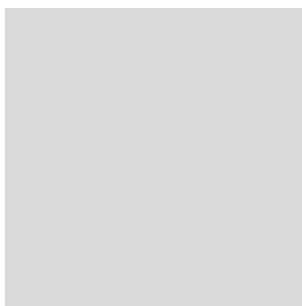
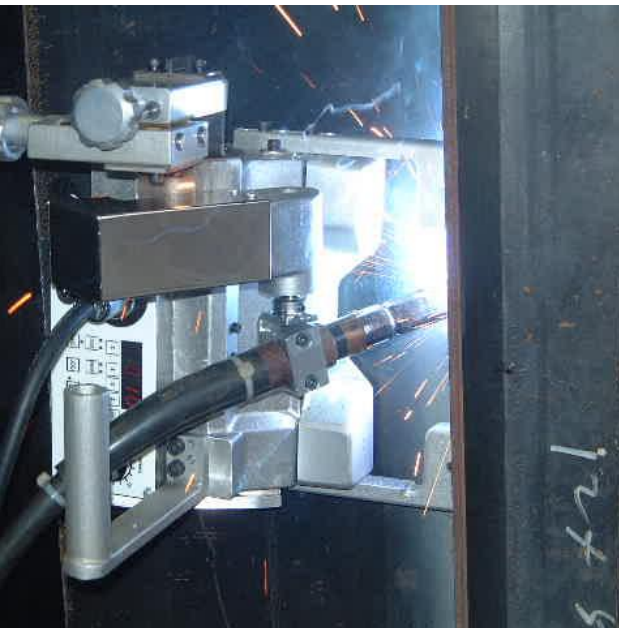


Portable Machines and Gas Equipment

Product Catalogue





KOIKE – the spirit of cutting.

Established in 1918 in Japan,
customers active in shipbuilding, steel construction, vehicle manufacturing, fabrication
and other heavy metal industries trust on nearly 100 years of KOIKE's cutting expertise.

Advanced technology combined with face to face relationship and an in-depth
understanding of customers cutting needs - that's what KOIKE as a Japanese manufacturer
of oxy-fuel, plasma and laser cutting technology stands for.

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Portable CNC Cutting Machine

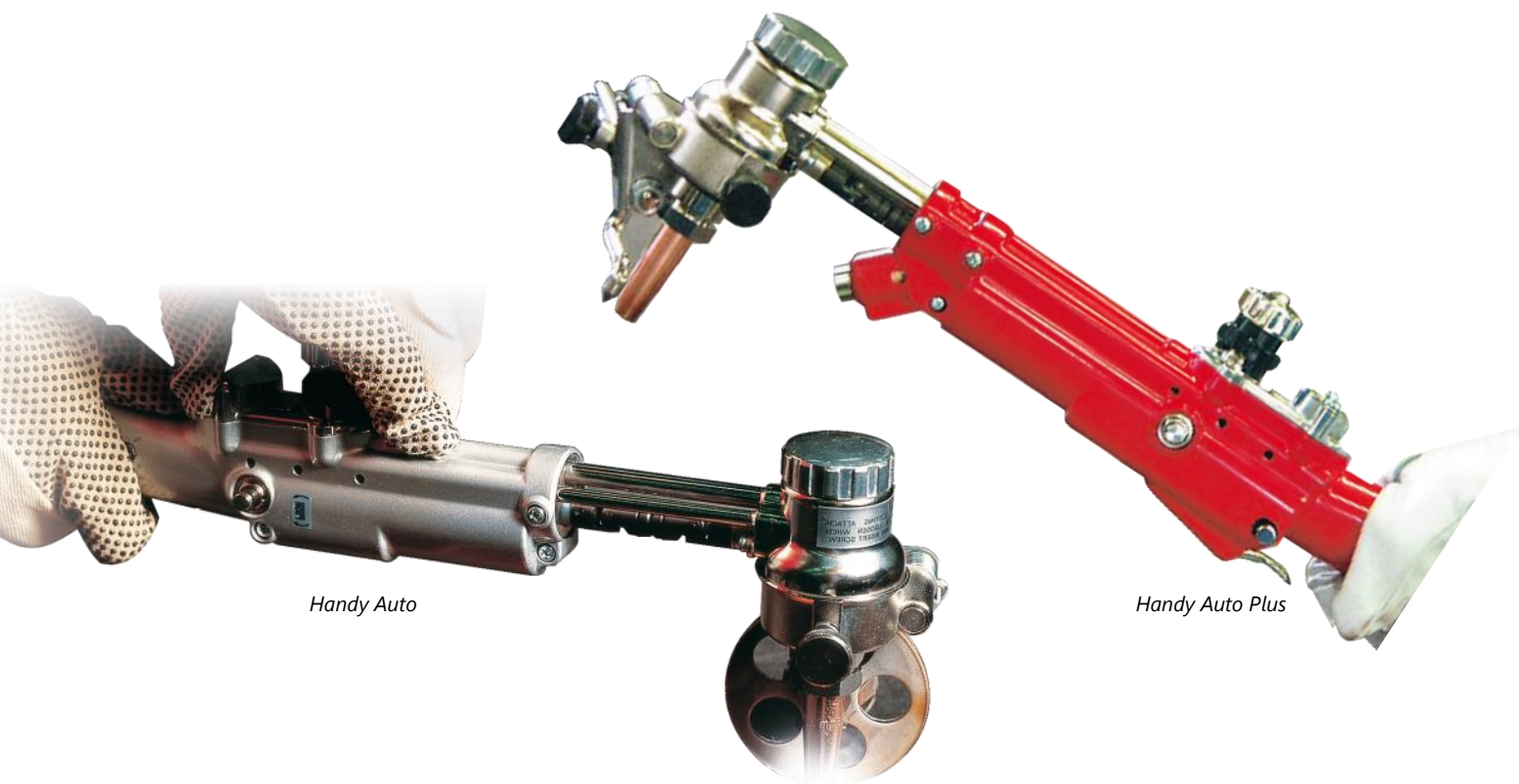
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Handy Auto

Handy Auto Plus

HANDY AUTO Series

Portable Motorized Hand Torch

Features and Benefits

- **Motorized oxy fuel hand torch**
High quality cuts in both every positions, on horizontal plate, pipe, or on vertical surfaces.
- **All position drives**
Allows cutting in any position from any direction
- **Quick change attachments**
Single hand changeover
- **Light weight**
Easily operated like a hand torch
2.7 kg (Handy Auto)
3.5 kg (Handy Auto Plus)
- **Auto ignition** (Handy Auto Plus)
- **One click gas shutoff** (Handy Auto Plus)
- **Flame pre-set valves** (Handy Auto Plus)



Two models

Handy Auto

- Machine-line cutting results with hand torch handling
- Modular attachment system
- Tool-free attachment replacement
- Set of basic attachments included*

* Every KIT comes with a basic set of attachments to cut straight, bevel, and small circle.



Handy Auto Plus

Handy Auto with additional features

- Auto ignition
- One-click gas shutoff
- Flame pre-set valves
- Set of basic attachments included.



Optional accessories

Accessory	Stock #	Description
Large circle cutting attachment	30106	Cutting diameter 120~500 mm
Straight guide rail 500 mm	30104	Straight cutting guide rail
Battery pack	225.401.101A	
Large circle extension bar 530 mm	30132	Use with Large circle cutting attachment to increase cutting diameter to 1000 mm



Straight guide rail 500 mm



Large circle attachment

Type and Specification

Specification

	Handy Auto KIT	Handy Auto Plus KIT
Cutting thickness	5 ~ 30 mm	
Cutting speed	150 ~ 530 mm/min	
Speed control method	Transistor control	
Drive system	Friction drive	
Power source	AC 100 - 240V	
Input power	DC 12V	
Bevel wheel assembly bevel angle	22 ~ 45°	
Small circle attachment cutting diameter	Ø 30 ~ 120 mm	
Machine length	500 mm	525 mm
Weight	2.7 kg	3.5 kg
Auto ignition function	-	●
Pre-set valves	-	●
Flame shut-off function	-	●

● : possible

Types

Model	Stock #
Handy Auto KIT	90005
Handy Auto Plus KIT	90001

Scope of delivery

	Handy Auto KIT	Handy Auto Plus KIT
Scope of delivery	Machine body	
	Small circle attachment	
	Standard wheel assembly	
	Bevelling wheel assembly	
	Auxiliary wheel assembly	
	Guide lever	
	AC adaptor with cable	
	Cutting nozzles	
	Standard tool set	
	Steel carrying case	



IK-12 BEETLE

Portable Oxy-fuel Cutting Machine

Features and Benefits

- **Multiple use oxy-fuel machine**
Performs high quality straight, circle and bevel cuts. Single model includes 1 torch and 3 cutting nozzles
- **Single Cone Stepless Drive System**
Maintains constant travel speed even with high temperatures providing stable, trouble-free cutting
- **Lightweight Aluminium body**
At only 9.5 kg, easy to carry and use yet rugged enough to be a true workhorse
- **Simple operation**
All functions are controlled by forward / off / reverse switch, clutch lever and speed adjustment knob.
- **Extendable 1800 mm straight rail**
Cut longer parts

The **IK-12 Beetle** is an affordable, portable, oxy-fuel cutting machine. It is known around the world as one of the best portable cutting machines in the industry.

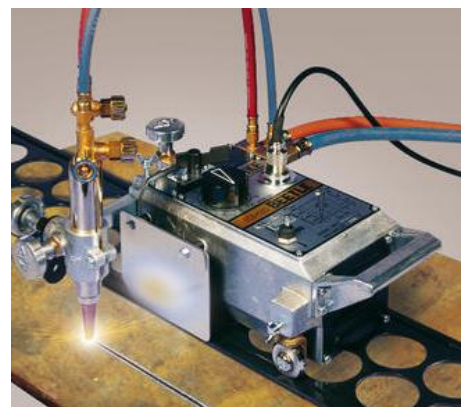


High quality cuts with simple operation

Single Cone Stepless Drive System

The Single Cone Stepless Drive System equipped on **IK-12 Beetle** guarantees a constant and stable movement of the machine, providing a sharp, clean cuts.

The travel functions (forwards, backwards, stop) are activated only by one operation element. The clutch control assures a trouble-free positioning of the machine. Bevel cutting is achieved by simply adjusting the torch holder at the bottom edge of the plate. A gear rack / bevel drive ensures an precise positioning of the machine torch (Y - and Z-axis).



Accessories

Optional accessories

Accessory	Stock #	Description
IK-12 Standard rail 1800 mm	30400	Extendable straight rail
Circle cutting attachment (Beetle)	31858	Cutting diameter: Ø 50 - 2400 mm
Transformer AC230V - 42V	222.002.207	For 42V models
Transformer AC230V - 110V	90100	For 110V models



Circle cutting attachment

Type and Specification

Specification

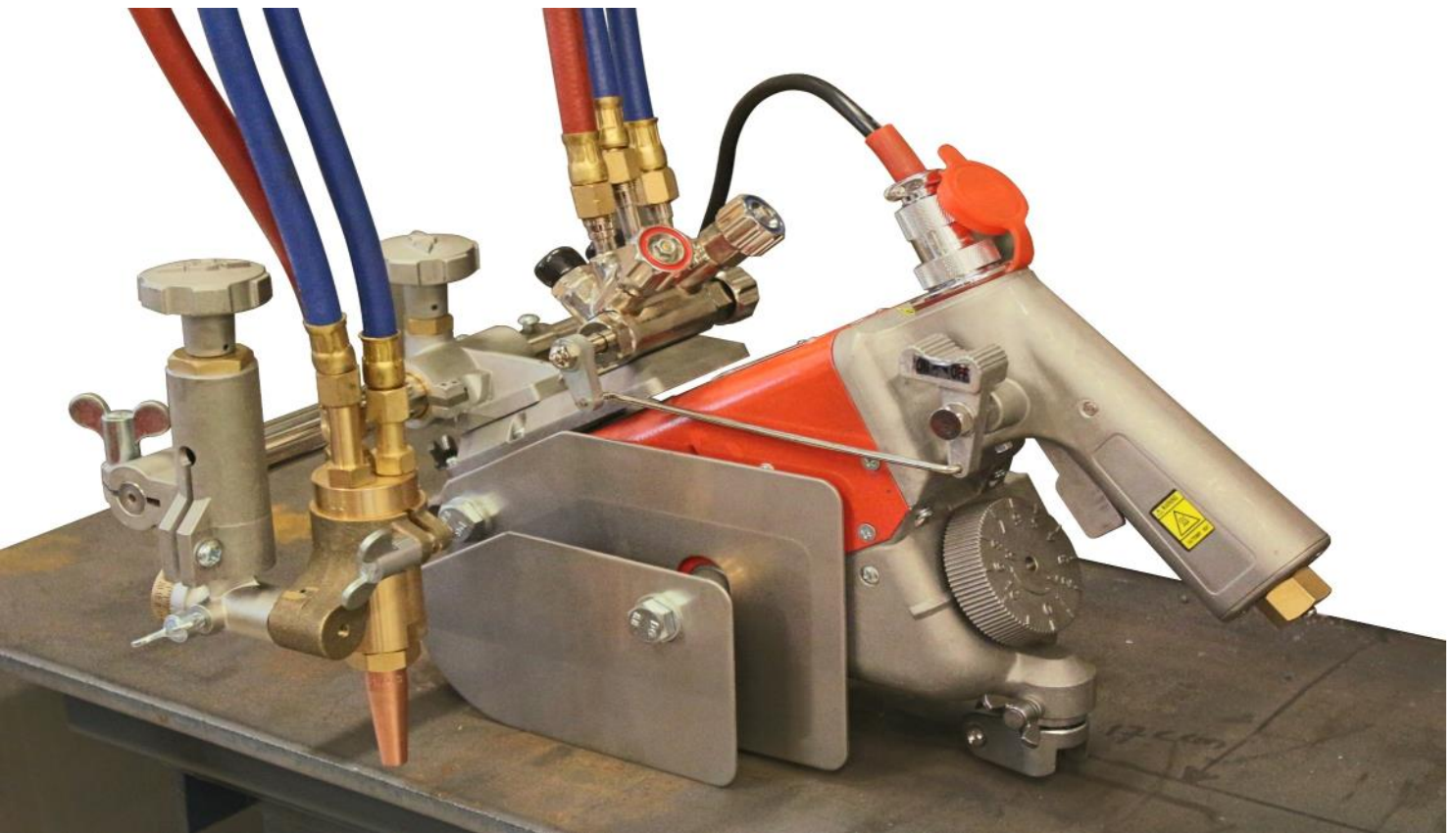
	IK-12 Beetle
Cutting thickness	5 – 50 mm
Cutting speed	150 - 800 mm/min
Bevel angle	0 - 45°
Drive system	Single Cone Stepless Drive System
Motor	Condenser-induction
Input power	AC 220V / 110V / 42V
Dimension	L350 x W175 x H140 mm
Weight	9.5 kg

