

CUTTING, POSITIONING & WELDING EQUIPMENT

KOIKE ARONSON RANSOME



**WE MAKE
METAL MORE PROFITABLE**



Koike Aronson offers manufacturers and metal workers dozens of ways to improve profitability. Every one of our high-quality welding positioners and thermal cutting products is designed to deliver many years of reliable performance and efficient production.

The Broadest Line The Koike Aronson lineup of cutting machines, positioners, welding equipment, portables, and gas apparatus is among the broadest in the world. Small shops and large manufacturers alike have profited from the long service life and safe operation of Koike products.

The Deepest Support Koike Aronson has always been the only company in the business whose machines are serviced when needed by the same experts who build them. That means every cutting machine and every positioner is supported by a master technician who knows it literally inside and out. By making our skilled craftsmen available to you, we minimize your downtime and protect your investment.



ABOUT US

Koike Aronson/Ransome is 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. We have a comprehensive facility that incorporates the latest technologies to engineer and manufacture heavy-duty equipment for maximum rigidity and long life. Our engineers, service technicians, and business unit representatives have well over 450 years of combined experience, and our shop personnel have on average 25 years of experience each.

Koike Aronson/Ransome has a sound balance sheet, showing a healthy cash position with access to multiple untouched lines of credit. This allows us to aggressively support our continuous improvement efforts and to invest in new and better products for our markets.

HISTORY

Koike Aronson/Ransome's history goes back to 1946 when Chuck Aronson founded the Aronson Machine Company, a welding positioner manufacturer at which he invented and patented positioners that are still used today. In 1969 Airco acquired Aronson Machine Company, then sold it 10 years later to BOC. In 1985, Koike Sanso Kogyo (est. 1918) of Tokyo, Japan, acquired the combined BOC and Aronson to add a world-class welding positioner line to their well-regarded cutting machine line. The result was a single company that supplied the market with the best welding positioners and thermal cutting products in the world.

In 2001 Koike Aronson purchased a large competitor based in Houston, TX called the Ransome Company. The acquisition allowed Koike Aronson to offer the most durable, safest, and largest variety of positioning equipment ever. Today we are known as Koike Aronson/Ransome, Inc., "The Most Complete Line in the Industry."



MANUFACTURING



Koike Aronson, Inc./Ransome is located in Arcade, New York in a facility that is regularly expanded to meet demand. The 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.

Since 2006 we have spent more than \$10 million to expand our production of welding positioners, water tables, and cutting machines. This investment and increase in capabilities proves our commitment to the metal cutting industry and our determination to manufacture the best products in the market. Our commitment is also shown by the ISO 9001 certification achieved by our entire NY facility. We have in place the means to continually improve our products, our service, and our support of customers.

With the knowledge, workers, skills, and capacity we possess you can be sure that we can meet your requirements. No project is too big for Koike Aronson/Ransome.

ENGINEERING

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.

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 not just quality products but also 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. Further assistance is just a phone call away Monday through Friday, 8am–5pm ET. Additional training and onsite repairs are available for machine issues that cannot be resolved over the telephone. Technical phone support is handled directly by a Koike Field Service Technician, not an anonymous call center, for the entire life of the machine.

We also maintain a 4,200 sq. ft. demo area to display our product line, provide demonstrations, and to train our service technicians. To see how Koike Aronson/Ransome can help make metal more profitable for you, schedule a visit to our facility today. All expenses are paid: airfare, transportation, room, and meals. (Contact the Koike Aronson/Ransome operator at 585-492-2400, ext. 0)



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CUTTING MACHINES



8-29



POSITIONERS



30-41



PORTABLE CUTTING/WELDING



42-50



GAS APPARATUS



CUTTING MACHINES

Koike Aronson offers the industry's most extensive lines of cutting machines in both Gantry and Cantilever styles.

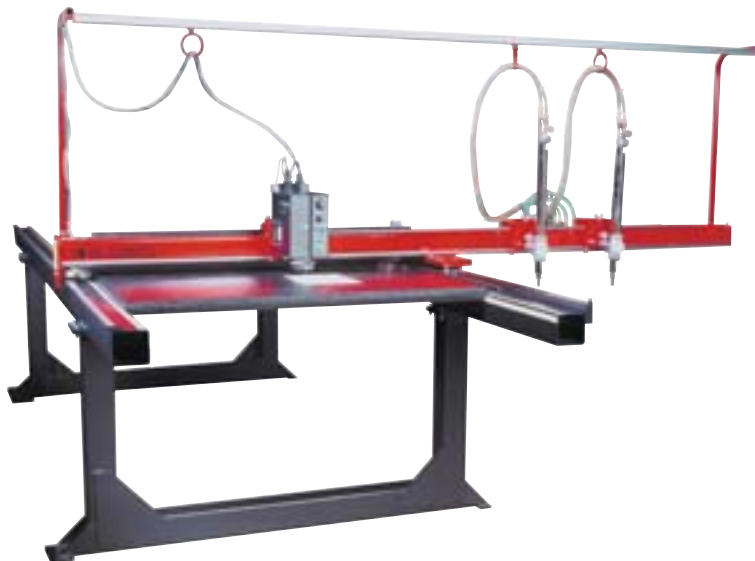
Choose from oxyfuel, plasma, laser, or water jet systems for optimum performance, then match the cutter with one of our CNC controls for added precision and versatility.

CUTTING MACHINES

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IK SERIES

Coordinate Drive Shape Cutting Systems



Highly reliable optical tracing flame cutting

- Optical line detection ensures accurate performance
- Simultaneous X and Y travel for smooth, precise cutting
- Kerf compensation, automatic lead-in, and automatic off-line stop
- Simplified set-up, centralized controls
- Seven models available in cutting widths of 2 ft. to 8 ft.

MINIGRAPH



Rugged, easy to assemble, aluminum extruded frame and electrical enclosure

- 4 ft. and 5 ft. of cut width
- 4, 8, and 10 ft. of cut length
- Dual side drive gantry
- Cutting/Rapid speed 0 - 800 IPM
- 1/2 in. maximum plate thickness
- CAD/CAM Software
- Auto torch height control with arc voltage feedback
- Industrial Computer & Monitor
- Easy to read step by step manuals
- Air plasma only

MONOGRAPH

MILLENNIUM SERIES

Thermal Cutting Machine



Makes advanced plasma and thermal cutting affordable to smaller shops

- Easy installation thanks to unitized design and screw-type leveling pads
- Deep downdraft table design with rear exhaust allows easy adaptation to any fume extraction system
 - Compact footprint and design afford full operator view of the cutting process
 - CNC control is easy to operate
- 1400 IPM rapid traverse speed
- $\pm .015$ in. position accuracy

PLATE-PRO

CNC Cutting Machine

1500

2000

2500



Affordable plasma CNC cutting for light to medium-duty jobs

- Simple to operate, easy to install, works in limited spaces
- 5, 6, and 8 ft. of cut width; 10, 12, 20, and 24 ft. of cut length
- 600 IPM rapid traverse speed
- Rigid beam with linear round way provides smooth and accurate motion
- Holds up to four tool stations
- $\pm .015$ in. position accuracy

CUTTING MACHINES

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PLATE-PRO EXTREME

Affordable, Versatile, Durable

- 6, 8, and 10 ft. of cut width
- 10 ft. to 100 ft. of cut length
- 800 IPM rapid traverse speed
- $\pm .010$ position accuracy
- Triple machined, 22 kg floor mounted crane-style rail system
- Replaceable wide profile linear roadway
- Dual side drive AC servo drives, motors and planetary gear boxes
- CNC control with integrated AC drives
- Maximum 2 plasma systems and 4 oxy-fuel stations



SUPERGRAPH-IV

High Productivity Precision Cutting Machine



Compact unitized design, productive and accurate cutting

- Easy to use
- Small footprint, easy to set up or move around
- Traverse speeds as high as 1,000 IPM
- 6 ft. to 8 ft. of cut width; 12 ft. to 25 ft. of cut length
- $\pm .005$ in. positioning accuracy
- High precision linear bearings both X & Y axis
- Dual side drive AC servo drives, motors, and planetary gear boxes
- Plasma only

MASTERGRAPH-II

MILLENNIUM SERIES

Integrated Thermal Cutting and Marking System

1500 2500 3100

Same features as the Mastergraph Millennium but with a limited tool load

- Effective cutting width 5 ft. (Model 1500) to 10ft. (Model 3100)
- 800 IPM rapid traverse speed, 400 IPM contour speed
- $\pm .007$ in. positioning accuracy
- Triple machined, 22 kg crane-style rail system
- AC brushless drive motors, planetary gear boxes
- Replaceable linear roundway on cross axis
- Maximum 6 tools



MASTERGRAPH

MILLENNIUM SERIES

Integrated Thermal Cutting and Marking System

1500 2500

3100 3700



Unmatched versatility and durability

- Effective cutting width 5 ft. (Model 1500) to 12 ft. (Model 3700)
- 800 IPM rapid traverse speed, 400 IPM contour speed
- $\pm .007$ in. positioning accuracy
- Triple machined, 22 kg crane-style rail system
- AC brushless drive motors, planetary gear boxes
- Replaceable linear roundway on cross axis
 - CNC control with touchscreen operator interface
 - Maximum 8 tools
 - Beveling option

CUTTING MACHINES

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VERSAGRAPH

MILLENNIUM SERIES

Integrated Thermal Cutting System

2500

3100

3700

5000

6300

7500



Unmatched speed, accuracy, versatility, and durability

- Heavy-duty dual cross beam construction
- Effective cutting width 8 ft. (Model 2500) to 24 ft. (Model 7500)
- 800 IPM rapid traverse speed, 400 IPM contour speed
- $\pm .005$ in. positioning accuracy
 - Triple machined, 22 kg crane-style rail system
 - AC brushless drive motors, planetary gear boxes
 - CNC control with touchscreen operator interface
 - 3D bevel link option
 - Drill option
 - Auto torch spacing option

LASERTEX SERIES

Widespan CO₂ Laser Cutting Machine



Processes upwards of 500 tons of steel plate per month

- Uses high-speed, common-line cutting to reduce cycle time by 20% to 30% and remnant scrap cost by 1% to 5%
- Operates unmanned for less expensive night and weekend runs
- Highly accurate, dross-free cutting, eliminates secondary cleaning
- Cutting capacity of .125 in. (3 mm) through 1 in. (25 mm)
- Revolutionary mounting of the CO₂ laser resonator on drive carriage
- Patented SigmaBox design for laser beam stability and lower maintenance costs
- HSQ (High-Speed and High-Quality) piercing
- Available in 4 kW and 6 kW

