

*ShopJet*<sup>TM</sup>



COMPACT WATERJET  
CUTTING MACHINE

 **KOIKE**  
ARONSON RANSOME

# SHOPJET

## COMPACT WATERJET CUTTING SYSTEM

- ✓ Effectively cuts a wide range of materials & applications
- ✓ Engineered, built and fully supported in the USA
- ✓ Manufactured by industry experts
- ✓ Solid steel structure
- ✓ Smaller footprint than others in its class
- ✓ Greater reliability and performance

### SHOPJET FEATURES

- Backed by a long-time industry leader with localized service, support and parts
- Built with a solid steel construction using Koike's proven design for a rigid and sturdy foundation
- Built to ISO 230-2 to ensure accuracy and repeatability
- No heat effected parts and no discoloring during use
- Repeatability of .0015" allows for accurate cutting
- Built using direct drive helical rack and pinion for maximum performance
- Backed by long-time industry leader with localized service, support and parts to ensure peak performance is maintained
- Quick installation and set-up (unitized design for plug and play)
- Add-on options available to enhance efficiency and performance
- Includes educational training for maximum precision and use of machine
- Can be shipped on a standard 8 ft truck
- 2,200 lbs. of FREE abrasive with every machine order
- Available in 4'x4', 4'x8", and 5'x10' models
- Equipped with FlashCut Pro CAD/CAM software
- 2 year warranty
- Machine and remote software licenses

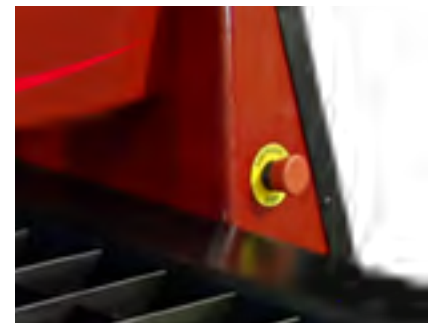


### The ShopJet offers fabricators unprecedented value for waterjet cutting

Koike Aronson's ShopJet is the company's newest waterjet cutting technology to meet a wide range of cutting applications, at an accessible cost. Fully manufactured in the USA by Koike, with localized service, support and parts. The ShopJet was built for proven performance and long-lasting reliability. The ShopJet makes waterjet cutting easy.



**Water Table**  
with curved slats



**Emergency Stop Button**  
E-stop button located on each saddle quickly and safely shuts off machine motion and cutting process



**Dual Side Drive With Precision Ground Linear Bearings**  
Provides smooth and accurate motion

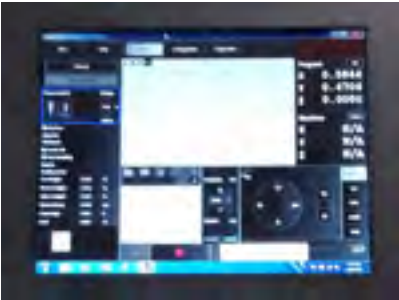


**Precision Low Backlash Gearboxes**  
Large 25mm linear bearing on short axis and 30mm bearing on the cross for smooth motion



**Helical Gear Rack**  
with AGMA 12 grade ground pinions

CNC CONTROL AND OPTIONS



ShopJet Offers  
FlashCut CAD/CAM/CNC PRO  
Software

CAD drawing package highlights:

- Simple shape menu
- Manipulate simple shapes into parts you need
- DXF and DWG import

- Fix drawing tool
- CAD layer support
- Centerline image import
- Silhouette image input
- DXF export
- Advanced text true type font support

CAM package highlights:

- True shape multipart nesting
- Material database (cut chart support)
- Lead-in/Lead-out auto assignment for material thickness
- Customizable lead-in and lead-out
- Advanced small hole processing

- Over burn
  - Tabbing
  - Graphical editing of lead-in/lead-out
  - Curved text around any shape
- CNC package highlights:
- Jump to line
  - Allows for easy torch placement on large nests or parts
  - Dynamic torch height control
  - Process parameter manipulation
  - Full view of nests or part with real time tracking