Types

Model	Stock #
IK-12 Beetle 220V	TBCA31005
IK-12 Beetle 42V	90022
IK-12 Beetle 110V	90021

Scope of delivery

Scope of delivery
Machine body with torch set
Cutting nozzles (102HC or 106HC, size #0, 1, 2)
Power cable
Standard tool set
Operation manual



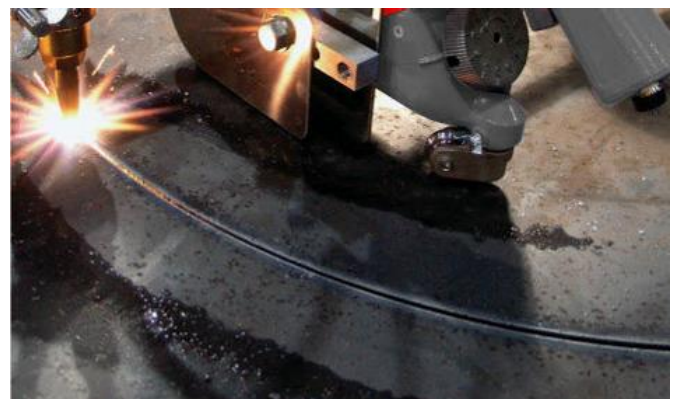
IK-93T HAWK

Mechanized Manual Guiding Cutting Machine

Features and Benefits

- **Pistol shape control grip**
Ergonomically designed grip provides comfortable handling of the machine.
- **Centralized control**
All functions including cutting oxygen, clutch operation and speed adjustment are located at the grip for ease of operation by one hand.
- **Multiple use oxy-fuel cutting machine**
All of straight line, hand guide, circle and plate edge bevel cutting can be done by selecting a suitable option.
- **Compact and lightweight**
Machine weighs only 7.2 kg. Together with the slim body and handling grip, machine can be carried from plate to plate easily.
- **Bevel collar**
Torch angle can be set accurately using graduated bevel collar.

The **IK-93T Hawk** is a portable gas cutting machine developed primarily for the purpose of high quality straight line, hand guided cutting. In addition to featuring high cutting quality, it also demonstrates unprecedented smooth operation and mobility.





Hand guided cutting

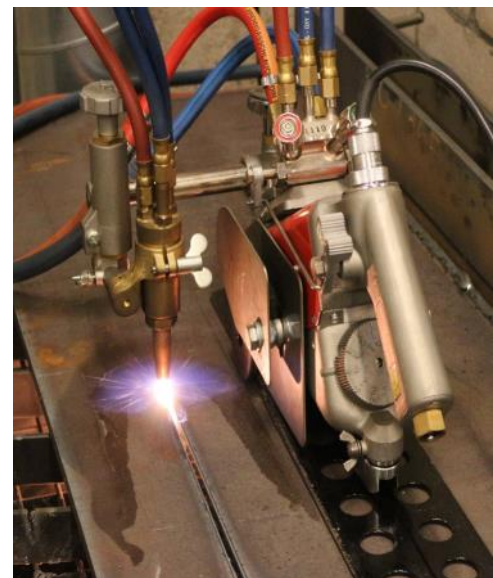
High quality multi purpose cutting

Machine handle with centralized controls

IK-93T Hawk is designed with the emphasis on ease of operation with one hand. Its centralized control features a convenient speed adjustment dial, travel switch, clutch and cutting oxygen operation lever.

Single wheel drive system provides maximum manoeuvrability, making it easy to change machine travel direction during cutting. The narrow and lightweight IK-93 rail is easily carried and placed.

The angle indicator on the torch holder ensures accurate bevel cuts. Together with optional accessories, wide variety of plate cutting can be achieved with **IK-93T Hawk**.



Straight cutting with IK-93 rail

Accessories

Optional accessories

Accessory	Stock #	Description
Extension rail 1800 mm f. IK-93	90018	
Circle cutting attachment f. IK-93	33353	Cutting diameter: Ø 100 - 1100 mm
Plate edge guide roller	T60038959	For bevel cuts along plate edge. Counter weight recommended.
Transformer AC230V - 42V	222.002.207	For 42V models



Plate edge guide roller option

Type and Specification

Specification

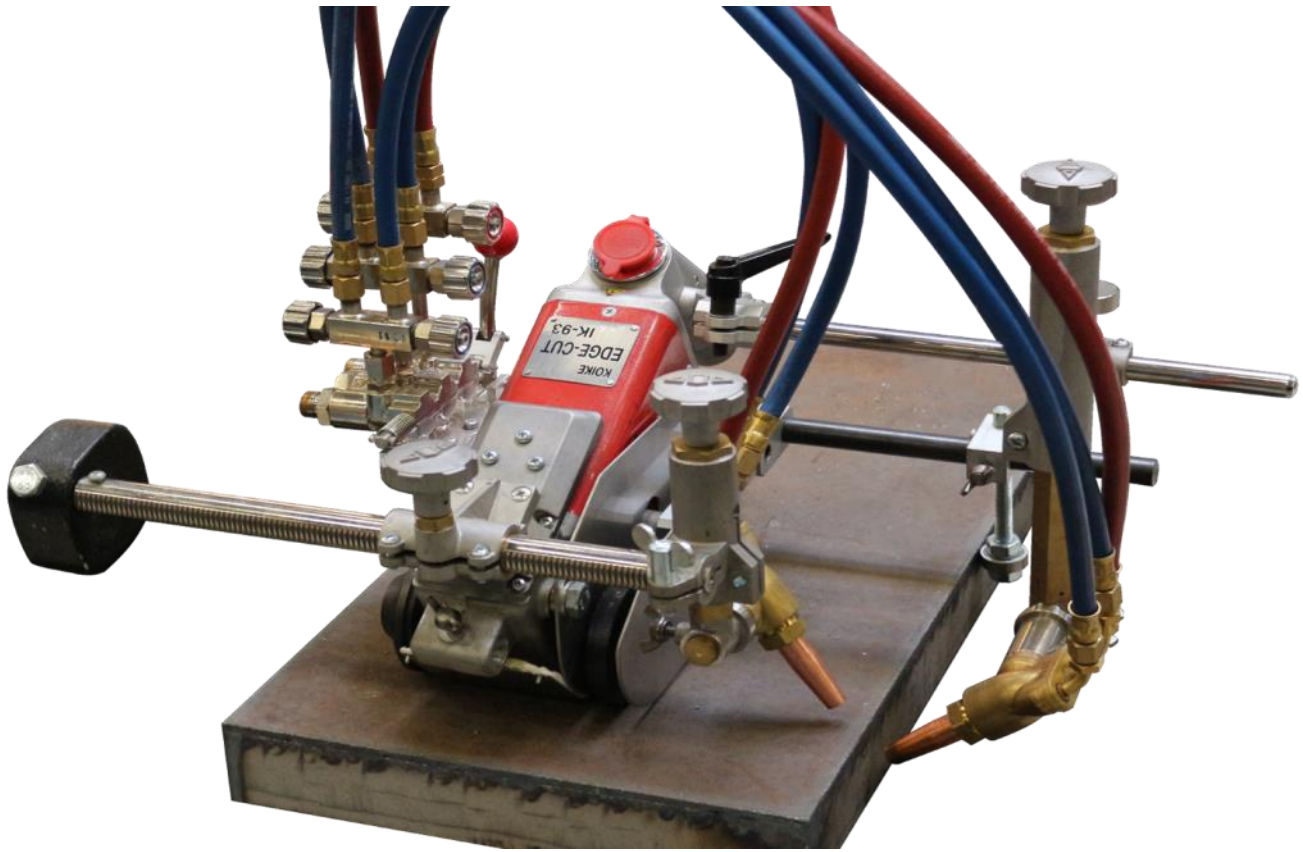
	IK-93T Hawk
Cutting thickness	5 –100 mm
Cutting speed	100 - 1000 mm/min
Bevel angle	0 ~ 45°
Clutch	Trigger type mechanical clutch
Speed control	Control IC
Heat shield	Doubled shield for thermal protection
Input power	AC 220V / AC 42V
Dimension (excl. torch unit)	L380 x W130 x H210 mm
Weight	7.5 kg

Types

Model	Stock #
IK-93T Hawk B-type 42V	TBPJ64009-20
IK-93T Hawk B –type 220V	TBPJ64009-16

Scope of delivery

Scope of delivery
Machine body with torch set (including slide bar)
Cutting nozzles (102HC or 106HC, size #0, 1, 2)
Power cable
Standard tool set
Operation manual



IK-93T EDGE-CUT

Trackless Plate Edge Bevelling Machine

Features and Benefits

- **Trackless bevelling**

Bevels plate edge top and bottom, up to 45 degrees without need for track. For V, X, Y, and K bevel welding preparation on the edge.

- **Pre-set flame**

Unique Koike preset stop valve allows saving flame settings and quickly turns gases on and off

- **Pistol shape grip**

Operator can control forward / reverse, clutch and speed adjustment with just one hand

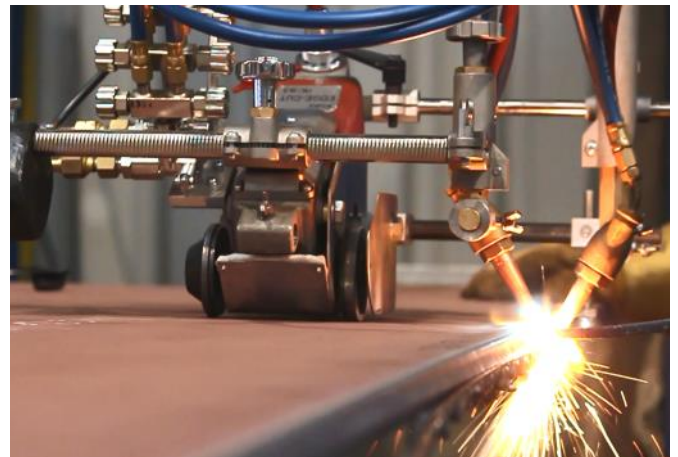
- **Compact and lightweight**

Although the machine is equipped with two torches and gas unit, it only weighs 12 kg, machine can be moved from one plate to the other easily

- **Multi purpose**

By removing caster on the bottom of the machine, straight cutting can be done by use of rail

The **IK-93T Edge-Cut** is a double-torch, trackless plate edge bevelling machine that performs sharp bevel cuts. The machine is equipped with two specialized torch units each with a graduated angle indicator, which ensures accurate torch angle settings.





Chamfering (1:4 ratio bevelling) using single torch

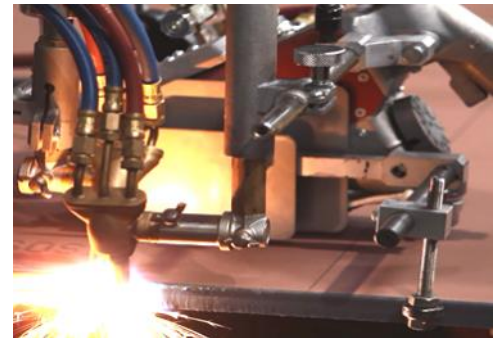
Light weight, trackless oxy-fuel bevelling

Machine handle with centralized controls

IK-93T Edge-Cut is designed in cooperation with the shipbuilding industry to meet the need for simple, yet effective plate edge preparation.

The **IK-93T Edge-Cut** performs high quality single or double bevels with out the need for a rail. V- Grooves essential to full penetration welds can be performed with just one pass.

Ease of set up and constant speed ensure high quality cutting even during long distant cutting. The Koike Snap Valve allows pre-setting of flames to reduce set up time while reducing gas waste.



Guide roller ensures accurate plate edge tracking

Accessories

Optional accessories



Single action gas On/Off



Accessory	Stock #	Description
Extension rail 1800 mm f. IK-93	90018	
Circle cutting attachment f. IK-93	33353	Cutting diameter: Ø 100 - 1100 mm
Transformer AC230V - 42V	222.002.207	For 42V models

Type and Specification

Specification

	IK-93T Edge-Cut
Cutting thickness	5 - 50 mm
Cutting speed	100 - 1000 mm/min
Bevel angle	0 ~ 45°
Clutch	Trigger type mechanical clutch
Speed control	Control IC
Heat shield	Doubled shield for thermal protection
Input power	AC 42V
Dimension (excl. torch unit)	L380 x W130 x H210 mm
Weight	12 kg

Types

Model	Stock #
IK-93T Edge-Cut 42V	TBPJ64228-04

Scope of delivery

Scope of delivery
Machine body with 2 torch set and plate edge guide roller
Cutting nozzles (102HC or 106HC, 2 sets of size #0, 1, 2)
Power cable
Standard tool set
Operation manual



IK-12 MAX3

The Portable Multi-purpose Carriage

Features and Benefits

- **Maximum reliability in most heavy-duty environment**

Not affected by intense heat and fluctuating voltage, the maximum driving mechanism ensures steady traveling

- **Double Cone Stepless Drive System**

Ensures extremely smooth speed transition, speed micro-adjustment and constant travel speed, which provides the IK-12 Max3's famous sharp, fine cuts.