KOIKEJET

Ultra High Pressure Water Jet Cutting

66

610

612



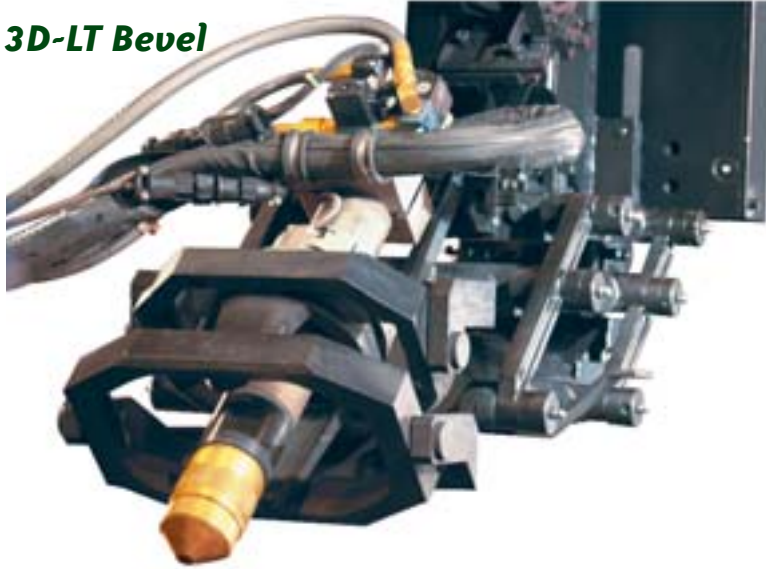
Ultra High Pressure water jet cutting

- 6 ft. of cut width; 6 ft., 10 ft., and 12 ft. of cut length
- Custom sizes available upon request
- Motorized Z-Axis Travel: Up to 8 in. (203 mm)
- Pre-loaded linear bearings and precision ground ball screws
- ± .003 in. position accuracy
- 500 IPM contouring and rapid positioning
- Initial height control
- Cutting head crash sensor
- Adjustable water level control
- BURNY XL PC-based CNC Controller
- IGEMS CAD/CAM Software package
- KMT Intensifier Pumps
- Multiple 5-Axis Bevel Heads

PLASMA BEVEL HEADS

3D Link

3D-LT Bevel



3D Link

- Makes clean bevel cuts with less slag
- Performs contour cutting capable of beveling angles to +45° and -40°
- Head rotates continually without the torch leads “winding up”
- Attaches to the Versagraph Millennium
- Uses a high-density plasma system rated for bevel cutting mild steel up to 1-1/4 in. (32 mm)

3D-LT Bevel

- Makes clean bevel cuts with less slag
- Performs contour cutting capable of beveling angles to +45° and -45°
- Head rotates continually without the torch leads “winding up”
- Attaches to the Versagraph and Mastergraph Millennium
- Uses a high density plasma system rated for bevel cutting mild steel up to 2 in.
- Can perform K, V, X and Y bevel types

CUTTING MACHINES

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CUTTING TABLES



Downdraft Table.

Modular design for future expansion

- 5 ft. sections with four 15 in. zones for optimal fume extraction
- 50% table coverage
- Removable slats, slat frame and slag pan
- 5, 6, 8, 10, 12 ft. wide cutting widths
- Expandable to 150 ft. cutting length
- Custom widths available
- Mechanically driven zones
- No pneumatic or electrical components

Water Table.

Pneumatic baffle design

- Manual water level control valves
- Optional electrically driven solenoid valves water level control valve
- Removable slats, slat frame and slag pan
- 5, 6, 8, 10, 12 ft. wide cutting widths
- Cutting lengths from 10 ft. to 50 ft.
- Custom widths and lengths available

POSITIONERS

No matter what size the piece, no matter what angle you need, Koike Aronson/Ransome has a positioner that will do the job efficiently. Our many models can handle standard parts or awkward objects in any shape from 100 lbs. to 4 million lbs.

POSITIONER SERIES

Universal Balance Positioners



Safe and quick manipulation of large, awkward pieces

- Allows the welder to position objects by fingertip pressure without raising a helmet or breaking an arc
- Pieces can be rotated 360° on the horizontal and vertical axis to maintain the most productive downhand welding position
- Full range of models in capacities of 100 lbs. to 4,000 lbs.

TILT/TURN

B1

LD-60R

B3

LD-150R

LD-300R



B Series

Safe, versatile positioning of 100 lb. to 300 lb. weldments

- Variable speed SCR solid state electronic drives maintain precise speed and control during welding
- 135° forward tilt through manual hand-wheel
- Standard Start/Stop foot switch
- Model B1 max load: 100 lbs. at 1 in. off table; Model B3 max load: 300 lbs. at 3 in. off table

LD-R Series

Safe, versatile positioning of 132 lb. to 660 lb. weldments

- Three load capacities; 132 lbs. (60 kg), 330 lbs. (150 kg), 660 lbs. (300 kg)
- Reliable Drive System
- 0 ± 135° Tilt Angle
- Self Locking Worm Gear
- Precision Welded Trunnions
- Preloaded Taper Roller Bearings

POSITIONERS

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P-TYPE

10P Gear Driven Positioner



Safe, versatile positioning of weldments up to 1,000 lbs.

- Variable speed AC solid state drives and motors provide precise rotation speed and control during welding
- Powered 135° forward tilt; tilt protractor
- Machined 30 in. diameter table with slots.
- Standard hand pendant control includes Start/Stop/Forward/Reverse 10-turn speed potentiometer as well as Rapid Traverse
- Manually adjustable from 32.5 in. to 50.5 in.
- Load capacity 1,000 lbs.

HD SERIES

Gear Driven Positioners

HD20



Cost-effective positioning in the 2000 lb. range

- 12,000 lb./in. rotation gearing ensures safety and stability
- Boxed section design will not distort support gearing when loaded
- Motors are mounted upright for easy access and sealed to protect from dust
- Available in fixed or variable speeds with manual or power rotation and tilt
- Includes a self-locking rotation pinion wormgear that makes it particularly suitable for large, eccentric loads
- 110 volt power requirement
- Fixed base not available

HD SERIES

Gear Driven Positioners

HD25

HD30

HD45

HD60

HD100



Rugged, reliable positioning within the 2,500-10,000 lb. range

- 135° powered forward tilt
- NEMA 12 electricals
- Upright motors are safely mounted within the chassis
- Straddle supported tilt-pinions prevent misalignment of rotational gearing
- 90,000 psi aluminum-bronze wormgear drive
- Easily transported throughout a facility
- Load capacities of 2,500 lbs. to 10,000 lbs.

HD

SERIES

Gear Driven Positioners

HD160

HD240

HD400

HD500

HD600

HD700



Dependable, accurate positioning of large pieces

- High performance, precision gear cases minimize backlash under heavy loads
- 135° powered forward tilt
- NEMA 12 electricals
- 90,000 psi aluminum-bronze wormgear drive
- Models HD400 through HD700 feature massive boxed beam-trunnions and spur-gear final drive of table rotation
- Transportable throughout a facility
- Load capacities of 16,000 lbs. to 70,000 lbs.

POSITIONERS

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G

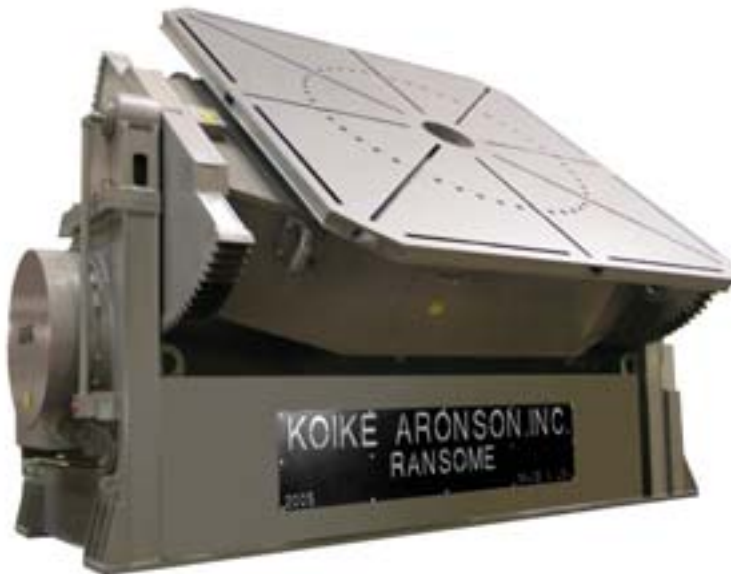
SERIES

Type 45-90 Positioners

G400

to

G2200



Our largest capacity positioner with power tilt

- Power tilt from 90° forward to 45° backward
- Fixed height bases, hollow spindles
- Fully enclosed bullgear, reinforced box-beam trunnion
- Wormgear drive box is weld-mounted to trunnion
- Worm driveshaft is protected by placement within trunnion journal
- Load capacities of 40,000 lbs. to 220,000 lbs.