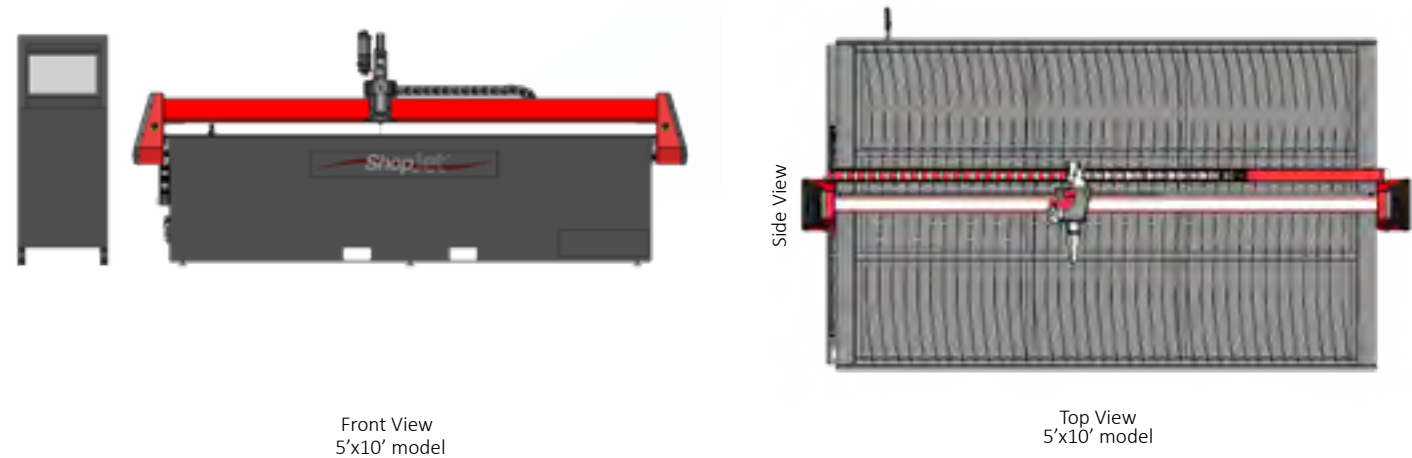
Abrasive Metering Assembly

- KMT Feedline Precision  
Simplicity and flexibility for performance value.
- Operational Ease  
Can be adjusted while cutting for maximum efficiency
- Cutting Flexibility  
Operator can quickly determine the amount of abrasive needed to improve cutting speed.
- Consistent Accuracy  
Hardened orifice components minimize changes in feed-rate over time due to orifice wear.
- Simplified Technology  
Gravity feed design close to the cutting head eliminates abrasive waste.
- Non-Metallic Design  
Lightweight, durable non-metallic construction for easy cleaning and corrosion resistance. Clear 360 degree viewing of abrasive for each monitoring.
- Wear Components  
Air cylinder rod shielded to minimize wear from abrasive. Fast and easy part replacement, clearing, no tools required for day-to-day maintenance.

**Pneumatic Valve, Cutting Head Assembly, IDE II, 60K.**  
**Includes IDE II Assembly with diamond orifice, focusing tube, .75 x 5.75 nozzle tube, .25 HP inlet adapter with short stop filter and N/C pneumatic valve.**

- New Diamond Mounting Design Improves Alignment and Cutting Performance
  - Newly Designed Nozzle Body Increases Performance
  - Less Clamping Torque Required
  - User-friendly Retro-fit for Current Users.
- Diamond Orifice Improves Alignment & Cutting Performance
- Up to 50% more productivity- no maintenance down time.
  - From 10 to 20 times greater mean time between failure
  - Superior edge quality