- **Choice of accessory and options**

Features wide variety of options that makes the machine suitable to achieve various cutting needs.

- **Selectable torch set and rails**

Each torch set is specially designed for the purpose, ensuring the maximum results.

- **Versatility**

Ready for oxyfuel cutting, plasma cutting, or welding

The **IK-12 Max3** is an incredibly robust tractor, which has been highly rated among the portable oxy-fuel cutting machines. Body structure is systematized to apply to different types of work and meet the needs of plasma cutting and automatic welding. Each component is functionally worked out as independent units, selection and assortment are at the customer's disposal to create the system needed for the requirement.

Enjoy the maximum efficiency, versatility and productivity with the **IK-12 Max3**.

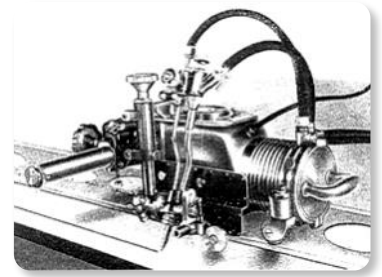


Carriage

The Original.

Since 1951 when the first model was released in Japan, Koike IK-12 series have been serving professionals who demand the highest quality in plate cutting.

Today, the state-of-the-art 6th generation, **IK-12 Max3** is equipped with double cone stepless drive system to maximize the reliability in cutting. Electrical and mechanical components, grease, soldering and wiring are carefully selected to ensure long service life in the most heavy-duty working environment.



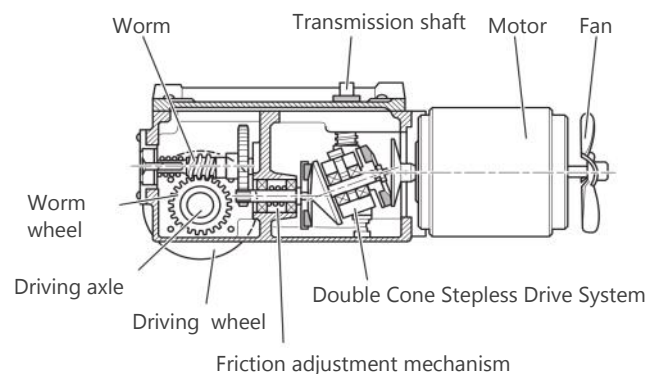
The first generation. Japan, 1951

Double Cone Stepless Drive System

Speed control mechanism of **IK-12 Max3** has adopted Double Cone Stepless Drive System, developed by KOIKE, which functions with a condenser motor rotating at constant speed (1500 rpm @50Hz) to prevent heat and voltage problems from occurring.

Because no reduction gear is employed in the mechanism, any knocking from backlash, noise or vibration does not take place. 50kg maximum loading weight with entire use of heat-resisting grease, high temperature soldering and minimal electrical component, **IK-12 Max3** is reliable and durable for long continuous operation.

Also the condenser motor rotating at a constant low speed prolongs the service life of bearing and maintains the machine condition for a long period of time.

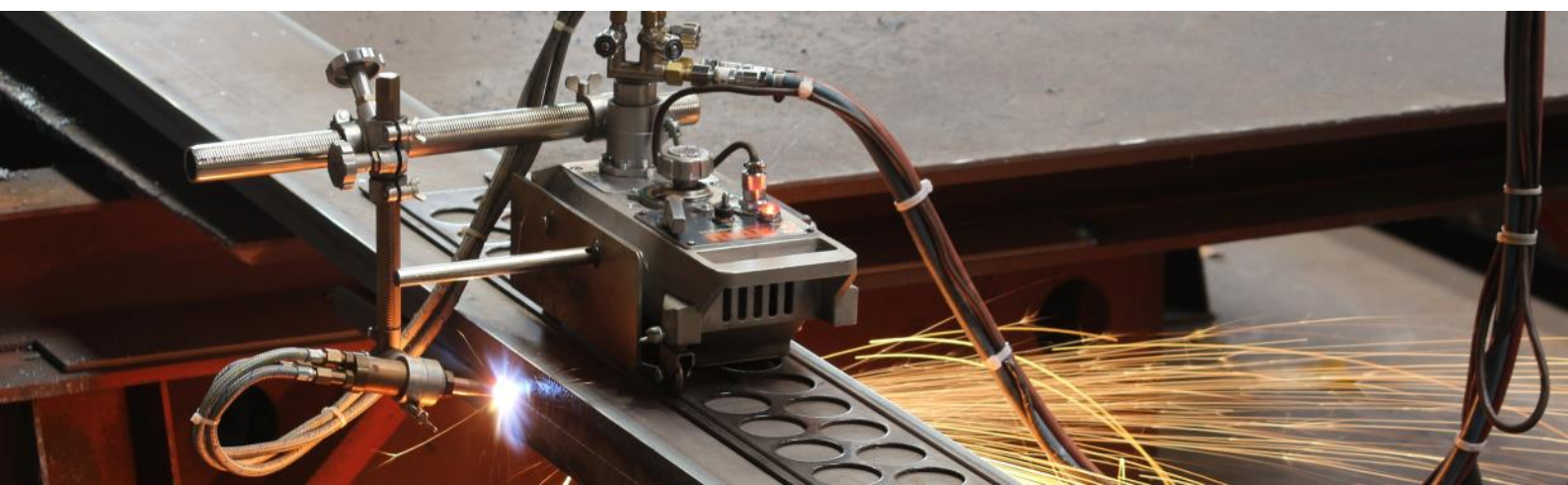


Machine selections

There are three different models available with **IK-12 Max3**.

■ IK-12 Max3	Standard	80 - 800 mm/min.	Suitable for most cutting and welding applications.
■ IK-12 Max3-S	High Speed	80 - 800 mm/min, 240 - 2400 mm/min.	Dual speed range. Suitable for plasma.
■ IK-12 Max3-ML	Slow Speed	40 - 400 mm/min.	Suitable for thick plate cutting and bevelling.

(speeds indicated above are with 50 Hz power supply)



Torch set

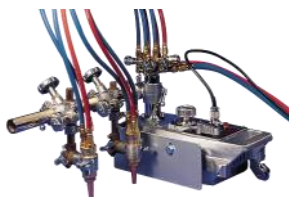
Oxy-fuel cutting torch set


S-100 Torch Set

- Standard 1 torch unit


SP-100 Torch Set

- 1 torch unit with mechanical automatic torch height control


S-200 Torch Set

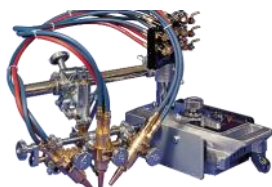
- Standard 2 torch unit


SP-200 Torch Set

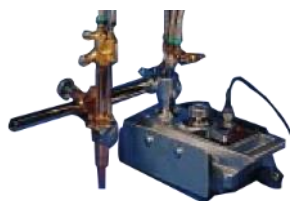
- 2 torch unit with mechanical automatic torch height control on each torch unit


SP-300 Torch Set

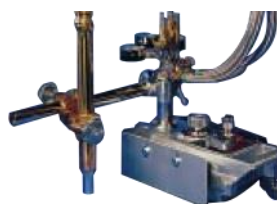
- 2 torch unit with mechanical automatic torch height control
- Maintains angle of 2 torches for accurate Y and X bevel cuts


SP-400 Torch Set

- 3 torch unit with mechanical automatic torch height control
- Maintains angle of 3 torches for accurate Y, X, and K bevel cuts


L-100 Torch Set

- Heavy duty torch designed to cut up to 300 mm plate thickness.
- Water cooled


EPOCH-300/600 Torch Set

- A safe, flashback-free out mixing torch, designed to cut up to 600mm plate thickness.
- Water cooled
- For propane gas

Torch set	S-100	SP-100	S-200	SP-200	SP-300	SP-400	L-100	EPOCH-300	EPOCH-600
Stock No.	90036	90038	90037	90039	90040	90041	90042	90043	90046
Max. cutting thickness (1 torch)	150 mm	150 mm	150 mm	150 mm	100 mm	100 mm	300 mm	300 mm	600 mm
Number of torch	1	1	2	2	2	3	1	1	1
Gas mixing	Tip mixing								
	•	•	•	•	•	•	•	-	-
Gas mixing	Out mixing								
	-	-	-	-	-	-	-	•	•
Mechanical auto height control	-	•	-	•	•	•	-	-	-
Standard pipe bar length (mm)	350	350	500	500	500	500	500	500	500
Vertical torch stroke (mm)	80	120	80	120	120	120	-	-	-
Cutting type		•	•	•	•	•	•	•	•
		•	•	•	•	•	•	•	•
		-	-	•	•	-	-	-	-
		-	-	•	•	-	-	-	-
		-	-	•	•	•	-	-	-
		-	-	•	•	•	-	-	-
		-	-	-	-	•	-	-	-
Optional torch accessories									
Long pipe bar	•	•	•	•	•	•	•	•	•
Long slide bar	•	•	•	•	-	-	-	-	-
Snap valve	•	•	•	•	-	-	-	-	-
Pre-set stop valve	•	•	•	•	-	-	-	-	-



S-100 Torch set



S-200 Torch set with Long slide bar option



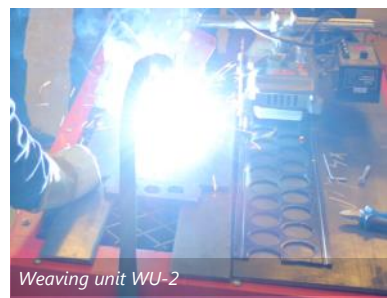
S-100 with Long slide bar option



S-100 with Long slide bar and Bevel attachment option



EPOCH Torch set with Heavy duty rail



Weaving unit WU-2



S-100 Torch set



S-100 Torch set with Long slide bar option



S-100 Torch set with Long slide bar and Guide roller option

Plasma cutting, welding torch set and related accessories



IK-12 Plasma Torch Set

- For 35mm torch diameter
- Torch set only
- Plasma ON/OFF Remote controller sold separately (FR-III Controller)



MP-100 Welding Torch Set

- For straight line butt welding
- Torch set only



Weaving unit WU-2

- Pendulum weaving unit for IK-12 Max3, including weaving unit, pipe bar and controller



FR-III Controller

- For Plasma cutting or welding
- Arc delay function
- Controls IK-12 Max3 and power source simultaneously

Torch set / Controller		IK-12 Plasma	MP-100 Welding	Weaving Unit WU-2	FR-III Controller
Stock No.		90045	BUA31301	90219	61003427 (220V) BUB01553 (110V)
Working voltage	AC 220V	-	-	-	•
	AC 110 V	-	-	•	•
Torch clamp diameter		Ø 35 mm	Ø 16 - 20 mm	Ø 16 - 20 mm	-
Pipe bar length (mm)		500	350	500	-
Application	Plasma cutting	•	-	-	•
	Continuous Welding	-	•	•	•
	Weaving welding	-	-	•	-

• : possible

Accessories

Optional accessories



Standard rail 1800 mm

- Extendable 1800 mm rail
- Built of special steel to ensure long life time



Circle cutting rail

- Cutting diameter Ø40 - 360 mm (inside); Ø770 - 1150 mm (outside)
- Counter weight recommended



Heavy duty rail 1800 mm

- Extendable, robust structured rail that does not bend
- Recommended when cutting thick plate over 150 mm



Circle cutting attachment

- Cutting diameter Ø400 - 2400 mm



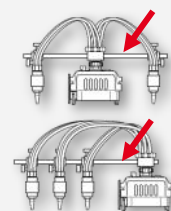
Long slide bar

- Extends torch up/down stroke, used when cutting from the side of the plate
- Available in different lengths



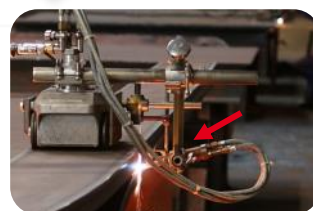
Plate edge guide roller

- Enables bevel cuts without rail by tracking plate edge
- For straight line cutting only



Long pipe arm

- Long pipe arm to enable different torch positioning
- Available in different lengths



Snap valve B-type

- Single action gas on/off
- Increases productivity by eliminating flame adjustments each time after cut



Preset stop valve

- Single action gas on/off
- 2 models; single or two torches



Torch bevel attachment

- Accurate bevel cutting with angle indicator
- Cuts bevel without tilting the torch



Twin torch attachment

- Enables 2-torch parallel cutting by attaching to a torch.
- Torch distance 30 - 300 mm

Flashback arrestor hose set

- A set of flashback arrestors with metal bladed hose
- Includes 3x flashback arrestors and 3x metal bladed hoses

Rail fixing magnet

- Holds the rail onto the place



MIG torch holder

- Simple welding torch holder, clamp diameter Ø16 - 20mm
- Fits on S-100 or SP-100 torch set by replacing oxy-fuel torch



Extended stand

- 105mm long stand



Accessory	Stock #
IK-12 Standard rail 1800 mm	30400
IK-12 Heavy duty rail 1800 mm	90044
IK-12 Max3 Circle cutting rail	30410
Circle cutting attachment	90100
Plate edge guide roller	T60038959
Preset stop valve	1 torch 80518
	2 torch 61003543
Snap valve B-type	80512
Torch bevel attachment	ON002
Twin torch attachment	ON001
Rail fixing magnet	D6010
MIG torch holder	61000676
Transformer AC230V - 42V	222.002.207
Transformer AC230V - 110V	90100