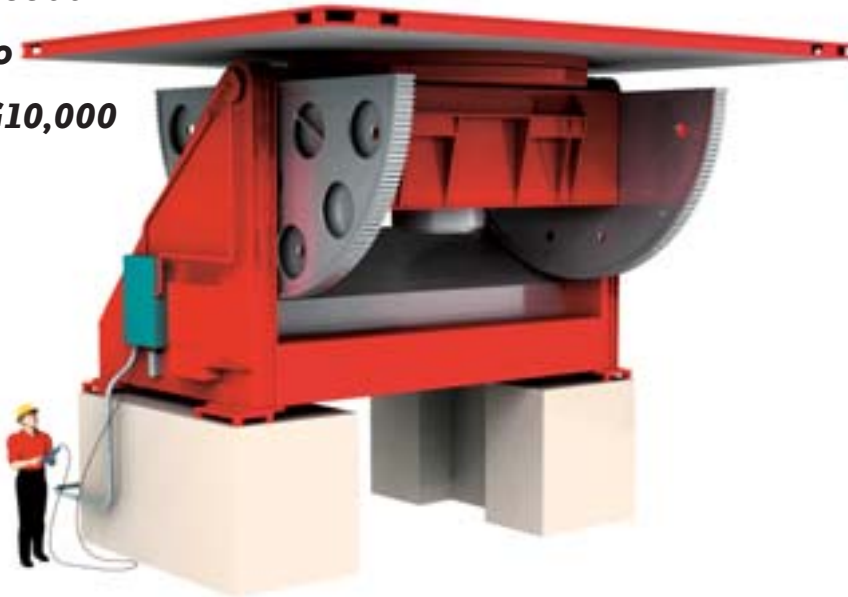
G SERIES

Type 45-90 Positioners

G3500

to

G10,000



Brings practicality to machining, welding and assembling massive structures

- Precision trunnion subassemblies
- Heavy-duty spindles
- Preloaded taper roller bearings with lifetime lubrication
- Reinforced boxed chassis
- Adjustable limit switch triggers
- High performance AC Inverter with Dynamic Braking
- Load capacities to 1,000,000 lbs.; higher capacities available on request

P SERIES

25P to 120P Positioner



Safe, versatile positioning with powered lift for up to 120,000 lbs.

- Variable speed AC inverter drives for 360° of continuous table rotation
- Powered 135° forward table tilt with tilt protractor and adjustable limit switch stops
- Manual height adjustment by pin locks on two leg design frame
- Rigid welded steel construction and boxed section design chassis
- Tables are machined and slotted for quick clamping of weldments

GE SERIES

Geared Elevation Positioners

GE25

GE30-6

GE30

GE45



Provides optimum welding height for smaller applications

- Powered, optimum tilt and rotation for secure positioning
- Allows work to be performed at the lowest possible level, which makes welding faster and safer
- Simultaneous tilt, rotation and elevation
- Multiple posts with rack teeth for rigidity and safety
- Can be positioned to keep the weld seam at the lowest height for the operator
- 130,000 psi yield alloy steel lift pinion integral with axleshaft
- Aluminum-bronze guide rollers and self-locking wormgear
- Self-aligning roller bearings mounted on journals
- Load capacities from 2,500 lbs. to 4,500 lbs.

POSITIONERS

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GE SERIES

Geared Elevation Positioners

GE60

GE90

GE120

GE180

GE250



Large capacity positioning in a compact unit

- Allows work to be performed at the lowest possible level, which makes welding faster and safer
- Simultaneous tilt, rotation and elevation
- Double tilt sectors and hollow spindles
- Four rackposts between double wall sideplates
- 8 in. torque tubes joining lift pinions at rackposts
- Lift pinions run in unison so any failure halts entire assembly
- Load capacities from 6,000 lbs. to 25,000 lbs.

GE SERIES

Geared Elevation Positioners

GE500

GE850

GE1200

GE3500

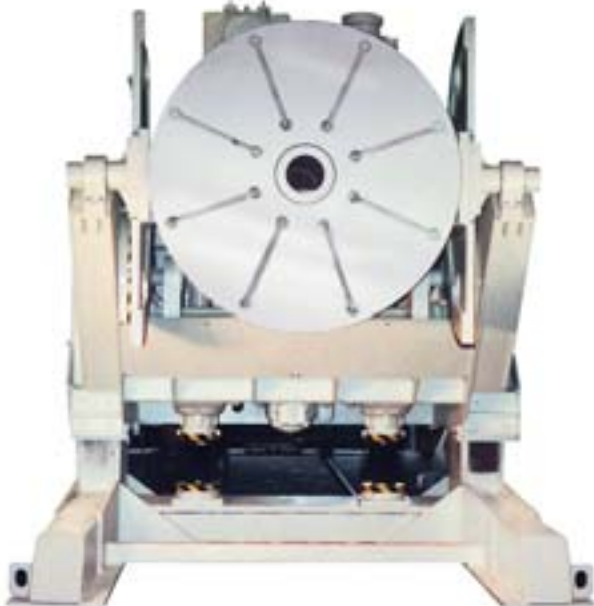


Easily positions your largest weldments

- Allows work to be performed at the lowest possible level, which makes welding faster and safer
- Simultaneous tilt, rotation and elevation
- Multiple posts with rack teeth for rigidity and safety
- Model 500 has four radial slots and edge slots; Model 850 and up have eight slots
- Lift pinions run in unison so any failure halts entire assembly
- Load capacities from 50,000 lbs. to 350,000 lbs.

PE SERIES

Power Elevating Positioner



Safe, versatile positioning with powered lift for up to 120,000 lbs.

- Variable speed AC inverter drives for 360° of continuous table rotation
- Powered 135° forward table tilt with tilt protractor and adjustable limit switch stops
- Powered elevation lift provided by (2) large diameter acme screws driven by a worm/wormgear arrangement provide consistent elevation with a 4 to 1 safety factor
- Dependable worm gear elevation for pieces up to 120,000 lbs.
- Precise guidance thanks to wide, large-diameter cam followers bearing on flat guideways
- Rigid welded steel construction and boxed section design chassis
- Tables are machined and slotted for quick clamping of weldments
- Load capacities of 2,500 lbs. to 120,000 lbs.

HT SERIES

Headstock-Tailstock Positioners



Allows full rotation through the horizontal axis, in the fashion of a lathe. Ideal for long structures

- Manipulates pieces into the most convenient working positions for faster, safer, high quality welding
- Table pilot holes
- Boxed section design chassis for strength; rigid welded steel construction
- Heavy-duty drive gearing delivers smooth rotation and minimal lost motion
- Available with fixed bases, manually adjustable bases, and gear-driven elevation
- Load capacities from 2,500 lbs. to 240,000 lbs.

POSITIONERS

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HTS SERIES

Patented "Geared Elevation" Headstock-Tailstock Positioners



The advantages of a headstock-tailstock positioner with the convenience of low loading

- Pieces can be loaded low then raised to optimum working heights for faster, safer, high quality welding
- AC variable speed drive motors available with optional ratings
- Lifetime lubrication and sealed drive units
- NEMA 12 electricals, ground blocks, preloaded tapered roller bearings
- Load capacities from 2,500 lbs. to 240,000 lbs.

PE SERIES

Power Elevating Head and Tailstocks



Dependable worm gear elevation for pieces up to 80,000 lbs.

- Large diameter acme screws driven by a worm/wormgear arrangement provide consistent elevation with a 4 to 1 safety factor
- Precise guidance thanks to wide, large-diameter cam followers bearing on flat guideways
- Digital AC drives provide synchronization during elevation cycle and absolute mechanical re-synchronization at full stroke
- Rigid welded steel construction and boxed section design chassis
- Tables are machined and slotted for quick clamping of weldments
- Load capacities of 5,000 lbs. to 80,000 lbs.

TILTER SERIES

180° Tilt Positioners



In some long weldment applications, a faster mount than on headstock-tailstock positioners

- 90° rotation from the horizontal position assures accessibility for downhand and flat welding while ends of mounted objects remain free
- Operates in a single range of motion, requires minimum floor space
- Brakemotor drive systems, NEMA 12 dust-tight electricals
- Four-slot fixed table design
- Load capacities up to 75,000 lbs.

FT SERIES Floor Turntables



Dependable, rugged positioners for flame cutting, assembly, x-ray inspection, and machining

- Reliable ground current assured by tapered roller bearings and our exclusive ground block system
- Close tolerance gearing maintains backlash to within .005 in./in. of radius
- Anti-friction ball and taper roller bearings, maintenance-free steel gearboxes
- AC Inverter variable speed rotation
- Dynamic braking, rapid traverse
- Load capacities from 1,000 lbs. to 120,000 lbs.

TR SERIES Portable Pipe Rolls



Lightweight rolls that can be easily carried and set up at the work site

- Rubber tired driver and idler rolls
- Compact, can be set up just about anywhere in the factory
- 3.5 in. to 40 in. diameter range
- Optional small diameter auxiliary wheel handles diameters from 1.5 in. to 3.5 in.
- Each driver and idler turning roll has a capacity of 3,000 lbs. One driver, two idler configuration has a capacity of 9,000 lbs.

TR SERIES

Turning Rolls

WRD 5-200



Effective positioning of long or cylindrical workpieces

- Exclusive Koike Aronson Overload Disks prevent even 200% loads from rupturing tires
- All-steel Timken Pillow Blocks have shock-load capacity many times the load rating
- Precision wheels of rubber or steel
- Tie-Rod Axles assure perfect backlash-free gear mesh
- AC Inverter drive with dynamic braking provides smooth, precise operation
- All-steel Gearcase Final Drive is fully enclosed and lifetime lubricated
- Load capacities from 30,000 lbs. to 200,000 lbs.; maximum turning to 300 tons

TURNING ROLLS

Conventional Power and Idler Rolls

A-EPPR



Rugged, reliable turning for a wide range of loads

- Rubber tired rollers absorb shock and protect seams during automatic welding (hardened steel rollers available)
- Roller spacing adjusts to a wide range of diameters
- Combination steel and bronze worm wheel resists shock from heavy loads
- Anti-friction bearings, infinitely smooth variable speed rotation
- Turning capacities from 2 tons and up

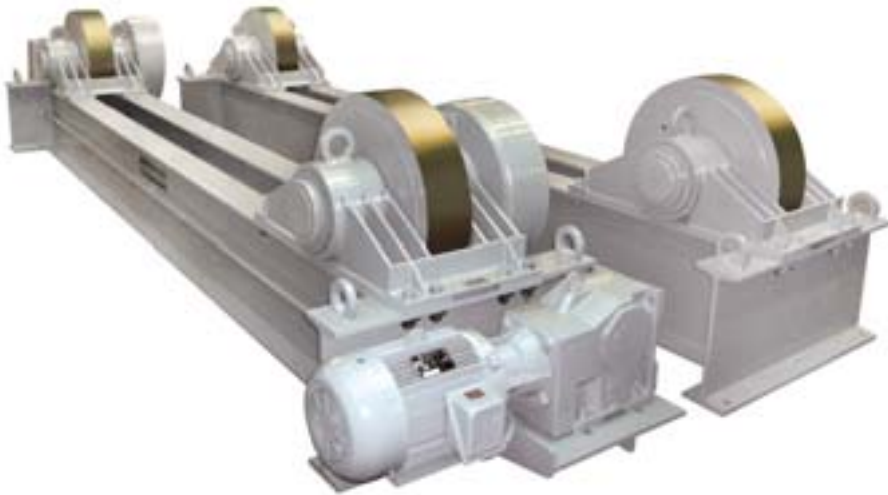
TR SERIES

Turning Rolls

300

to

1200



Effective positioning of long or cylindrical workpieces

- Steel wheels
- Tie-Rod Axles assure perfect backlash-free gear mesh
- All-steel Timken Pillow Blocks have shock-load capacity many times the load rating
- Electronic AC drives and dynamic braking provide smooth, precise operation
- Rapid traverse
- Load capacities from 300,000 lbs. to 600 tons; maximum turning to 1,200 tons