SPECIFICATIONS



| SHOPJET                              | SJ-44                                 | SJ-48                           | SJ-510                           |
|--------------------------------------|---------------------------------------|---------------------------------|----------------------------------|
| Effective Cutting Area               | 4 ft x 4 ft                           | 4 ft x 8 ft                     | 5 ft x 10 ft                     |
| Effective Cutting Width              | 48 in                                 | 96 in                           | 120 in                           |
| Effective Cutting Length             | 48 in                                 | 48 in                           | 60 in                            |
| Rapid Traverse Speed                 | 750 IPM                               | 750 IPM                         | 750 IPM                          |
| Machine Width                        | 79 in                                 | 127 in                          | 151 in                           |
| Machine Length<br>(CNC not included) | 71 in                                 | 71 in                           | 83 in                            |
| Table Dimensions                     | 78 in x 60 in x 56 in                 | 78 in x 108 in x 56 in          | 150 in x 72 in x 56 in           |
| Machine Weight                       | 2,300 lb-empty<br>5,094 lb-full       | 3,400 lb-empty<br>8,800 lb-full | 4,900 lb-empty<br>13,800 lb-full |
| Tool Capacity                        | 1                                     | 1                               | 1                                |
| Water Capacity                       | 335 gallons                           | 649 gallons                     | 1,068 gallons                    |
| Table Capactiy                       | 82 pounds per square feet             |                                 |                                  |
| Machine Voltage                      | 115/1/60 @ 15 AMP                     |                                 |                                  |
| CNC Controller                       | FlashCut CNC 21” Panel PC             |                                 |                                  |
| Drive System                         | Stepper                               |                                 |                                  |
| Rack and Pinion Drive System         |                                       |                                 |                                  |
| Stepper Motors                       | (3) 954 oz-in NEMA-34                 |                                 |                                  |
| Gear Reduction                       | (3) Precision Helical 10:1 gearboxes  |                                 |                                  |
| Linear Guidance                      | 25mm Profile Linear Rail, 30mm Gantry |                                 |                                  |
| Gear Engagement                      | Direct Drive Helical Rack and Pinion  |                                 |                                  |
| Gantry Carriage                      | Solid Steel Construction              |                                 |                                  |
| Traverse Speed                       | 750 IPM                               |                                 |                                  |
| Machine Repeatability                | 0.0015 in                             |                                 |                                  |
| Frame Construction                   | 7 Gauge Mild Steel                    |                                 |                                  |

Specifications are subject to change without notice

# SHOPJET WORKSHEET

Effective Cutting Width: Effective Cutting Length:

Material Types:

Material Thickness Range:

## Pump Selection

- Triline Direct Drive 55,000 psi 30hp
- Neoline Intensifier 55,000 psi 40hp

## Pump Voltage:

- 230/3/60
- 480/3/60

## Other Options

- Closed Loop
- Chiller (Neoline pump only)
- Overflow to Drain
- Settling Weir (not needed with Closed Loop)



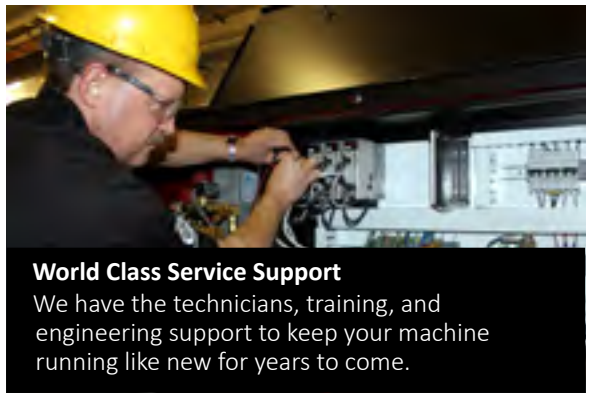
# COMPANY

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



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

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 the 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!

Toll-free: (800) 252-5232

Fax: (585) 457-3517

[www.koike.com](http://www.koike.com)



## MANUFACTURING PROCESSES



LOGISTICS



SAWING / MACHINING



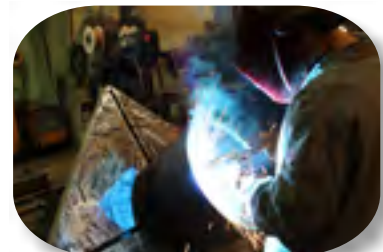
BURNING



ASSEMBLING



PAINTING



WELDING/FABRICATING



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