Accessory	Stock #
Long slide bar	145 mm (standard) 30390
	250 mm 30430
	300 mm 30431
	400 mm 30422
Long pipe arm	350 mm 30300
	500 mm 30321
	1000 mm 30425
	1500 mm 30427
	2500 mm 30429
Stand	80 mm (standard) 30204
	105 mm 30378
Flashback arrestor hose set	600 mm hoses on request
	900 mm hoses on request

Type and Specification

Specifications

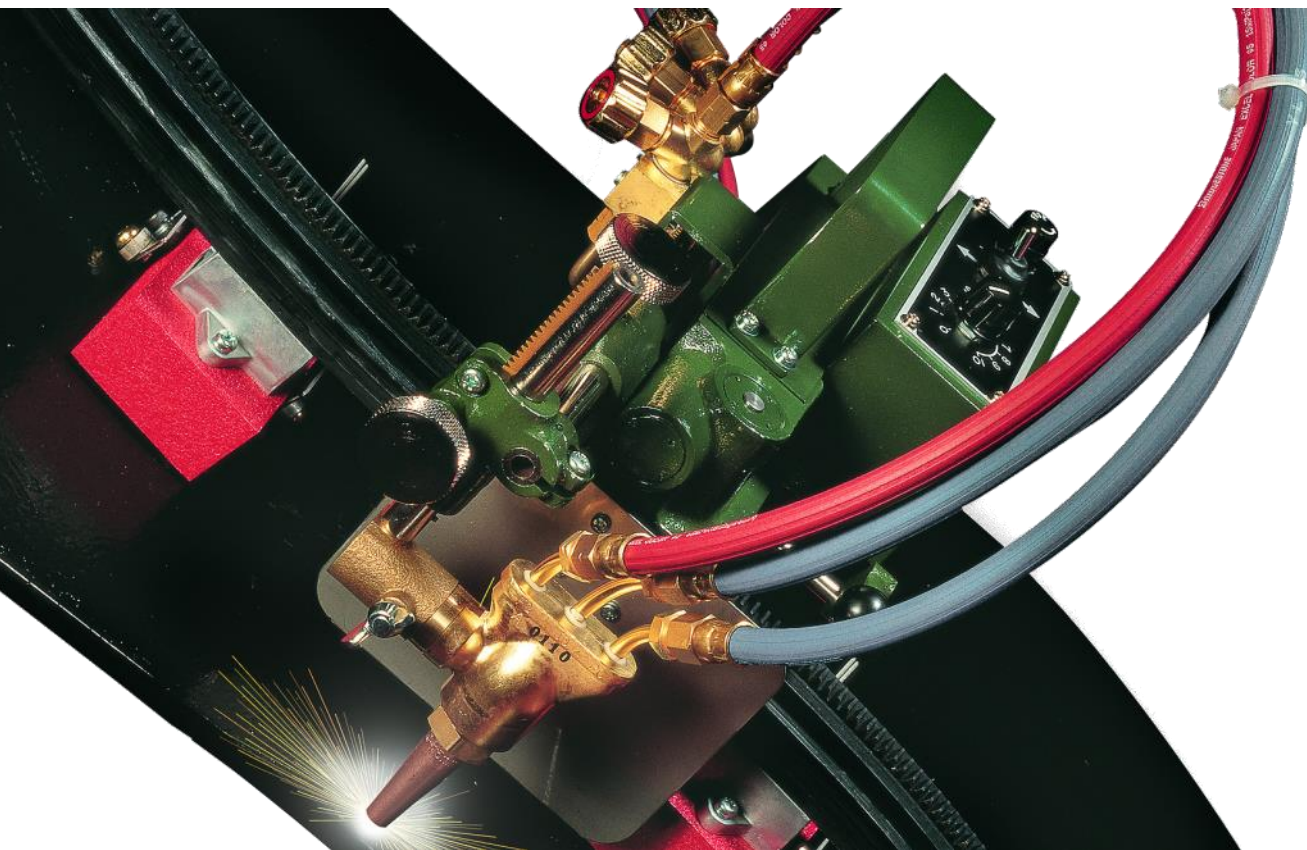
	IK-12 Max3 Standard	IK-12 Max3-S	IK-12 Max3-ML
Traveling speed	@50 Hz 80 - 800 mm/min	80 - 800 mm/min 240 - 2400 mm/min	40 - 400 mm/min
	@60 Hz 100 - 1000 mm/min	100 - 1000 mm/min 300 - 3000 mm/min	50 - 500 mm/min
Input power	AC 220V / AC 110V / AC 42V (+/- 10%)		
Cutting thickness	Depends on torch set		
Drive system	Double Cone Stepless Drive System		
Motor	Condenser-induction		
Machine construction	Aluminium die cast body		
Gear box	Closed gear box, highly resistant against heat and dust		
Max. loading weight	50 kg		
Machine dimension	L430 x W220 x H215 mm		
Weight	10 kg	11 kg	11 kg

Types

Carriage Model	Stock #
IK-12 Max3 machine body	42V 90029
	110V 90028
	220V 90027
IK-12 Max3-S machine body	42V 90056
	110V 90057
	220V 90026
IK-12 Max3-ML machine body	220V 90033
	42V 90030

Scope of delivery

Scope of delivery
Machine body
Power cable
Tip support
Hexagon bolt (2pcs)
Operation manual



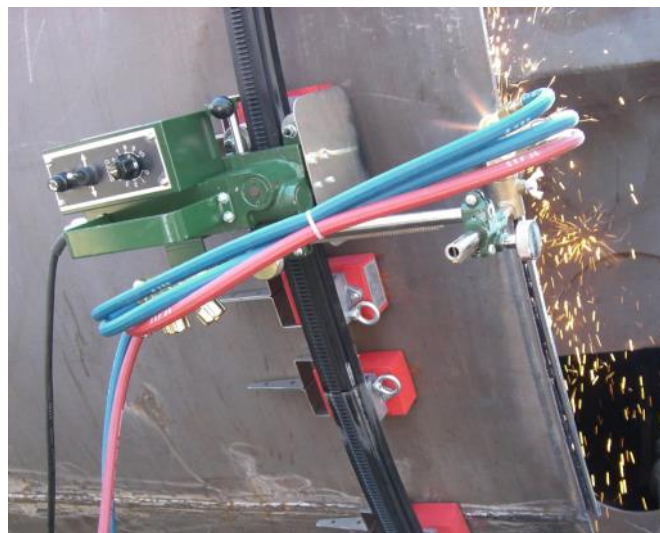
IK-72T

All Position Oxy-Fuel Cutting Machine

Features and Benefits

- **All position oxy-fuel cutting**
Cuts flat, bended, or twisted steel plates in all positions and directions
- **Permanent magnet rails**
Secures rail to plate; allows the rail to be used vertically
- **Selectable rail configuration**
There are 3 unique rail types; all rails can be connected to each other by use of connector kit
- **Clutch lever**
Allows quick positioning of machine on rail
- **Amazingly lightweight**
Only 4.5 kg and compact; machine can be carried easily to anywhere.

The **IK-72T** cuts various types of steel including channel, curved plate and angled steel members. Made of aluminium alloy, the IK-72T is lightweight and easy to use. A graduated bevel collar is provided for bevelling. Simply adjust the scales to precise bevel angle.



High quality cutting in all positions

Flexibility and versatility

The **IK-72T** is ideal for industries which require out-of-position cutting such as ship-vessel, and tank-building and repair.

There are three different types of rails available.

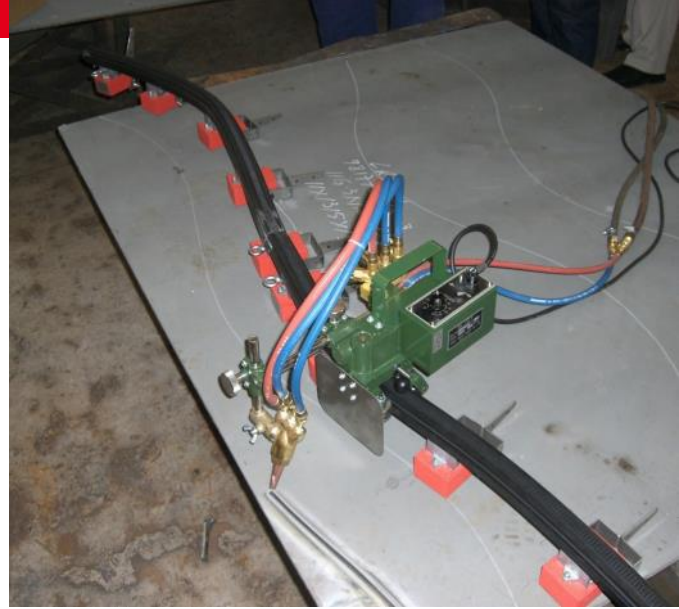
- The **straight 1D rail** made of robust aluminium, allowing straight cutting on flat plate in out-of-place positioning.
- The **double-plane 2D rail** has flexible steel strip inside, which makes the rail not to bend in sideways. Ideal for applications which require straight cutting line on bended plate surface such as tank fabrication.
- **Triple plane 3D rail** is flexible in every direction and suitable for applications which require maximum flexibility.

All rails are delivered with magnetic holder, enabling cuts in vertical and horizontal position. For maximum magnet efficiency and reduction of rail movement, be sure to clean rusty plate before cutting.

Portability

The **IK-72T** is designed to maximize portability. Aluminium alloy body together with robust gear system made the machine to be extremely light, yet durable in heavy duty working environment.

- **Light weight: 4.5 kg**
- **Rack and pinion drive system**
- **Single-action mechanical clutch system** allows quick machine positioning along the rail.



Curved line cutting on a flat plate using 3D rail



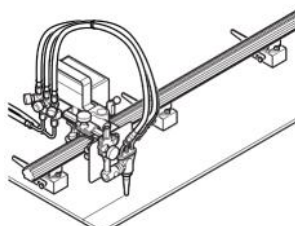
Welding preparation performed with 2D rail



Accessories

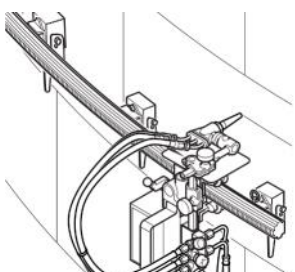
Rail selections

Accessory	Stock #
IK-72T 1D-RAIL 1500MM	TBPJ64025
IK-72T 2D-RAIL 1000MM	90154
IK-72T 3D-RAIL 1000MM	TBPJ64026



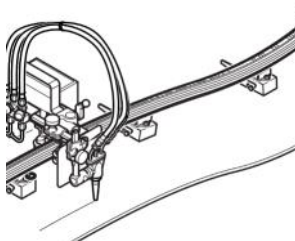
1D Rail 1500mm

- For flat plate
- Aluminium made straight rail
- Ideal for straight cutting applications
- 4 permanent magnets



2D Rail 1000mm

- For bended plane
- Flexible rubber made with steel plate liner
- Maximum bending radius 2500 mm
- 5 permanent magnets



3D Rail 1000mm

- For bended and twisted planes
- Flexible rubber made; bends in any direction
- Maximum bending radius 2000 mm
- 5 permanent magnets



Optional accessories

Accessory	Stock #	Description
Rail connector	33017	Parts to connect 1D rail to 2D / 3D rail.
Longer vertical bar 350L	31697	Extends torch positioning by 350 mm
Transformer AC230V - 42V	222.002.207	For 42V models
Transformer AC230V - 110V	90100	For 110V models



Transformer



Rail connector



Type and Specification

Specification

	IK-72T
Cutting thickness	5 -50 mm
Cutting speed	150 - 700 mm
Type of drive	PWM control
Bevel angle	0 ~ 45°
Driving method	Rack and Pinion
Input power	AC 110V / AC 42V
Maximum rail bending radius	2D rail: 2500mm 3D rail: 2000mm
Dimension	L250 x W300 x H190 mm
Weight	4.5 kg

Types

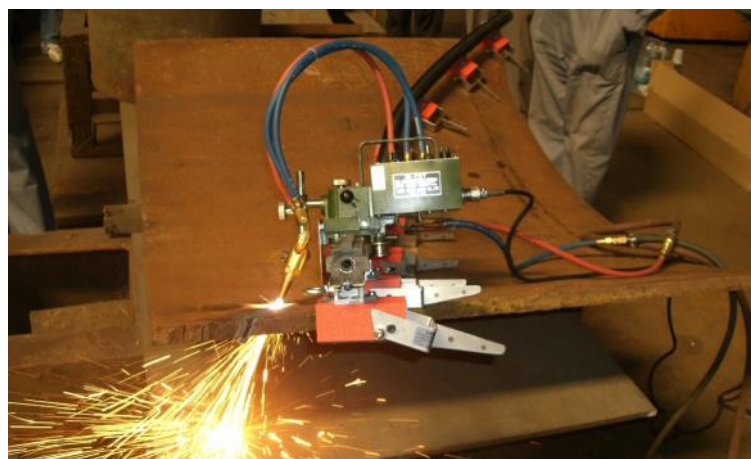
Model	Stock #
IK-72T Machine body 42V	90152
IK-72T Machine body 110V	90151