POSITIONERS

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TURNING ROLLS

Anti-Drift



Koike's Exclusive Eccentric Axle

- Minimal vessel movement during drift corrections
- Small correction forces required
- Fast response time to correct vessel drift
- Lower cost, due to design and common components
- Low maintenance design

Conventional forms of Anti-Drift Control

- Lateral Moving Base causes vessel centerline to be shifted left and right

Vertically Moving Wheels

- Causes vessel centerline to be shifted left, right, up and down

Koike's Patent Pending Eccentric Axle Design

- Maintains Vessel Centerline
- Lowers Vessel Centerline
- Closer to the floor
- Automatically compensates for vessel irregularities and roll misalignment
- Holds vessel axially in position on rolls within ± 0.04 in. (1 mm)

TURNING ROLLS

Rustler Self-aligning Rolls

Adjusts automatically to accommodate any circular piece keeping a constant centerline

- Four self-aligning wheels automatically move into ideal support position – no operator adjustment needed
- Adjusts automatically for load conditions
- Variable speed drive, self-locking gear reducers, self-aligning bearings
- Turning capacities from 15 tons and up
- Hand pendant controlled



TURNING ROLLS

Fit-up Roll

Fits up and tacks shell courses together for a uniform diameter vessel

- Capacity range from 20 tons to 100 tons
- Ideal for high-production tank shops
- Available different length roll sections couple and uncouple to allow full or partial drive down the line
- Provided in 10 ft. sections, can be connected to make sections up to 100 ft. long



TR SERIES WPR Pipe Rolls



Stationary pipe roll for smaller workpieces

- 3 in. to 24 in. diameter range
- Four rubber tires, two axles, taper lock hubs
- SCR DC drive with dynamic braking
- Various frame lengths available
- Load capacity of 5,000 lbs.

POSITIONERS

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TR SERIES WRU Unit Turning Rolls



Safely turns heavy cylindrical pieces without marring, wrinkling, or indenting

- Wheels can be positioned anywhere
- W12 x 4R wheels have taper-lock hubs which require no keyways on the axles
- Maximum diameter 6 ft. (Models 5, 10, and 20); 13 ft. (Model 30)
- Load capacities from 5,000 lbs. to 30,000 lbs.

TR SERIES

Tilting Turning Rolls



Power tilting for operations from horizontal to 45°

- Precise tilt determined from the side-mounted protractor
- Adjustable trigger can be set to stop movement at a precise tilt at any given angle
- Diameter ranges 3 in. to 72 in.
- Load capacities from 3,000 lbs. to 30,000 lbs.

TR SERIES

Trac-Tred® Turning Rolls



Precision rotation of thin walled vessels

- Safely turns thin walled or precious surfaced cylindrical pieces without slipping, wrinkling, or indenting
- Patented Trac-Tred® system allows for steady, precise rotation of vessels from 10 ft. standard, up to 16 ft. optional
- Load capacities from 6,000 lbs. to 30,000 lbs.

TURNING ROLLS

PTR Pipe and Tube Roll



PTR pipe and tube roll on a convenient adjustable base

- Capacity range of 1000 lbs. to 10,000 lbs
- Rubber-tired PTR idler roll accommodates diameters from 2 in. to 36 in.
- Stand allows 8 in. of vertical adjustment
- Roller bearings, constant center adjustment
- Can be used as an auxiliary support roll with positioners, headstocks, or powered rolls

POSITIONERS

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TR SERIES

Turbine Rotor Turning Rolls

60 tons

to

250 tons



Cost-effective controlled rotation of rotors

- More economical than vee-blocks, requires only cranes for mounting and unloading
- Easily rotates objects such as steam and gas turbines for sonic inspection and welding repair
- Phenolic laminated wheels in rigid chassis allow precise setup
- Welded steel gear cases and tapered roller bearing axles
- Load capacities from 60 tons to 250 tons; other capacities upon request

MANIPULATOR

Automatic Welding Head Manipulators



Precision and safety for smaller welding functions

- Allows operator to maintain a steady arc, resulting in highly accurate welds, higher productivity, and less deflection
- All inclusive unit is reliable and easy to operate with maintenance-free preloaded wheels and anti-friction bearings throughout
- Manual handcrank reach, lift, mast rotation, and a travel car
- Can be modified with a gear reducer and motor for powered reach
- Capable of supporting Sub-Arc equipment and TIG processes
- Load capacity of 150 lbs.; reach range 7.5 in. to 55.5 in.

MANIPULATOR

Automatic Welding Head Manipulators



Speeds welding in fabrication and maintenance operations

- Easy to operate, cost efficient
- Eliminates fatigue of hand operations
- Remote control for operator safety
- Precise, x-ray quality welds free from undercut and slag
- Eight different models available for a range of sizes and loads

LOCUST-I & II

Welding Head Manipulators



Ideal for welding jobs at ground level

- Allow operator to maintain a steady arc, resulting in highly accurate welds, higher productivity, and less deflection
- Reliable gear elevation: no chain, anti-fall, or screw lift devices to fail
- Manual sub-arc and forced flux feeder maximizes utilization
- NEMA 12 electricals include dust tight enclosures and push button pendants
- Floor-base or car-track configurations available
- Locust-I load capacities from 300 lbs. to 400 lbs., any size up to 8 ft. x 8 ft.; Locust-II capacities from 300 lbs. to 600 lbs., any size up to 12 ft. x 12 ft.

POSITIONERS

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SCARAB-I & II

Welding Head Manipulator



Gear elevated welding for load capacities up to 2,200 lbs.

- Allows operator to maintain a steady arc, resulting in highly accurate welds, higher productivity, and less deflection
- Reliable gear elevation: no chain, anti-fall, or screw lift devices to fail
- Variety of accessories for different applications including Kingpin-Base and Outrigger, Kingpin-Car and Track, Portable Kingpin-Base, etc.
- Scarab-I load capacities from 900 lbs. to 1,700 lbs., any size up to 14 ft. x 14 ft.; Scarab-II load capacities from 1,000 lbs. to 2,200 lbs., any size up to 20 ft. x 20 ft.

GIRTH WELDER

**AGW-I AGW-II
(Automatic
Girth Welder /
3:00 Welder)**



Delivers construction speeds up to 20 times faster than manual

- Self propelled unit for controlled quality
- Travel speeds from 4 IPM to 105 IPM based on procedures
- Plate sizes up to 10 ft. tall and up to 1-3/4 in. (44 mm) thick; tanks 30 ft. in diameter or larger
- Can use any combination of wire and flux based on procedure
- Can weld from one side or both sides of tank
- Can weld with single wire or tiny twin wire; sub arc or open arc process

GIRTH WELDER

AGW-I-LW Light Weight



Automatic system that speeds up construction of thin walled field-erected storage tanks

- Straddles the shell plates riding on adjustable flanged wheels at operator controlled speeds of 4 to 105 IPM (.10 – 2.67 M/min)
- Handles plates as thin as 3/16 in. and tank diameters down to 12 ft.
- Equipped with welding head, controls, flux support belts and recovery unit for 3 o'clock welding
- Standard Lincoln controls and welding head, straightener and 50 lbs. (22.7 kg) wire reel included
- Adjustable submerged arc flux belt mechanism ensures retention of the flux at the joint, and efficient recycling of flux
- Machine is 40% lighter than standard unit (just under 1000 lbs. complete)

VUP WELDING

VUP (Vertical Up) Welding System— NR-431 Process



Versatile welding that speeds production

- High deposition rates of 40 to 65 lbs. per hour
- Fast vertical speeds, 9 IPM on 3/8 in. (10 mm) plate; 6 IPM on 1 in. (25 mm) plate; 4 IPM on 4 in. (100 mm) plate
- X-Ray quality with impacts better than 20 ft.-lbs. at 0 ° F
- Weld joints of either square edge or single bevel
- Square butt reduces plate preparation time
- Operates with either two movable shoes or one moving shoe with a fixed backing bar (rear sliding shoe is standard)
- Self-shielding means no additional gas or flux is required
- Standard unit works on plates from 3/8 in. (10 mm) up to 2 in. (50 mm) thick and 10 ft. high

POSITIONERS

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VUP WELDING

VUP (Vertical Up) Welding System— MIG, FCAW Process



Productive VUP welding for MIG and FCAW

- High deposition rates, fast vertical speeds
- X-Ray quality with impacts better than 20 ft.-lbs. at 0°F
- Weld joints of either single bevel, double bevel, or butt
- Standard unit works on plates from 3/8 in. (10 mm) up to 2 in. (50 mm) thick and 10 ft. high
- Does not require special process wire

SEAM WELDER



Easy to operate, accurate welding of seams on Internal, External and Flat Plates

- Large diameter mandrel with backing bar supports the work piece. Water Cooling and Gas Purging is available if needed
- Mandrel is adjustable for different thicknesses of material and different welding processes
- Replaceable copper clamping fingers mounted in aluminum retainers conduct heat away from the weld and prevent arc blow caused by magnetization
- Isolated support bushing guards against machine magnetization
- Top beam assembly supports the rack and pinion carriage assembly for the welding process
- Accommodates most all welding processes including sub arc welding, and gas shield welding, TIG and Plasma
- Utilities connections include shop air with pressure regulator, inert gas fitting, and cooling water
- Weld lengths from 24 in. and up, with plate thicknesses up to 3/8 in. (10 mm) maximum

ROBOTIC POSITIONERS



Robotic Double Ended Tilt/Rotate



Robotic Double Ended Skyhook

SPECIAL APPLICATIONS

**WUSPT
Special design Positioner**



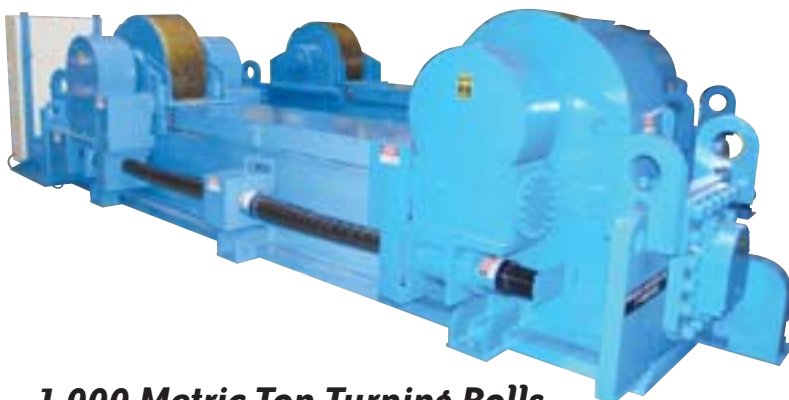
Dual Head Pantograph Gantry



Side Beam Overlay station



Steel Wheel Rolls on rail



1,000 Metric Ton Turning Rolls

PORTABLE CUTTING/ WELDING

The Koike Aronson portable equipment line includes a wide array of cutting and welding machines for many different applications. Each delivers the same type of high quality results and manufacturing savings as our larger machines. Koike Aronson torches, tips, couplings, and regulators also offer the same value as our bigger equipment by delivering long service life and safe operation.

