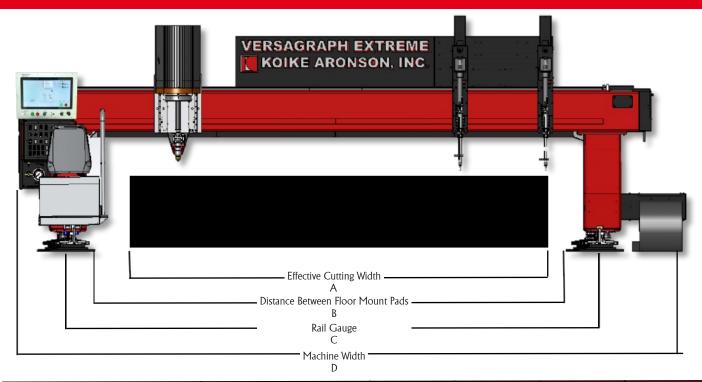
Optional Operator Platform

VERSAGRAPH EXTREME WORKSHEET

Effective Cutting Width:	Effective Cutting Length:				
Material Types:					
Material Thickness Range	CNC Controller				
Plasma Thickness:	Hypertherm® EDGE Connect				
Oxy-Fuel Thickness:					
Rail Axis Cable Carrier	Plasma Type				
Floor Mounted	Quantity: Hi-Definition				
Overhead Mounted	Voltage: Conventional				
Plasma System					
Hypertherm®	Oxy-Fuel				
Plasma Bevel	Quantity: Fuel-Gas Type:				
Manual Type	Auto Ignition				
3D-LT Automatic Full Contour	Capacitive Height Control				
	Manual Bevel Attachment				
Plasma Height Control					
Koike Sensor-THC					
	Cutting Tables				
	Pneumatic Water				
Plate Marking	Dry				
Pneumatic Dot Peen	Downdraft				
	Self Cleaning Downdraft				
Offline Software	Fume Collector				
Hypertherm® CAM Solutions	គោះស				
SigmaNEST					



SPECIFICATIONS



MODELS	2500	3100	3700	5000	6300	7500
Effective Cutting Width (A)	96 in	120 in	144 in	192 in	240 in	288 in
Effective Cutting Width (2-Slave Stations)	1 20 in	144 in	168 in	216 in	264 in	312 in
Distance Between Floor Mount Pads (B)	171 in	195 in	219 in	267 in	315 in	363 in
Machine Rail Gauge (C)	189 in	213 in	237 in	285 in	333 in	381 in
Machine Width (D)	245 in	269 in	293 in	341 in	389 in	437 in
Effective Cutting Length (Expandable)	250 ft					
Machine Rail Support	Floor mounted					
Rapid Traverse Speed	1400 IPM					
Contour Speed (Maximum)	600 IPM					
Machine CNC	Hypertherm© Edge Connect					
Machine Drive System	6-hp AC Servo					
Maximum Number of Tools	10	10	10	10	10	10
Maximum Number of Slave Stations	9	9	9	9	9	9
Maximum Plasma or Marker Stations	4	4	4	4	4	4
Maximum Oxy-Fuel Stations	10	10	10	10	10	10
Oxy-Fuel Gas System 10 in Max. Thickness	Servo Gas					
Machine Voltage	480/3/60 @ 30 AMP					

Specifications are subject to change

CUTTING, POSITIONING & WELDING EQUIPMENT



Koike Aronson, Inc./Ransome





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