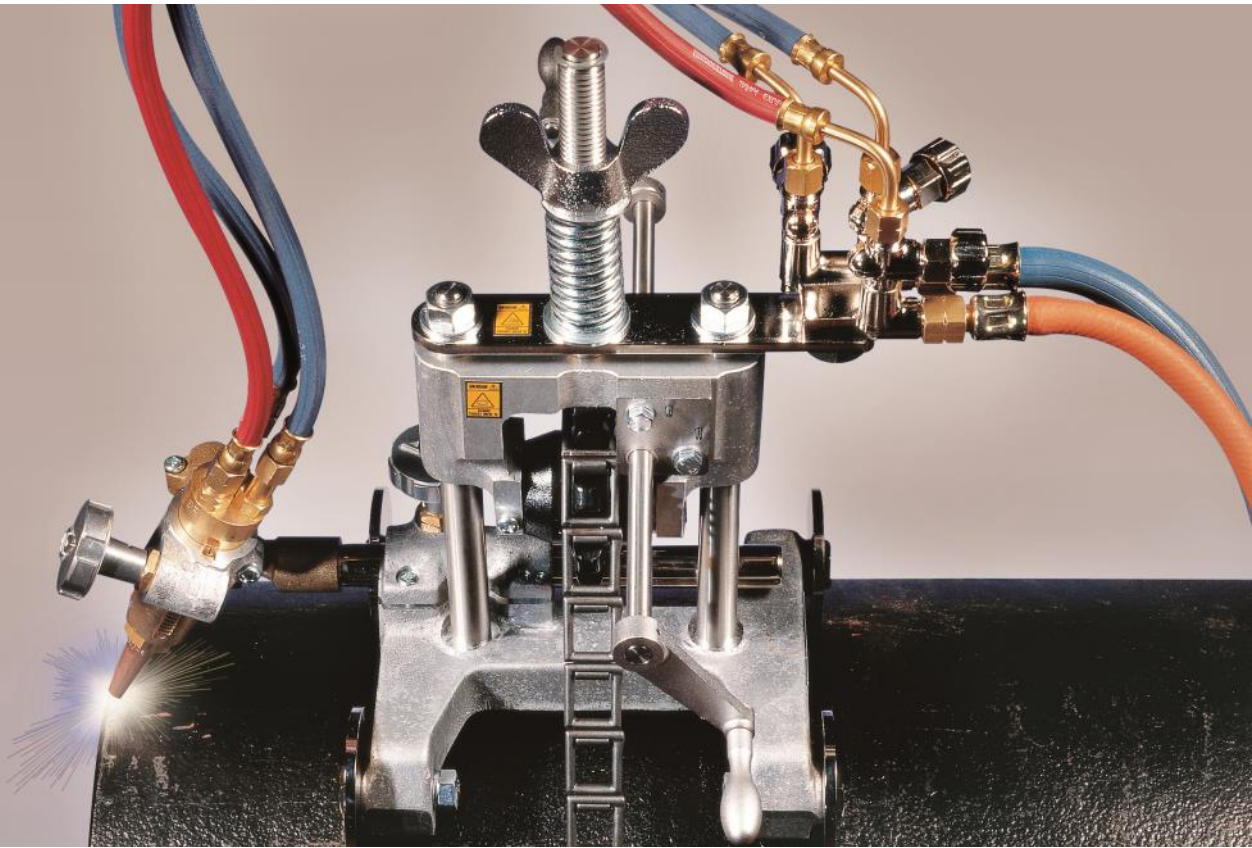
Scope of delivery

Scope of delivery
Machine body with torch set
Cutting nozzles (102HC or 106HC, size #0, 1, 2)
Power cable
Standard tool set
Operation manual



Overhead cutting made possible with strong permanent magnets





PICLE-1-II

Manual Pipe Cutting Machine

Features and Benefits

- **Manual pipe cutting machine**
No power/electricity needed to cut pipe; ideal for field use
- **Oxy-fuel pipe cutter**
Bevel cuts or straight cuts on steel pipe
- **Interlocking link chain system**
Swiftly adapts to any pipe diameter
- **Extremely smooth feed**
Worm gear with low transmission ratio
- **Accurate bevel angle**
Bevel collar with angle indicator for easy and accurate bevel setting
- **Lightweight**
At only 8.5 kg, this unit is easy to carry, operate and maintain
- **Very low maintenance**

Picle-1-II is a manually operated pipe cutting machine for cutting and bevelling pipes. Equipped with a chain and worm gear drive system with low transmission ratio, leading to an absolutely frictionless feel.



Extremely smooth feed

Quality pipe cutting without electrical power

PICLE-1-II's extremely smooth feed makes the machine handy and easy to operate. The drive chain is comprised of durable, interlocking links that can easily be added or removed for quick change of pipe diameters.

A graduated bevel collar ensures accurate bevel setting. The control valves for fuel, preheat and cutting oxygen are positioned from heat yet conveniently placed for easy operator use.



Accessories

Optional accessories

Accessory	Stock #	Description
Extension chain 1 m	31131	1 m chain links



Extension chain 1m



Chain links can be adjusted easily for various pipe diameters.

Type and Specification

Specification

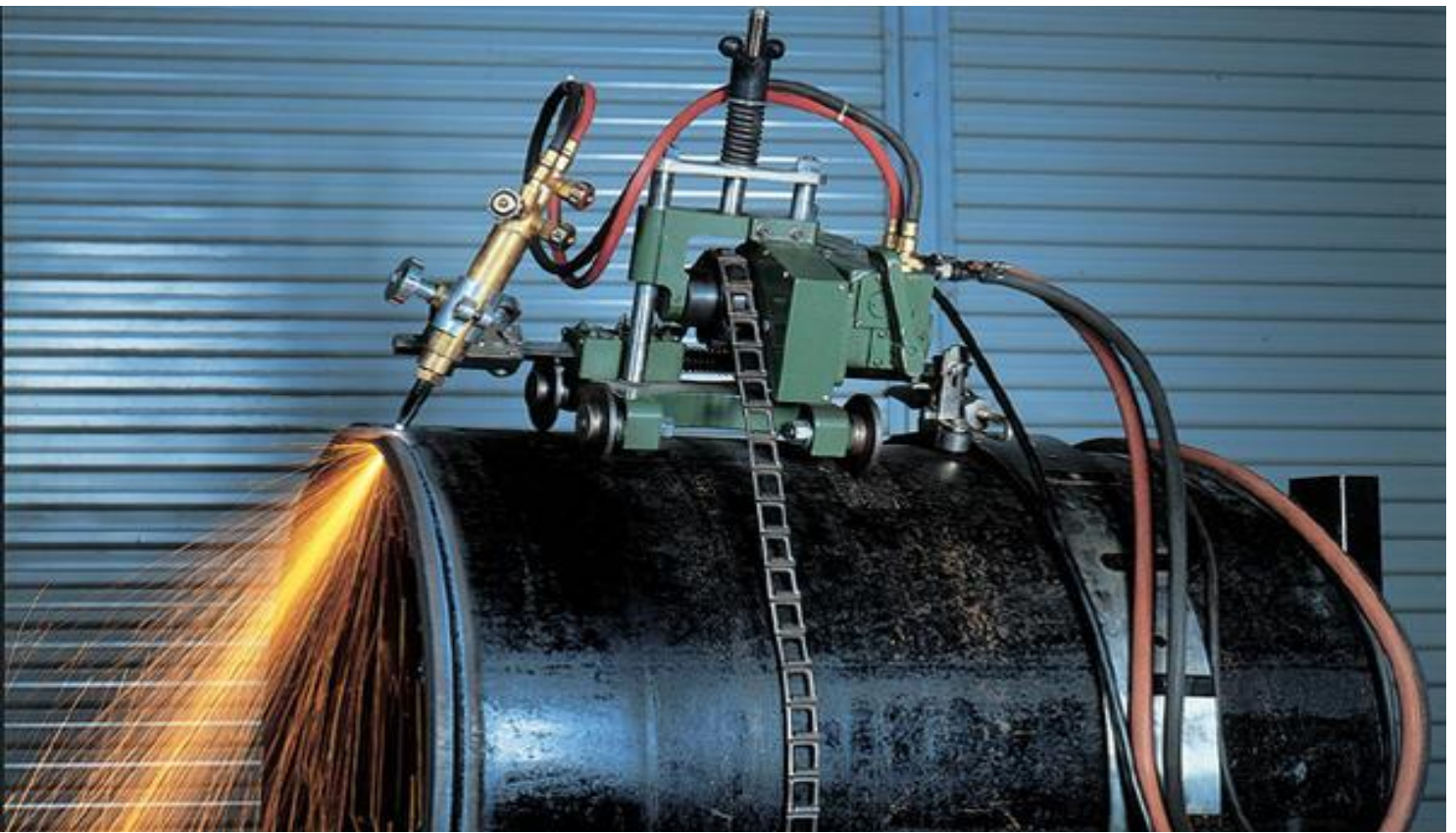
	PICLE-1-II
Cutting thickness	5 -50 mm
Cutting speed	Manually adjusted
Cutting diameter	Ø 114 ~ 600 mm
Torch up/down stroke	50 mm
Torch lateral stroke	100 mm
Bevel angle	0 ~ 45°
Drive system	Worm gear and chain
Input power	Not required
Dimension	L410 x W210 x H410 mm
Weight	8.5 kg

Types

Model	Stock #
PICLE-1-II	90110

Scope of delivery

Scope of delivery
Machine body with torch set
Chain link (80 pcs. for 600mm pipe diameter)
Cutting nozzles (102HC or 106HC, size #0, 1, 2)
Power cable
Standard tool set
Operation manual



AUTO PICLE-S

Automatic Pipe Cutting Machine

Features and Benefits

- **Guide rail**
Cuts up to 1500 mm diameter of pipe accurately; use for cutting pipe vertically
- **Motorized oxy-fuel pipe cutter**
Automatically bevel cuts or straight cuts on steel pipe
- **Remote Control Pendant**
Easy operation from a distance
- **Special Fixed Rail Tip Guide System**
Mechanical automatic torch guiding; provides high cutting accuracy.
- **Interlocking link chain system**
Swiftly adapts to any pipe diameter
- **On/Off drive clutch**
Position and align machine quickly

The Auto Picle-S is a motorized oxy-fuel pipe cutting machine with remote control. The optional guide rail provides high cutting accuracy, particularly suitable for large pipes.

Countless professionals from fabricators and scrap yards to boiler makers and tank manufactures have used Koike pipe cutting machines products successfully.



Automatic motorized pipe cutting

A sharp, clean cuts for small to large diameter pipes

Auto Picle-S is a oxy-fuel pipe cutting machine equipped with motor and robust gear system . Together with the interlocking transmission chain links, **Auto Picle-S** travels smoothly around the pipe in all positions.

Cutting operations are carried out from a handy remote controller. Mico speed adjustment is easily be done during cutting.

The slide bar torch system allows flexible torch positioning. When used with the optional guide rail, this system automatically guides the torch along the rail, providing high cutting accuracy for large diameter pipes.



Remote Controller



Accessories

Optional accessories

Accessory	Stock #	Description
Transformer AC230V - 42V	222.002.207	For 42V models
Transformer AC230V - 110V	90100	For 110V models
Extension chain 1 m	31131	1 m chain links
Guide rail D-600	90106	For pipe diameter Ø400 - 600mm
Guide rail D-900	90107	For pipe diameter Ø600 - 900mm
Guide rail D-1200	90108	For pipe diameter Ø900 - 1200mm
Guide rail D-1500	90109	For pipe diameter Ø1200 - 1500mm



Optional guide rail provides high cutting accuracy, particularly suitable for large pipes. Each guide rail is provided with additional chain links for each maximum pipe diameter.

Type and Specification

Specification

	Auto Picle – S
Cutting thickness	5 - 50 mm
Cutting speed	100 - 700 mm/min
Cutting diameter	Ø 150 - 1500 mm; Guide rail option is recommended above Ø600 mm
Bevel angle	0 ~ 45°
Drive system	Worm gear and chain
Input power	AC 115V / AC 42V
Dimension	L270 x W230 x H400 mm
Weight	15 kg

Types

Model	Stock #
Auto Picle - S 42V	90117
Auto Picle - S 110V	90116

Scope of delivery

Scope of delivery
Machine body with torch set (including slide bar)
Remote controller and cables
Chain link (80 pcs. for 600mm pipe diameter)
Cutting nozzles (102HC or 106HC, size #0, 1, 2)
Standard tool set
Operation manual



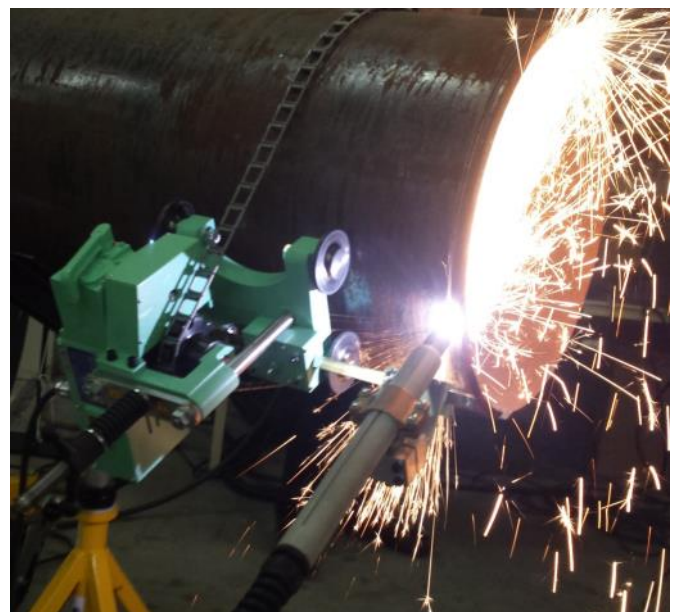
AUTO PICLE-S PLASMA

Plasma Pipe Cutting Machine

Features and Benefits

- **Guide rail**
Cuts up to 1500 mm diameter of pipe accurately;
use for cutting pipe vertically
- **High-speed, motorized plasma pipe cutter**
Automatically bevel cuts or straight cuts
- **Remote Control Pendant**
Easy operation from a distance
- **Special Fixed Rail Tip Guide System**
Mechanical automatic torch guiding; provides
high cutting accuracy.
- **Interlocking link chain system**
Swiftly adapts to any pipe diameter
- **On/Off drive clutch**
Position and align machine quickly
- **Suitable with most Air Plasma systems**

The **Auto Picle-S Plasma** is a high-speed motorized pipe cutting machine designed specially for pipe cutting and pipe bevelling with most air plasma cutting machines.