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PORTABLE CUTTING MACHINES

HANDY AUTO

Automatic Gas Cutting Torch

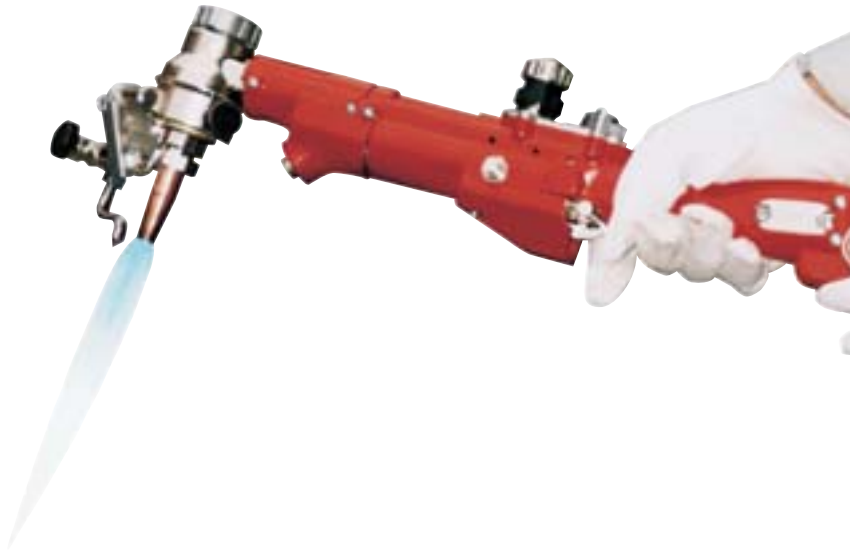


For virtually unlimited cutting possibilities

- Simple adjustment of the torch allows straight line, circle, and shape cutting
- Standard and optional drive attachments enhance versatility and efficiency
- Drive switch and cutting oxygen valve are linked for simultaneous operation of cutting oxygen and drive power
- Light weight 5.9 lbs. (2.7 kg), as easy to use as a manual hand torch
- Cutting thickness 1/5 in. - 2 in. (5 - 50 mm)

HANDY AUTO PLUS

Semi-automatic Hand Torch with Auto Ignition



Easy-to-operate hand torch with built-in auto ignition

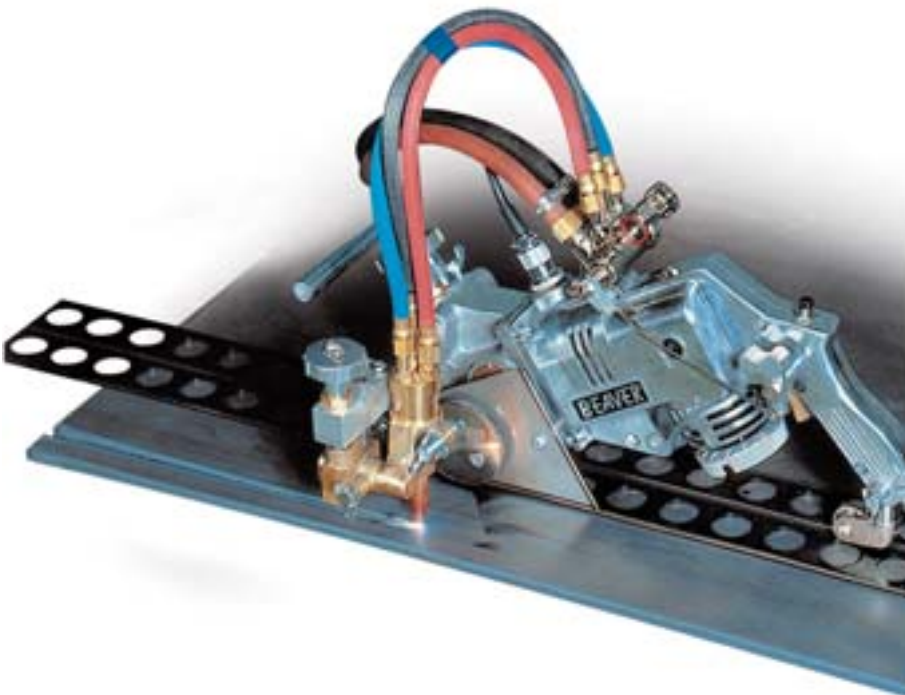
- Same features of Handy Auto Standard "PLUS"
- Simple push button ignition and extinguishing
- Set the preheat flame just once — no readjustment needed
- Use with LP, MAPP,[®] and Acetylene
- Weight: 7.7 lbs. (3.5 kg)
- Cutting thickness 1/5 in. to 1-1/5 in. (5 - 30 mm)

PORTABLE CUTTING MACHINES

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BEAVER

Compact Gas Cutting Machine



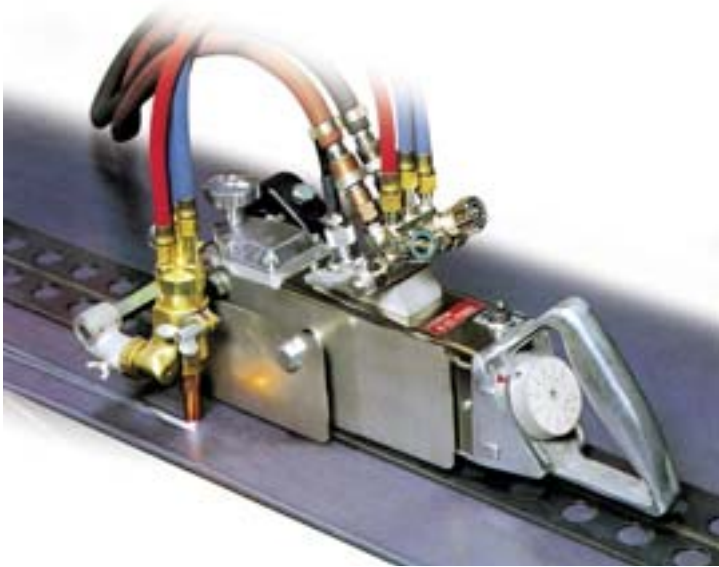
Portable gas cutting machine for straight, circle, and curved cutting

- Moveable guide wheel provides running stability in straight line cutting and tracing accuracy in curved line cutting
- Pistol grip and close-in switches for easy operation
- Optional auto-stop device
- Optional circle cutting attachment
- Extendable 72 in. (1800 mm) track sections
- Cutting thickness: 1/8 in. to 6 in. (3 - 150 mm)
- Weight: 19.8 lbs. (9 kg)

PUMA

Portable Automatic Gas Cutting Machine

IK-92



For automatic straight-line cutting, circle, and hand-guided cutting with one hand

- Stable design for high-quality straight-line cutting
- Easy one-hand operation for accurate manually guided cutting
- Reliable drive system provides accurate machine travel
- Secure and easily adjustable torch holder
- Forward and reverse cutting
- Extendable 72 in. (1800 mm) track sections
- Cutting thickness: 1/4 in. - 4 in. (5 - 100 mm)
- Weight: 18 lbs. (8 kg)

HAWK

Portable Automatic Gas Cutting Machine

IK-93



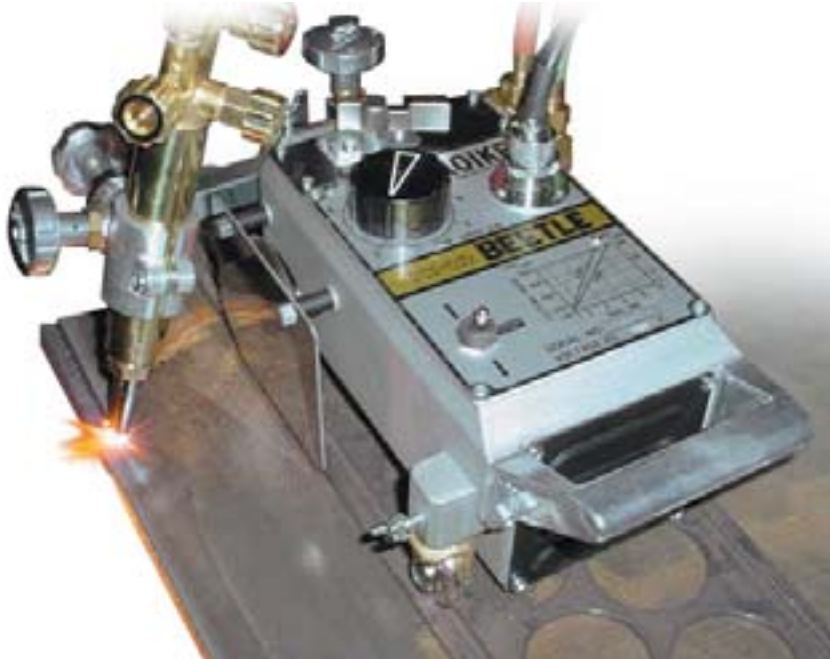
Ideal for straight-line, hand-guided cutting

- Simple operation thanks to easy-to-reach trigger, coupled operation, and speed adjustment dial
- One-handed gas manipulation, clutch operation, and speed adjustment
- Forward and reverse cutting, use on or off track
- Cuts circles from 2 in. - 22 in. (50 - 550 mm) diameters
- Extendable 72 in. (1800 mm) track sections
- Cutting thickness: 1/4 in. - 4 in. (5 - 100 mm)
- Weight: 16 lbs. (7.2 kg)

BEETLE

Portable Automatic Gas Cutting Machine

IK-12



More portable version of the IK-12 MAX3 cutting machine

- Easy to adjust forward/off/reverse switch, clutch lever, and speed adjustment knob
- Simple, accurate cutting of straight lines, circles, and bevels
- Single cone design in the drive ensures stable travel
- One or two torch capacity
- Optional circle cut from 1-1/2 in. - 96 in. (38 - 2450 mm) diameter adjustable radius bar. Extendable with 72 in. (1800 mm) track sections.
- Weighs only 20.9 lbs. (9.5 kg)
- Cutting thickness: 1/4 in. - 2 in. (5 - 50 mm)
- CSA Approved model available

PORTABLE CUTTING MACHINES

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IK-12MAX3

Portable Welding/Plasma/Oxy-fuel Cutting Machine

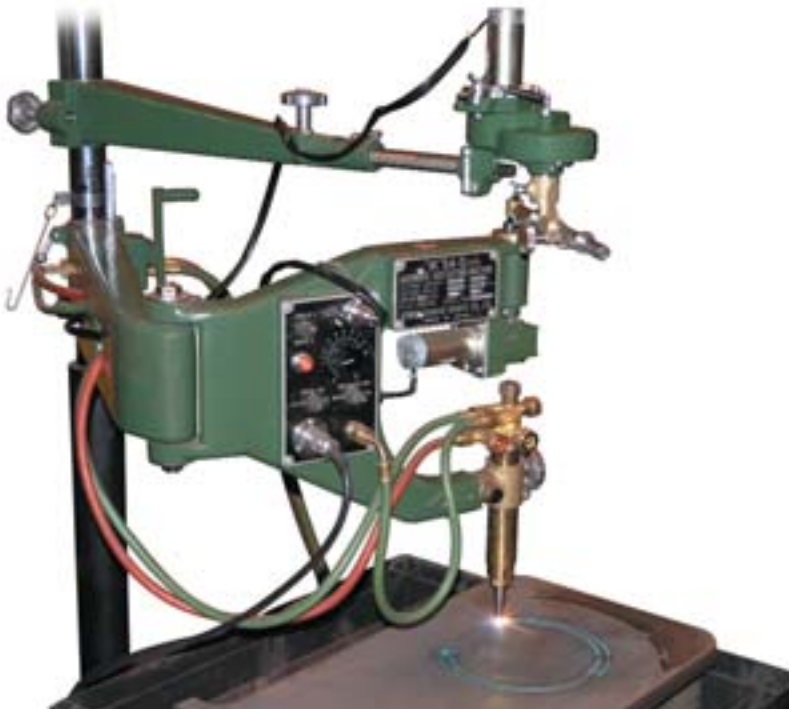


Versatile gas/plasma cutter and welding carriage

- Designed for multiple purpose use
- Extremely smooth travel thanks to Koike's exclusive double cone stepless speed control system
- Cuts circles from 1-1/2 in. - 104 in. (40 - 2650 mm)
- Extendable 72 in. (1800 mm) track sections
- Available circle track and other accessories for maximum flexibility
- 10 optional cutting torch sets precisely perform I to V cutting, as well as K, X, and Y
- Cutting capacity up to 24 in. (600 mm) with Epoch 600 Torch
- Weight with (S-100 torch Set): 25 lbs. (11.5 kg)

IK-54D

Portable Shape Cutting Machine



Economically cuts virtually any shape

- Compact, simple to operate, easy to transport
- Ideal for high production and repetitive gas cutting work
- Powerful magnet roller smoothly and accurately guides the cutting torch around the steel template
- Automatic drive motion with cutting oxygen valve
- Cuts steel plate up to 4 in. (100 mm) thick
- PWM control for smooth, constant drive speed
- Optional ball transfer base
- Cutting range up to 67 in. (1700 mm) with optional attachment
- Weight: 72.5 lbs. (33 kg)

CIRCLE CUTTER

Circle Cutting Attachment for the IK-54D



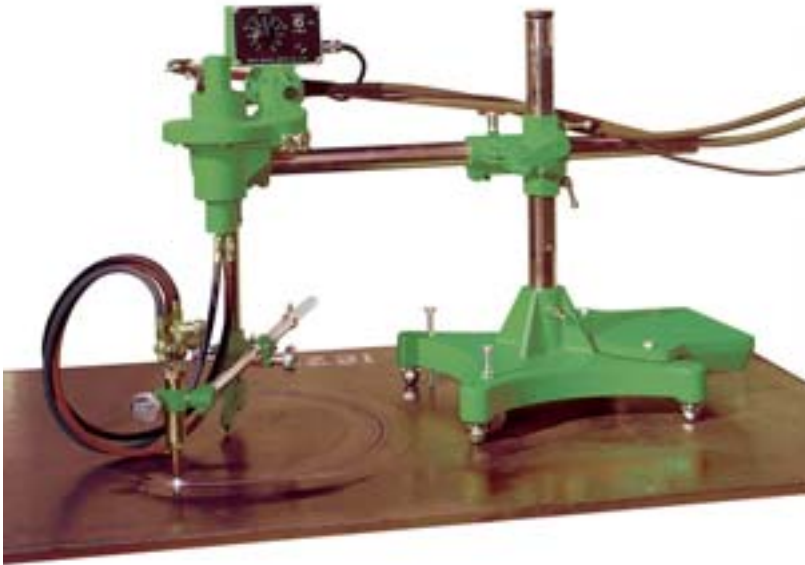
Allows the IK-54D to cut circles without a template

- Enables the cutting of circles 2 in. - 16 in. (60 - 400 mm) in diameter without a template
- Easy to attach, easy to set diameter
- PWM control for smooth, constant drive speed

IK-70

SERIES

Portable Single Purpose Circle Cutter



Automatically flame cuts a wide range of circle sizes

- Cuts cleanly and with exceptional accuracy, delivering the same quality and output as much more expensive machines
- Straight and bevel cuts circles and holes
- Centralized controls, simple positioning and speed adjustments, three-position clutch
- Lightweight and portable
- Circle cutting diameters of 1-3/16 in. - 40 in. (30 - 1000 mm) diameters
- PWM control for smooth, constant drive speed
- Cutting Thickness: 1/4 in. - 2 in. (5 - 50 mm)
- Optional ball transfer base
- Weight with base: 121 lbs. (55 kg)

PORTABLE CUTTING MACHINES

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IK-82

SERIES

Portable Automatic Shape Gas Cutting Machine

IK-82 S200

IK-82 M300

IK-82 L900



Advanced magnetic tracing type gas cutting

- Easy handling and high-precision cutting thanks to a tracer head that has a cutting tip at the center of the magnetic roller
- Three types of arms: S and M types use lightweight, stainless steel pipe for 8 in. diameter (S) and 12 in. diameter (M) circles. L type uses an adjustable rail pipe on a rail carriage for 36 in. reach.
- Easy tip cleaning and replacement
- Lightweight, easily portable
- LPG and Acetylene Models
- Cutting thickness: 1/4 in. - 2 in. (5 - 50 mm)
- Weight S-200: 16.5 lbs. (7.5 kg)
M-300: 20.9 lbs. (9.5 kg)
L-900: 12 lbs. (5.5 kg)

CIR-CUT I/II

SERIES

Automatic Portable Circle Gas Cutting Machine

I-200

II-200



Accurate circle cutting that goes anywhere

- Lightweight, compact, and easy to carry
- Moving center makes positioning easy, eliminates melting loss of the center on extremely small holes
- Cuts circles from 1 - 9/16 in. – 8 in. (40 - 200 mm) diameters
- Straight and bevel cut circles and holes; horizontal and vertical cutting (vertical cutting only with CIR-CUT II)
- CIR-CUT I is a permanent magnet type and CIR-CUT II is an electromagnet type
- PWM control for smooth, constant drive speed
- Weight: 25 lbs. (11.3 kg)

PICLE-1-II

Portable Gas Pipe Cutting Machine



Quick, manually operated portable pipe cutting

- Cuts pipe from 4 in. - 24 in. (114 - 600 mm) diameter with no electricity and no other attachments required
- Unique chain drive system adjusts quickly to different diameters
- Square and bevel cut
- Very low maintenance
- Versatile enough for field work
- Weight: 18.7 lbs. (8.5 kg)

AUTO PICKLE-S

Remote Controlled Motorized Gas Pipe Cutting Machine



Easy to use, portable cutter for larger pipes

- Provides high cutting accuracy on large pipes (no guide rail needed below 24 in. (600 mm) diameter)
- Cuts pipe from 6 in. - 96 in. (150 - 2400 mm) diameter, optional guide band for pipe over 6 in. - 96 in. (150 - 2400 mm)
- Unique chain drive system adjusts quickly to different diameters
- Square and bevel cut, horizontal and vertical (vertical use with optional guide band)
- Remote operation for operator comfort
- Very low maintenance
- PWM control for smooth, constant drive speed
- Weight: 33 lbs. (15 kg)