High-speed cutting of various metals

Auto Picle-S Plasma can be used for pipes made of various materials such as carbon steel, stainless steel, aluminium and other metals.

Remote controller is equipped with an arc on/off switch, and delivered together with plasma interface cable.

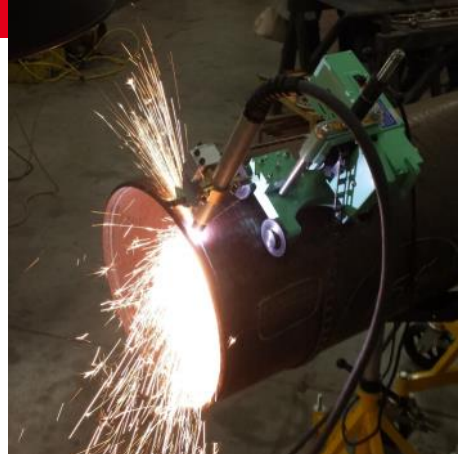
Accessories

Optional accessories

Accessory	Stock #	Description
Transformer AC230V - 42V	222.002.207	For 42V models
Transformer AC230V - 110V	90100	For 110V models
Extension chain 1 m	31131	1 m chain links
Guide rail D-600	90106	For pipe diameter Ø400 - 600mm
Guide rail D-900	90107	For pipe diameter Ø600 - 900mm
Guide rail D-1200	90108	For pipe diameter Ø900 - 1200mm
Guide rail D-1500	90109	For pipe diameter Ø1200 - 1500mm



Quick-fixing Guide Rail systems



Optional guide rail & customized torch holder



Type and Specification

Specification

	Auto Picle-S Plasma
Cutting thickness	Depends on plasma power source
Cutting speed	500 - 3000 mm/min
Cutting diameter	Ø 150 - 1500 mm; Guide rail option is recommended above Ø600 mm
Torch holder diameter	Ø 35mm
Bevel angle	0 ~ 45°
Drive system	Worm gear and chain
Input power	AC 110V
Dimension	L270 x W230 x H400 mm
Weight	15 kg

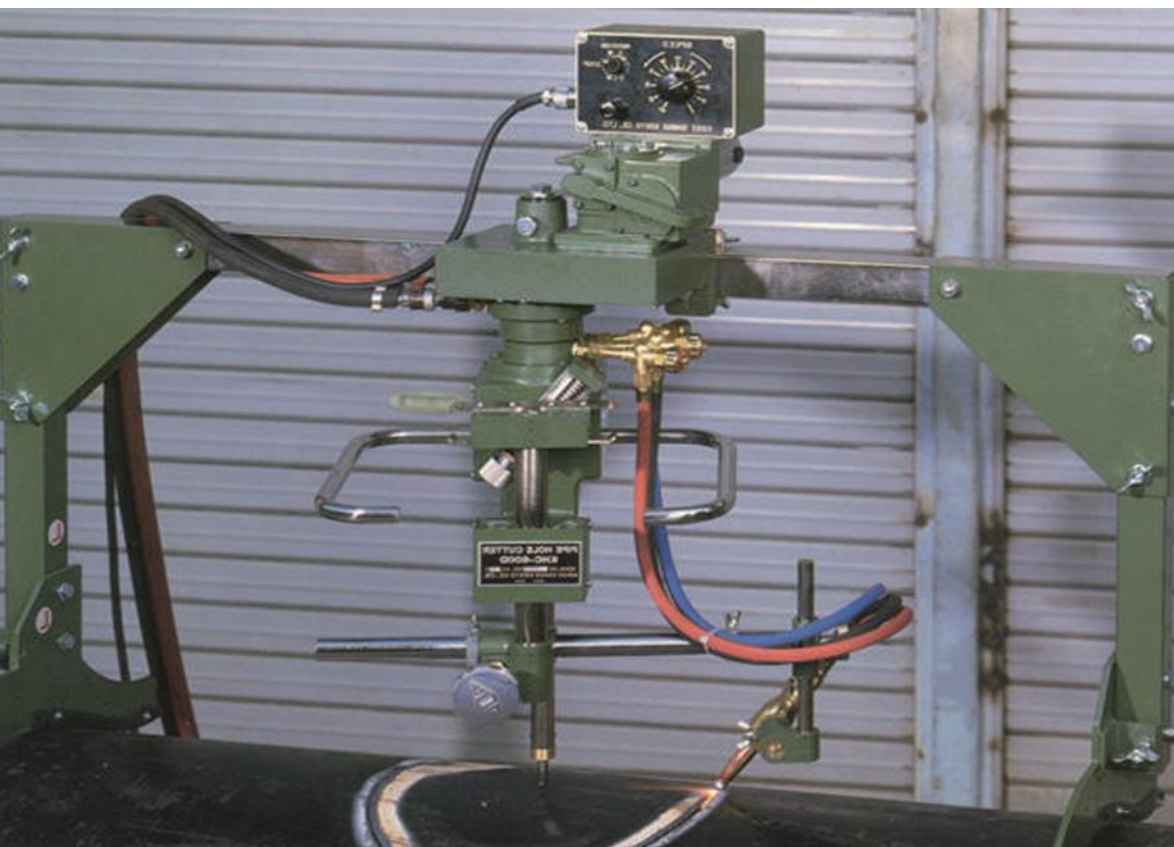
Types

Model	Stock #
Auto Picle-S Plasma 110V	90119

Scope of delivery

Scope of delivery
Machine body with torch holder (including slide bar)
Remote controller with power and arc signal cables
Chain link (80 pcs. for 600mm pipe diameter)
Standard tool set
Operation manual

* Plasma power source is sold separately.



KHC-600D

Pipe Hole Cutting Machine

Features and Benefits

- **Automatic oxy-fuel pipe cutter**
Automatically bevel cuts or straight cuts holes into pipe
- **Infinite rotational gas manifold**
Tangle-free gas manifold eliminates tension to the torch during cutting, ensuring accurate, sharp & clean cuts.
- **H-lever handle**
Torch height is automatically maintained to work distance based on trigonometry function of H-lever; very easy setup with just two adjustments
- **On/Off drive clutch**
- **Flat plate circle cutting**
Can be used for circle cutting on flat plate

KHC-600D is ideally suited for cutting high precision T-joint circles including any hole that crosses the side of the pipe for piping systems, high pressure vessels and heat exchangers. Developed with Koike Advanced Technology, the **KHC-600D** is a compact design that is light weight and easy to operate.

In addition to cutting circles and bevel in flat plate, the machine can cut a vessel from the inside or outside.



T-Joint pipe hole cutting

High quality cuts with easy operation

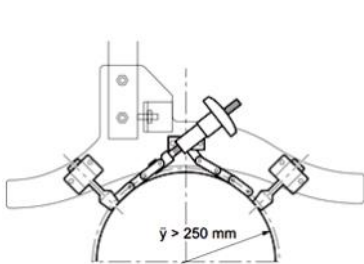
The **KHC-600D** increases quality and productivity of T-joint pipe hole cutting. Cutting nozzle to work distance is automatically maintained mechanically without cutting nozzle touching the plate. Very easy to setup with just two adjustments.

Also, rotating gas manifold with slip coupling is used on the main gas connection, keeping hoses from becoming tangled during operation.

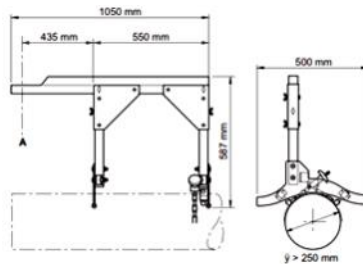
Accessories

Optional accessories

Accessory	Stock #	Description
Small diameter pipe fixture	90123	Fixture to small diameter pipes
Overhang cutting fixture	90125	Enables hole cutting near the end of pipe
Transformer AC230V - 42V	222.002.207	For 42V models
Transformer AC230V - 110V	90100	For 110V models



Small diameter pipe fixture



Overhang cutting fixture

Type and Specification

Specification

	KHC-600D
Cutting thickness	5 -50 mm
Torch rotation speed	0.12 ~ 1.2 rpm
Cutting diameter	Ø 80 ~ 600 mm
Torch up/down stroke	0 ~ 100 mm
Torch revolving radius	r 40 ~ 300 mm
Bevel angle	0 ~ 45°
Speed control	Control with dial operation
Pipe ratio branch : main	1:2 and above
Input power	AC 115V / AC 42V
Dimension	L1050 x W500 x H760 mm
Weight	26 kg (incl. support leg)

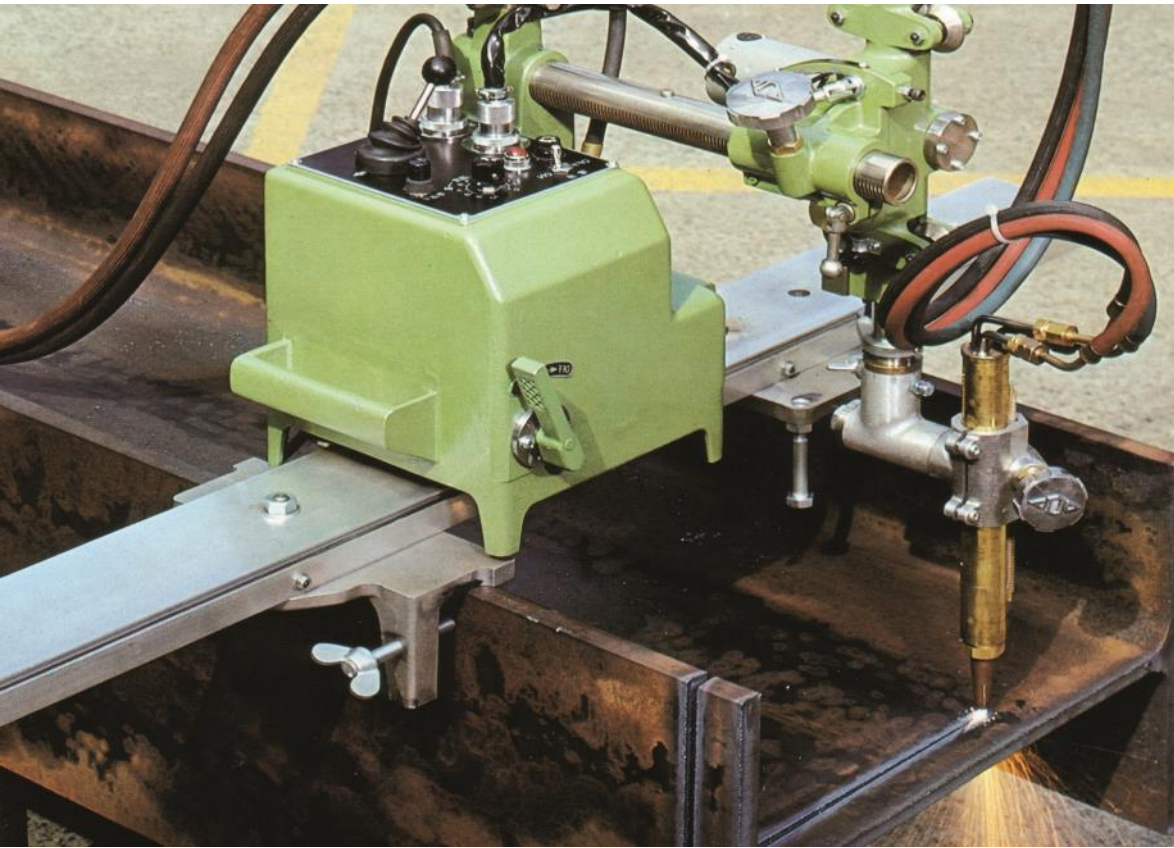
Types

Model	Stock #
KHC-600D 42V	90122
KHC-600D 110V	90121

Scope of delivery

Scope of delivery
Machine body including support leg
Cutting nozzles (102HC or 106HC, size #0, 1, 2)
Power cable
Standard tool set
Operation manual





MINI-MANTIS II

H-Beam Cutting Machine

Features and Benefits

- **Three rail types**
Makes web and flange cutting easy and efficient.
- **Adjustable rail and rack bar angle**
Allows diagonal cuts on web and flange
- **Flame pre-set function**
Set preheat only once; saves time and gas
- **4-Way jog direction control**
Controls both flange and web cutting with one direction switch
- **Long flange bar option**
For cutting of longer flanges up to 700 mm
- **Lightweight and portable**
The body and vertical units weigh 15kg; easy to carry and use in tight spaces

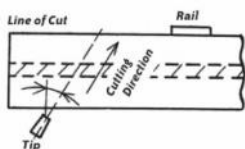
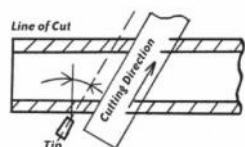
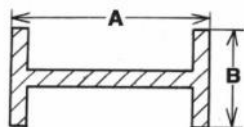
The **Mini-Mantis II** is a semi-automatic gas cutting unit for rapid and precise cutting of H-beam web and flange.

KOIKE's quality construction, ensuring durability and trouble-free operation, and you have an economical, efficient, compact gas cutting machine for H-beam steel.



Semi-automated H-beam cutting

Ideal for various types of H-beam steel



The **Mini-Mantis II** provides high-precision diagonal cuts that are clean and sharp. Two motors drives the torch for both web and flange cutting. No need to turn and mark the workpiece.