PORTABLE CUTTING MACHINES

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AUTO PICKLE-P

S TYPE

Remote Controlled Motorized Plasma Pipe Cutting Machine

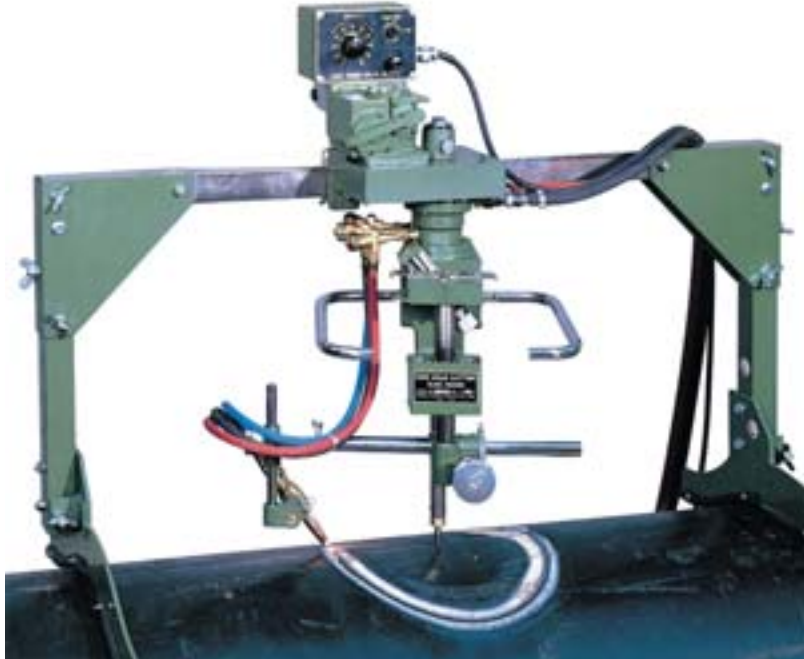


Easy to use, portable cutter for larger pipes

- Fixed-rail tip guide provides high cutting accuracy on large pipes (no guide rail needed below 24 in. (600 mm) diameter)
- Cuts pipe from 6 in. - 96 in. (150 - 2400 mm) diameter, optional guide band for pipe over 24 in. (600 mm)
- Unique chain drive system adjusts quickly to different diameters
- Square and bevel cut, horizontal and vertical (vertical use with optional guide band)
- Remote operation for operator comfort
- Very low maintenance
- PWM control for smooth, constant drive speed
- Travel speed 20 - 120 IPM (500 - 3000 mm/min), 1-3/8 in. (35 mm) torch holder with 32 pitch pinion
- Weight: 33 lbs. (15 kg)

KHC-6000

Portable Automatic Pipe Hole Gas Cutting Machine



Ideal for high precision cutting of T-joint circles

- Cuts from inside or outside vessels
- Rotating gas manifold keeps hoses from knotting up
- Automatic torch stand-off maintains tip to work distance, ensuring accurate cuts
- Lightweight, compact design
- Also cuts circles and bevel in flat plate
- PWM control for smooth, constant drive speed
- Cutting diameter: 3-1/8 in. - 23 in. (80 - 600 mm)
- Weight: 57.2 lbs. (26 kg)

MINI-MANTIS II

Portable H-shape Steel Gas Cutting Machine

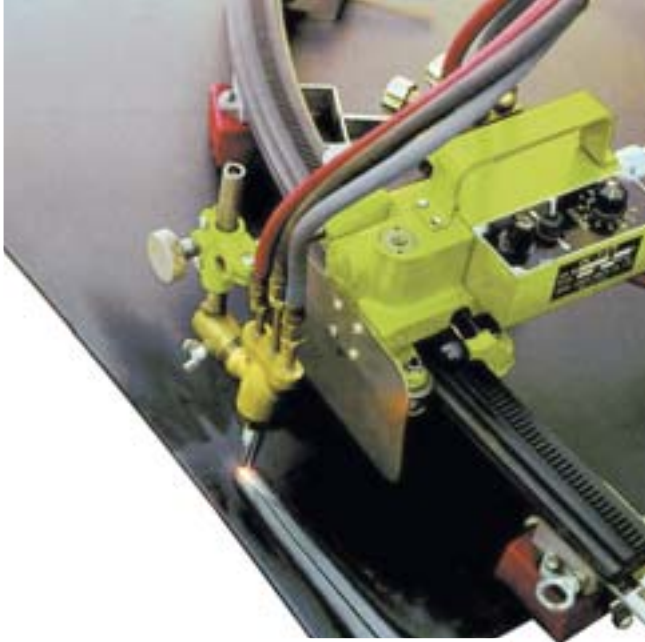


For easier, more accurate and cleaner beam cutting

- Rapid, precise cutting of H-shape web and flange
- Fast set-up thanks to combination rail and main unit and single-lever rail clamping
- Cuts web up to 60 in. (1525 mm) and flange up to 31 in. (785 mm) (with various options)
- Short and long torch models
- PWM control for smooth, constant drive speed
- Automatic pilot flame saves time and gas between cuts
- 4-way jog control automates vertical and horizontal travel

IK-72T

Portable Automatic All-position Gas Cutting Machine



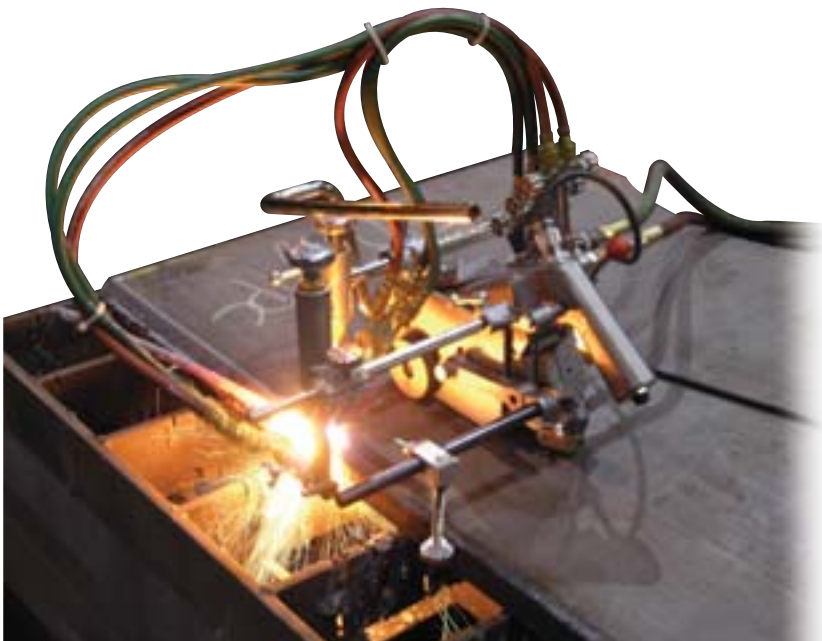
Versatile cutting of channel, curved plate, angled steel members, and more

- 1, 2, and 3 dimensional cutting
- Square and bevel cut; horizontal and vertical
- Lightweight (about 13 lbs. (5.8 kg)), easy to set up, easy to move
- Smooth, stable travel on steel-reinforced rubber guide rails that can be curved through two or three planes
- 3D rail cuts to 60 in. (1525 mm) radius, 2D rail cuts to 98 in. (2490 mm) radius; cuts steel up to 2 in. (50 mm) thickness
- Weight without rail: 8.8 lbs. (4 kg)

PORTABLE CUTTING MACHINES

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EDGE CUT



Lightweight, compact, and trackless gas beveling machine

- Trackless Beveling; bevels plate edge top and bottom, up to 45° without the need for track
- Pre-Set Flame with quick shut off
- Specialized Torch Set is designed to allow accurate bevels and quick set up
- Pistol Shape Grip provides operator ability to control forward/reverse, clutch, and speed adjustments with just one hand
- Multi Purpose Cutting

WEL-HANDY MULTI **STANDARD**

Multi-purpose Automatic Welding Carriage

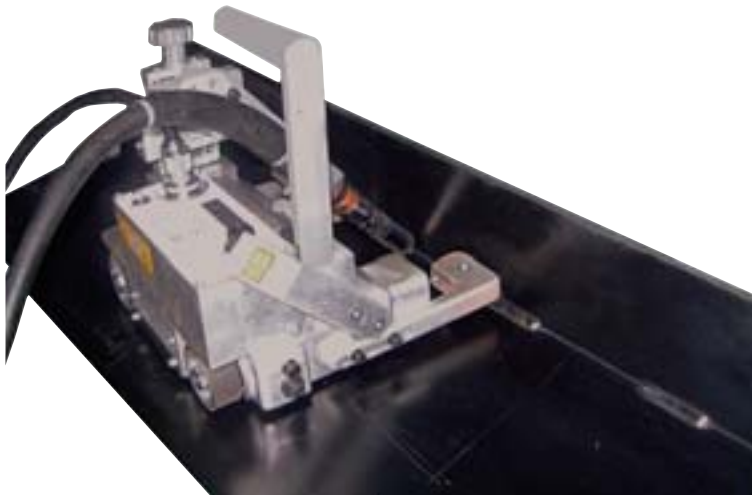


Lightweight, compact, and durable with outstanding pulling power

- Performs fillet, butt, and lap welds, horizontal and vertical without the use of a track
- Pulling capacity of 66 lbs. (30 kg)
- Solid aluminum body
- Limit switch on each end of machine trigger stop of welding
- Optional Remote controlled weaver (oscillator) available
- Weight: 15 lbs. (7 kg)

WEL-HANDY MULTI **STITCH**

Automatic Stitch Welding Carriage



Easily performs numerous stitch weld functions

- Same basic features as Wel-Handy Multi Standard
- Equipped with stitch weld functions such as setting of welding length, rapid travel distance, crater processing conditions, etc.
- Digital input and storage by distance not time to ensure consistent welds
- Puddle and crater fill parameter options
- Digital display shows actual operation and welding speed
- Optional remote controlled weaver (oscillator) available

WEL-HANDY MULTI

Twin Torch



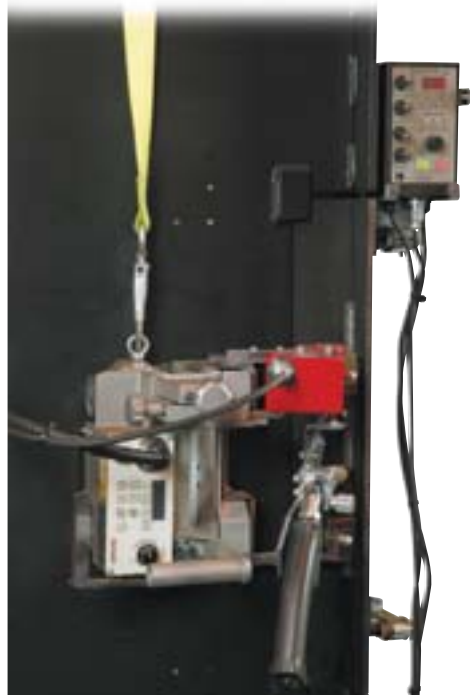
The Twin Torch option features dual torch holders for welding both sides of a vertical plate (rib or stiffener). Twin Torch Option is used with the Wel-Handy Multi Standard or Stitch models. Easy to set up with two welding guns, the torch slide are designed to allow optimum torch positioning.

PORTABLE WELDING MACHINES

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WU-1 WEAVER

Option for Wel-Handy Multi Standard or Stitch



Weaves and welds

- Unit can be used stand alone or with Wel-Handy Multi Carriages
- Weave up to 1 in. (25 mm) plus welds
- Adjust mid point of weld on the fly with just a touch of a button
- Digital display and controls with an analog feel
- Adjust all parameters before welding or on the fly
- Saves parameter program in memory

GAS APPARATUS

The Koike Aronson gas apparatus line

includes a wide array of cutting and welding products for many different applications. Each delivers the same type of high quality results and manufacturing savings as our larger machines. Koike Aronson torches, tips, couplings, and regulators also offer the same value as our bigger equipment by delivering long service life and safe operation.

MK-150

Hand Cutting Torch



Compact, easy-to-use in any situation

- Well balanced
- Three seat tip-mixing system greatly reduces the risk of flashback and backfire
- 6 in. (150 mm) thickness cutting capacity
- Produces high-quality cuts using all Koike 100 Series tips
- Locking cutting oxygen lever with ease-on cutting valve

MK-250

Hand Cutting Torch



Universal-type torch with tip mixing method

- Well-balanced, rugged design reduces flashback
- Tip mixing method reduces risk of damage if flashback occurs
- Produces high-quality cuts using all Koike 100 Series tips
- Locking cutting oxygen lever with ease-on cutting valve
- Three models: 75° angle head, 90° angle head, and 180° angle head
- 10 in. (250 mm) thickness cutting capacity



SILVERCUT 250

Heavy-duty Hand Cutting Torch



Rugged, well-balanced design that's easy to handle

- Three land tip-mixing system greatly reduces the risk of flashback
- Chrome plating provides corrosion resistance, reflects heat away from torch and reduces spatter adhesion
- Triangle tube design for greater strength
- Produces high-quality cuts using all Koike 100 Series tips
- 10 in. (250 mm) thickness cutting capacity
- Shown with optional Safety-Z couplers

MK

LONG HAND TORCHES

Hand Scraping Torch

MK-36"

MK-48"



Easy to use and versatile

- MK-36" available with 75° and 90° head
- MK-48" available with 75° head
- Underhand style cutting oxygen lever
- Die forged head
- Easy grip valves
- Internal tip nut protects threads
- Use all Koike 100 series tips
- Cuts up to 8 in. (200 mm)
- Shown with optional Super Sentinel Coupler/Flashback Arrestors

EPOCH 300/600

Post-mixing Torch/Tip Combination

300

600



The preferred design for safe, high quality, heavy-duty cutting

- Post-mixing tip eliminates flashback
- Runs cool during cutting to deliver longer service life
- Convenient stand-off height of 2 in. (50 mm)
- Produces minimal or no slag, squared top edges
- Fuel gas is shielded inside and outside by oxygen for high efficiency
- Cuts up to 12 in. (300 mm) with Epoch 300
- Cuts up to 24 in. (600 mm) with Epoch 600

L MACHINE TORCHES

300L

500L



Heavy duty, high quality cutting machine torches

- Tip Mixing System has a three land tip mixing system that assures greater safety and reduces the risk of flashback and backfire.
- Cutting Tips Save Gas since each tip is designed for each fuel gas BTU, thereby insuring proper plate preheating
- Faster Cutting- our high speed 106D7 divergent tips increase cutting speed by 20-28% over standard tips
- Safer Operation- Koike's tips have been designed to reduce backfires to keep the operator and the torch safe

G A S A P P A R A T U S

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TORCH BEVEL HEAD

ATTACHMENT



The bevel attachment for mounting in the tip area of long torches currently in use, enables not only the top surface beveling but also any other bevel cutting operations including the top and bottom surface serpin cuts.

TWIN TIP HOLDER



The **Twin Tip Holder cutting adapter** for all Koike 100 Series torches allows converting a single oxy fuel cutting torch into dual cutting torches.

The Twin Tip Holder can be used to cut narrow width flat bar with a single torch, high accuracy is possible by reducing thermal distortions, and it is a common practice to employ multiple torches for such a process.

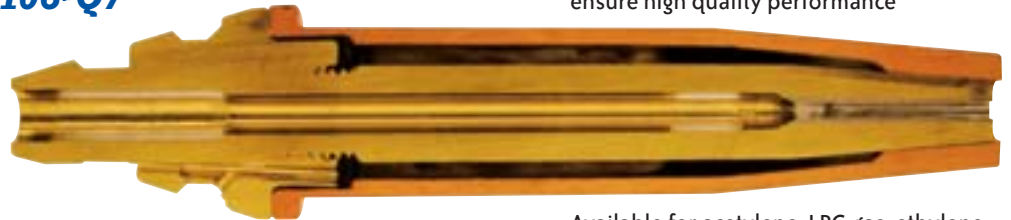
CUTTING TIPS

Gas Cutting Tips

102	102HC	102D7
103	103D7	
106	106D7	106HC
106M	106M7	106-Q7
107	107D7	
402ST		
406NT		
2VKP7		
OKP7		

Superior design and manufacturing for more accurate, economical, and safer cutting

- An even cutting surface and no slag under various conditions
- Exclusive design helps prevent damaging flashbacks and backfires into the torch
- All tips are inspected and tested to ensure high quality performance



- Available for acetylene, LPG gas, ethylene, and natural gas for Koike equipment and other manufacturers' equipment
- High Speed Divergent D7 series increase cutting speeds up to 28% while saving gas, stainless steel liner makes tips last up to 5x longer

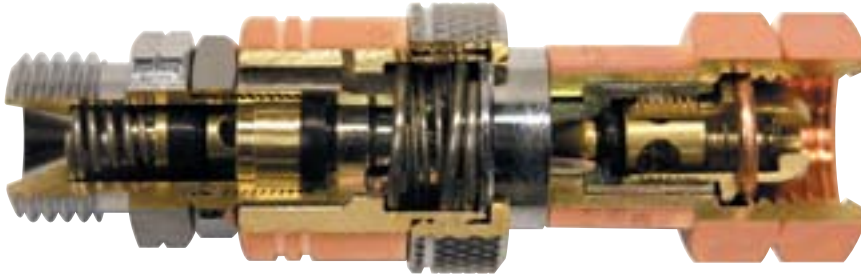
SENTINEL SERIES

Safety-Z Coupling Set

WZA – Hose to Hose

WZG – Regulator to Hose

WZO – Torch to Hose



Easy click-in, click-out; prevents reverse flow

- Reverse-flow prevention valve keeps gases from mixing, greatly reducing the chance of explosion
- Cuts off flashback pressure and stops gas mixing in the event of a flashback caused by the welding/cutting machine
- Spring-load locking starts the gas flow immediately upon connection; single-action release
- UL Listed and complies with OSHA code 1915.55 (F) (5)
- Unique reverse disconnect feature “Will not come apart with a straight pull”

SENTINEL SERIES

Super Sentinel Coupling

ZOP-1A ZOP-2A

ZOSP-1A ZOSP-2A



Direct coupling, dry-type flashback arrestor for welding/cutting units

- Combines convenient click-in, click-out Sentinel coupling with a built-in dry-type flashback arrestor
- Miniature arrestor connects directly with the welding/cutting unit and performs as well as larger arrestors
- UL Listed

SILVER ARRESTOR



Silver Arrestor Z Set shown on Custom 101 gas regulator

Flashback Arrestor for Gas Regulators

- Flashback Arrestor Filter uses sintered metal to cool down below ignition temperature
- Check Valve prevents reverse gas flow
- Thermal Cut-Off activates at 203°F (95°C)
- Gas Hose Coupler allows quick connecting a disconnecting hoses
- Tight Sealing unique design and material prevent leaks and are tested for 30,000 cycles by UL

GLOBAL SERIES

Sentinel Inert Coupling Series

LS-3SF **LS-3SM**

LSP-3SFM **LSP-3SMF**

OP-3SF **OP-3SM**



Quick releasing reverse-flow prevention valve

- Makes set up and removal of welding equipment on the job quick and simple
- Gas supply shut-off mechanism easily activated by removing a plug from the socket
- Safety lock mechanism
- Two seal packings between the plug and socket ensure a high degree of air tightness
- Sets available for flow meter outlet-to-hose and for hose-to-welding unit
- UL Listed

SNAP VALVE

One-touch On/Off Gas Valve



Keeps gas supply pressure constant after a single setting

- Gas is turned on at the pre-set pressure by moving a simple toggle switch—no more adjusting each time cutting is started
- Prevents wasteful gas discharge
- Gas is controlled by the unit's body valve, then by the on-off Snap Valve
- Optional flame adjustment valve
- Connections available for use with a variety of machines

G A S A P P A R A T U S

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ACCUFLOW

MIX-30

CWH-30D



Quick releasing reverse-flow prevention valve

- MIX-30 for Argon/CO₂
- CWH-30D heated type for CO₂
- Safety lock mechanism
- Exclusive piston design eliminates pressure variation, ensuring better accuracy and durability
- More accurate than a conventional ball/float system, saves time and gas
- Locks at each setting to prevent accidental adjustment
- No worries about flow tube breakage

ACCUFLOW

Flow Selector System Gas Flow Regulator

ARGON-16/30



Adjusts the flow rate of gas with just one touch of the dial

- Argon gas regulator for TIG or MIG welding
- Exclusive piston design eliminates pressure variation, ensuring better accuracy and durability
- More accurate than a conventional ball/float system, saves time and gas
- Locks at each setting to prevent accidental adjustment
- Triple filter prevents dirt and grime from entering the system
- No worries about flow tube breakage

CUSTOM

REGULATORS

Standard Single Stage Regulators



For oxygen, acetylene, and LPG

- Designed to properly regulate pressures for many applications
- Compact and economical
- Makes cutting, welding, and heating operations safe and effective
- Add our Sentinel Plus reset-able flashback arrestors for added safety

QUALITY POLICY

“Koike Aronson, Inc./Ransome,

through continuous improvement efforts,
shall provide our customers with the
highest quality products at a fair value
and an environment for our employees
that is safe and affords them opportunity
for growth.”



NOTES



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