Right angle cutting capacity

- Web cutting ("A" in the diagram)
 - 150 - 600 mm: 600-ST rail
 - 150 - 900 mm: 900-ST rail
 - 900 - 1500 mm: 1500-ST rail
- Flange cutting ("B" in the diagram)
 - 150 - 400 mm: Standard
 - 150 - 700 mm: With optional Slide bar 1200L

Diagonal cutting capacity

- 30 degrees maximum for both web and flange cutting.

Accessories

Optional accessories

Accessory	Stock #	Description
600-ST rail	90234	600mm effective cutting , rail lengths 1100 mm
900-ST rail	90235	900 mm effective cutting , rail lengths 1400 mm
1500-ST rail	90136	1500 mm effective cutting, rail lengths 2100 mm
Slide bar 1200L	32027	700 mm vertical stroke for flange cutting
Transformer AC230V - 110V	90100	For 110V models

Type and Specification

Specification

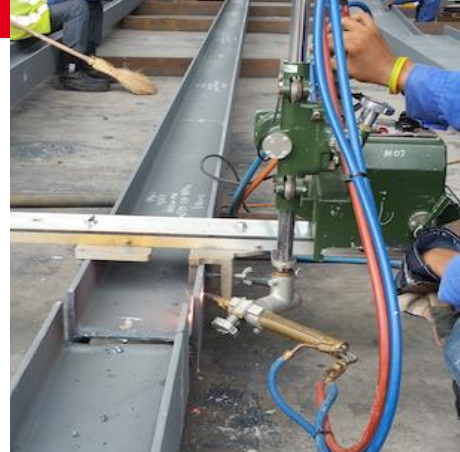
	Mini-Mantis II ST Set
Cutting thickness	5 -30 mm
Cutting speed	100 - 700 mm
Bevel angle	0 ~ 35°
Speed control	Dial operation
Driving method	Web: Friction roller Flange: Rack and Pinion
Input power	AC 110V
Dimension (incl. vertical unit)	L350 x W350 x H880 mm
Weight	15 kg

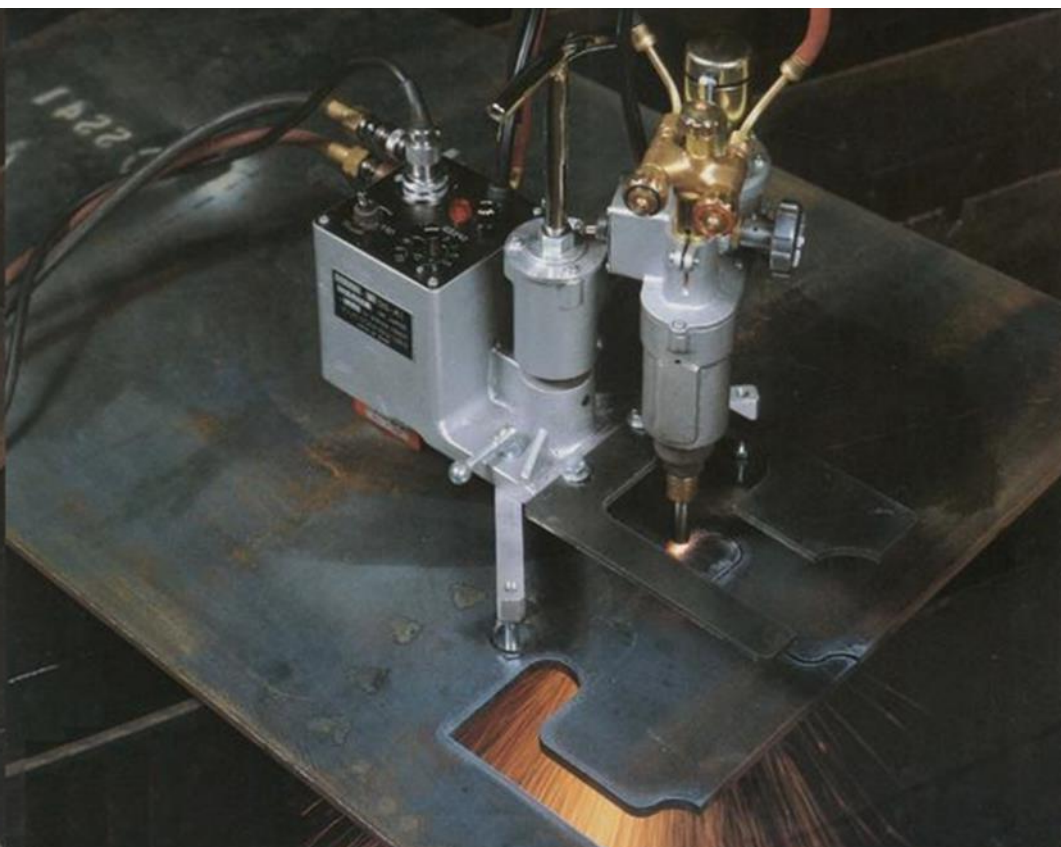
Types

Model	Stock #
Mini-Mantis II ST 110V Set	90131

Scope of delivery

Scope of delivery
Machine body
ST-400 Vertical unit with torch unit
Power cable
Standard tool set
Operation manual





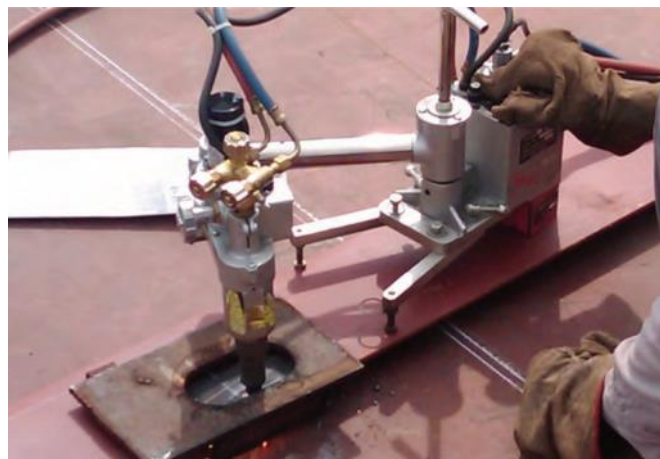
IK-82 Series

Portable Shape Cutting Machine

Features and Benefits

- **Oxy-fuel pattern cutting**
Increase efficiency and productivity of repeating shape cutting by using templates
- **Compact and lightweight**
Designed to occupy minimal space. The machine is useful for making holes on H-beam webs, processing bulb stiffener openings on a long strip.
- **Magnetic tracing head**
Magnet is integrated in the tracing head; clean sharp cuts are realized by accurate template tracing
- **Permanent magnet base**
Permanent magnet in the machine base secures machine to workpiece for smooth and accurate cuts

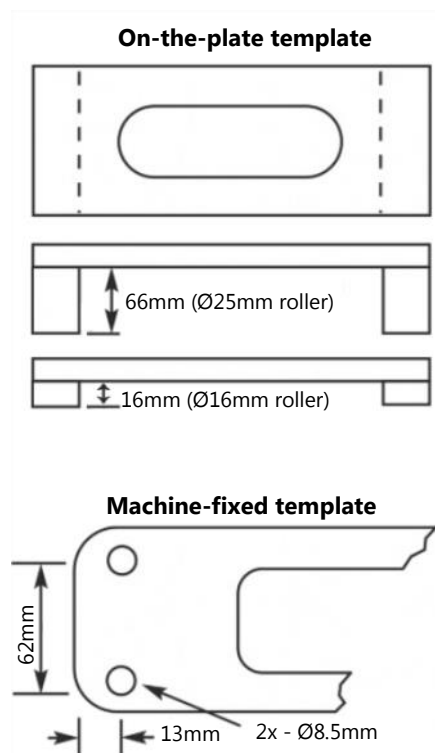
The **IK-82 Series** are the most advanced magnetic tracing type gas cutter on the market. The innovative design and unique modular structure was created to reduce equipment mass and weight and to provide a system configuration that ensures easy operation. The IK-82 comes in two types according to the effective cutting length.



Hole and slot cutting in narrow spaces

Increase productivity of repetitive shape cutting

The **IK-82 Series** is an ideal machine to improve productivity and quality of repetitive shape cutting. By the use of template, slot, scallop and hole cutting are easily be done on steel profiles and stiffeners used in shipbuilding.



Its minimal, compact design allows the machine to be placed in tight spaces, such as between flanges on a H-beam. Magnetic template follower together with simple, rugged stainless steel ensures a sharp cut.

Template production

Template for IK-82 machines are produced by the customer.

- Thickness 6 - 12 mm steel plate
- On-the-plate templates for easy exchange of template
- Machine-fixed template, convenient for mass-production of similar shapes.



IK-82 M300 being used for profile cutting



Increases productivity of repetitive cuts



Shipyard application example

Type and Specification

Specification

		IK-82 S200	IK-82 M300
Max. cutting capacity	Circle	Ø 200 mm	Ø 300 mm
	Ellipse	420 x 160 mm	600 x 200 mm
Cutting speed		100 - 900 mm/min	100 - 600 mm/min
Magnet roller diameter		Ø 25 mm	Ø 16 mm
Cutting thickness		5 -50 mm	
Machine securing		50 kg magnet with detaching lever	
Bevel angle		Not suitable for bevelling	
Speed control		By Transistor, dial speed adjustments	
Cutting nozzle	Acetylene	Koike 402ST type	
	Propane	Koike 406NT type	
Input power		AC 110 V	
Weight		7.5 kg	9.5 kg

Types

Model	Stock #
IK-82 S200 110V	90060
IK-82 M300 110V	90063

Scope of delivery

Scope of delivery
Machine body with arm and torch unit
Cutting nozzles (102HC or 106HC, 2 size #0, 1, 2)
Power cable
Standard tool set
Operation manual



CIR-CUT II

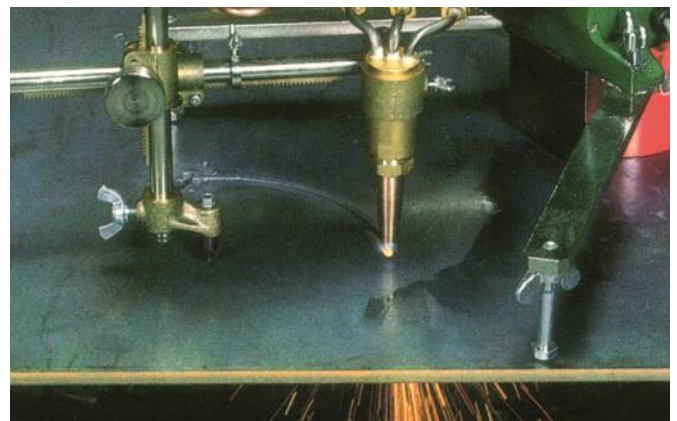
Portable Circle Cutting Machine

Features and Benefits

- **Oxy-fuel circle cutting machine**
Bevel or straight cut circles or holes
- **Rotating gas manifold**
Tangle-free hoses for ease of use
- **Electro Magnet**
Holds the machine to surface, enables vertical surface cutting.
- **Excellent cutting capacity**
Circle diameters ranging from Ø 40 - 200 mm, cutting thickness up to 30 mm and bevelling 0° - 45°
- **Lightweight and compact**
11.3kg compact body with a large lifting handle makes the machine extremely portable
- **Centering pin**
Accurate and easy positioning of the machine

The **Cir-Cut II** is a portable automatic oxy-fuel circle cutting machine, designed to cut or bevel circles in on flat or vertical surfaces, and any angles in between.

High quality results done quickly and easily makes this Koike machine a must in your inventory for circle cutting.



Versatile circle cutting machine

on flat and vertical surfaces

The **Cir-Cut II** is specially designed to maximize productivity of circle and hole cutting on flat and vertical surfaces.

The 11.3 kg compact body is made of robust aluminium die-cast body and easy to carry with large lifting handle. The 300 kg/f electro magnet allows the machine to be positioned in vertical position. Tangle-free rotational gas manifold gives no loads to the torch, providing an excellent smooth feed through out the cut.

Radius indicator on the cross feed bar and bevel angle indicator on the torch ensures high quality cuts to be achieved with minimal setup time.



Bevel cutting



Vertical surface

Accessories

Optional accessories

Accessory	Stock #	Description
Transformer AC230V - 110V	90100	For 110V models



Type and Specification

Specification

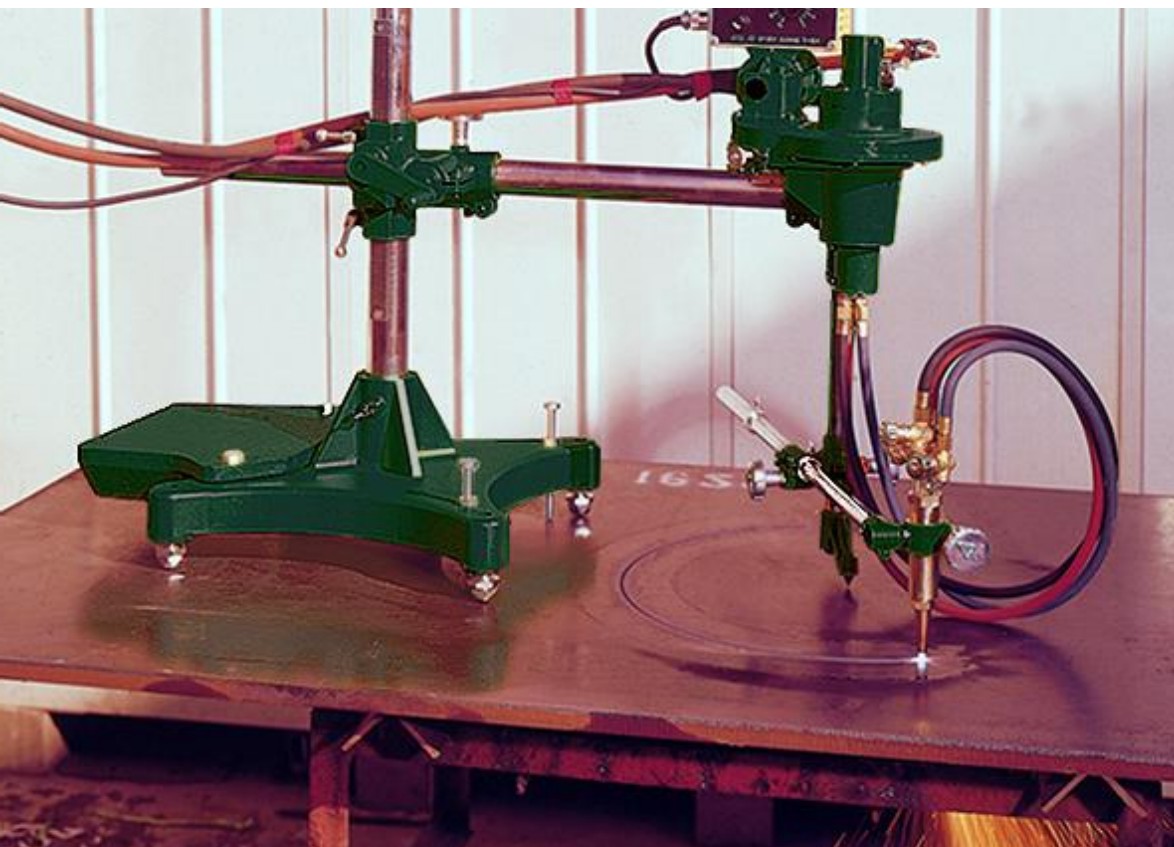
	CIR-CUT II
Cutting thickness	5 – 30 mm
Cutting diameter	Ø 40 - 200 mm
Torch rotation speed	0.6 - 6.0 rpm
Bevel angle	0 - 45°
Machine securing	Electromagnet (300kg)
Input power	AC 110V
Dimension	L410 x W450 x H395 mm
Weight	11.3 kg

Types

Model	Stock #
CIR-CUT II 110V	90073

Scope of delivery

Scope of delivery
Machine body with torch set
Centering pin
Cutting nozzles (102HC or 106HC, size #0, 1, 2)
Power cable
Standard tool set
Operation manual



IK-70 Model 1000

Portable Wide-Range Circle Cutting Machine

Features and Benefits

- **Oxy-fuel circle cutting machine**
Bevel or straight cut circles or holes
- **Rotating gas manifold**
Tangle-free hoses for ease of use
- **Excellent cutting capacity**
Circle diameters ranging from Ø 150 - 1000 mm, cutting thickness up to 50 mm and bevelling 0° - 45°
- **Cantering pin**
Accurate and easy positioning of the machine

The rugged construction of the **IK-70** is designed for quality flame cutting circles in a wide range of sizes. Operational versatility, ease and economy have all been built into this precision machine. Central controls, convenient clutch lever, variable mode operations, rigid yet lightweight unit, are just some of the features of this portable machine.



Precision circle cutting of various sizes

Easy Operation, Versatile Cutting

Operation of **IK-70** is very easy. Adjust the speed by simply turning the knob on the control box. Cutting direction, stop and change switch are all conveniently located on the control. Select the optimum cutting speed range by shifting the 3-position clutch lever on the front of the gear box. Change from high to low speed smoothly while cutting. Shift the clutch to the stop position and easily adjust the torch position.

The specially designed stand allows stability and flexibility in the field. Vertical position is easily obtained by turning the handle on the stand.

Cutting precision can be achieved from 0-45° inclines by adjusting the arm joint to ensure torch position.



Bevel cutting



Vertical surface

Accessories

Optional accessories

Accessory	Stock #	Description
Transformer AC230V - 110V	90100	For 110V models



Angled plate cutting

Type and Specification

Specification

	IK-70 Model 1000
Cutting thickness	15 – 50 mm
Cutting diameter	Ø 150 - 1000 mm
Torch rotation speed	0.04 - 1.5 rpm
Bevel angle	0 - 45°
Slope cutting angle	0 - 90°
Machine securing	Stand with counter weight
Input power	AC 110V
Weight (incl. counter weight)	55 kg

Types

Model	Stock #
IK-70 Model 1000 110V	90081

Scope of delivery

Scope of delivery
Machine body with torch set
Machine stand
Counter weight
Cutting nozzles (102HC or 106HC, size #0, 1, 2)
Power cable
Standard tool set
Operation manual



PNC-12 EXTREME

Portable CNC Cutting Machine

KOIKE Auto Nesting
CAD/CAM included

Features and Benefits

- **Oxyfuel and plasma cutting**
Machine is ideal for either oxyfuel or plasma cutting configuration
- **Easy operation**
Simple CNC controller with highly customizable parameters enables high quality cuts to be achieved easily
- **Rigid linear guiding system**
Rigid linear guiding system for both X and Y axis
- **Robust steel-made longitudinal rail**
Steel-made rail provides extra stability and durability in heavy duty working environment
- **Auto Nesting CAD/CAM software**
Every PNC-12 Extreme package comes standard with Koike original CAD/CAM software
- **Flexible shape cutting**
CNC control allows cutting of various shapes

PNC-12 Extreme is a flexible, productive, and affordable CNC cutting solution designed to provide high quality cuts using oxyfuel and plasma cutting technology.

PNC-12 Extreme is a perfect machine to enter the world of CNC cutting.

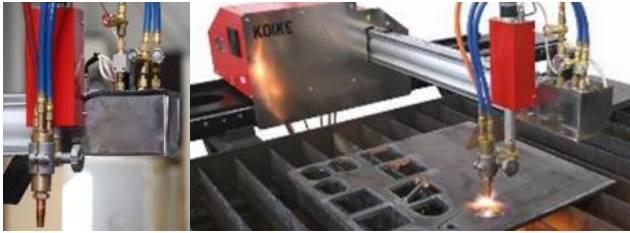


Designed with Koike quality standard

Flexible cutting

Oxy-Fuel configuration

- High quality cutting from 5mm to 50mm thickness mild steel.
- Affordable CNC cutting solution



Plasma configuration

- Faster cutting on almost all types of metal plates.
- Works with most air plasma systems upto 100A (plasma power source is sold separately)



Reliability and performance

Cross bar design

- Extra-wide cross bar with linear guiding system realizes high quality cuts.
- Cross bar compartments are separated from CNC for better dust protection for electrical parts.
- Plasma lead and cables are placed in metal square pipe for spatter protection.



Longitudinal rail

- Robust steel welded construction.
- Designed to maximize durability in heavy-duty working environment.
- Weight contributes to provide stability to the machine movements.
- Linear block is securely fixed onto a thick, long aluminium base that fully covers entire length of the machine body.



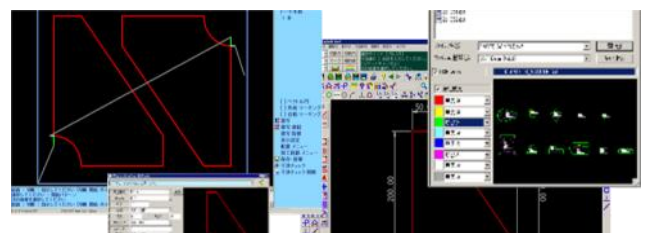
Koike D420 Controller

- Simple and easy to use.
- 47 pre-installed shape patterns
- Numerous functions including nesting, plate alignment, mirroring, pierce point selection, and more.



KOIKE Auto Nesting CAD-CAM software included

- Auto nesting and sequence up to 12 shapes per cutting plan.
- Easy to learn and operate.



Cutting Capability and standard features

Oxy-fuel cutting

Three solenoid valves

- Quick and easy ignition and flame adjustment.

Piercing sequence

- Customizable piercing sequence allows optimum piecing control and productivity.

Cross bar with integrated gas lines

Clean and sharp cuts

- Koike High-speed Divergent Nozzles are included in every oxy-fuel configured PNC-12 Extreme, providing outstanding cutting speed and quality.

Expansion possibilities

- Variety of optional accessories available. Machine can be reconfigured to Plasma, Twin gas torch etc., at any time when needed.



Plasma cutting

Arc voltage control

- Automatically detects live arc voltage and make necessary torch height adjustment during cutting.

Torch collision protection

- Magnetic torch break away system disjoint the torch from the lifter in case of torch collision.

Initial torch height control

- Initial height sensor is implemented in torch break away system, allowing fast and accurate torch initial height adjustment.

Internal torch cable carrier

- Cable carrier mounted on the cross bar allows easy handling of plasma torch cable during cutting. Fits most 100A plasma torch cable.

Plasma power source

- Most air plasma systems upto 105A with 35mm diameter torch.

Flexibility

- Variety of optional accessories available. Machine can be reconfigured to Oxy-fuel at any time when needed.

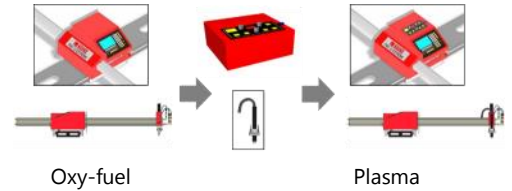


Optional Accessories

Conversion Kit

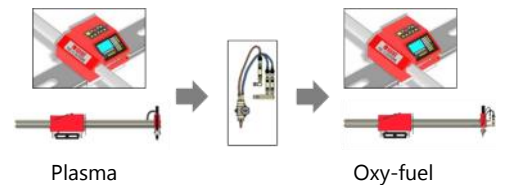
Gas to Plasma Conversion Kit

- A Kit to change an Oxy-Fuel configured machine to Plasma configuration. Included: Arc Voltage Control (AVC) unit, Plasma torch holder with integrated torch break away system and initial height sensor, all required cables.
- Plasma power source not included.



Plasma to Gas Conversion Kit

- A Kit to change an Plasma configured machine to oxy-fuel configuration. Included: Koike oxy-fuel torch unit with solenoid valves and gas connections, a set of 3pcs HC nozzles.



Cutting Table and Filter System

MCT Modular Cutting Table

Modular cutting table system. 1 module covers cutting area 1500 mm x 1500 mm. Delivered in almost-ready package. Final assembly is required on site.

- MCT 1515 contains 1 Module for PNC-12 Extreme Type-1015.
- MCT 1530 contains 2 Modules for PNC-12 Extreme Type-1530.

Important: 85% of each module surface must be covered for effective fume extraction. Easy Transport and Installation.

Including rail support to mount PNC-12 Extreme.



HELIOS Cutting Table for PNC

A 1500 mm x 3000 mm cutting table, suitable for plasma cutting. The table has 6 divided internal sections (500mm x 1500mm each).

As machine travels, fume extraction opening of each section open/close automatically by mechanically triggered pneumatic valves, allowing effective fume extraction.

Delivered complete, Including rail support, pneumatic valves and tubing.



Fume extraction valves

VDS2-H5C Filter system

A compact fume extraction filter unit. Requires Filter Kit to work with MCT cutting table. Full specification available upon request.

- Maximum flow capacity of 4000m³/hr
- Maximum pressure of 2000 Pa
- Includes PTFE made 2 cartridges. Each cartridge has filter surface of 20m².
- 80L dustbin capacity.

Filter Kit H5C

A Kit including duct pipes to connect VDS2-H5C with MCT Modular Cutting Table, air regulator, hose, vibration reducing mat and cartridge protection powder.



Plasma Power Source

Following is some products Koike Europe confirmed compatibility with PNC-12 Extreme.

- Hypertherm® Powermax series with interface connection
- Kjellberg® CutFire series with interface connection

Preassembled plasma interface cable is supplied, when one of above plasma systems are purchased (together with PNC-12 Extreme) from Koike Europe.

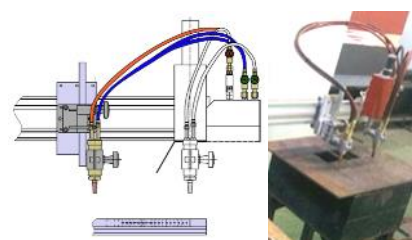


Oxy-fuel cutting accessories

Twin Torch Option

Adds 2nd oxy-fuel torch.

- Automatic gas control
- Manual torch up/down adjustment
- Maximum cutting thickness when using 2 torches: 30 mm
- Torch distance 75 - 600 mm



Twin Torch Attachment

A simple way to cut with two oxy-fuel cutting nozzle.

- Maximum cutting thickness when using 2 torches: 30 mm
- Torch distance 30 - 300 mm



Heavy Duty Torch set

Long oxy-fuel torch with 230 mm neck. Also includes metal bladed hose set. Recommended to customers who plan to cut thick materials on frequent basis. Metal blade protects the hose from spatters, which reduce frequency of hose replacement. Long torch allows machine to be positioned higher from the cutting table. Due to less heat input to the cross bar, longer service life can be expected.



Accessory	Type	Stock #	Description
Conversion Kit	Gas to Plasma	64072	
	Plasma to Gas	64073	
Cutting Table	MCT Type-1515	239.100.813	
	MCT Type-1530	239.100.814	
	HELIOS Type-1530	239.100.815	
Filter System	VDS2-H5C Filter System	239.100.119	
	Filter Kit for VDS2-H5C	239.100.231	
Plasma Power Source	Hypertherm® Powermax 65	64074	Stock # is valid only for purchases with PNC-12 Extreme. A convenient package including interface cable assembly by Koike. Contact Koike for detailed configuration and specification of each plasma power source.
	Hypertherm® Powermax 85	64075	
	Hypertherm® Powermax 105	64076	
	Kjellberg® Cutfire 100i	64077	
Oxy-fuel Accessory	Twin Torch Option	64079	
	Twin Torch Attachment	ON001	
	Heavy Duty Torch set	64080	

Type and Specification

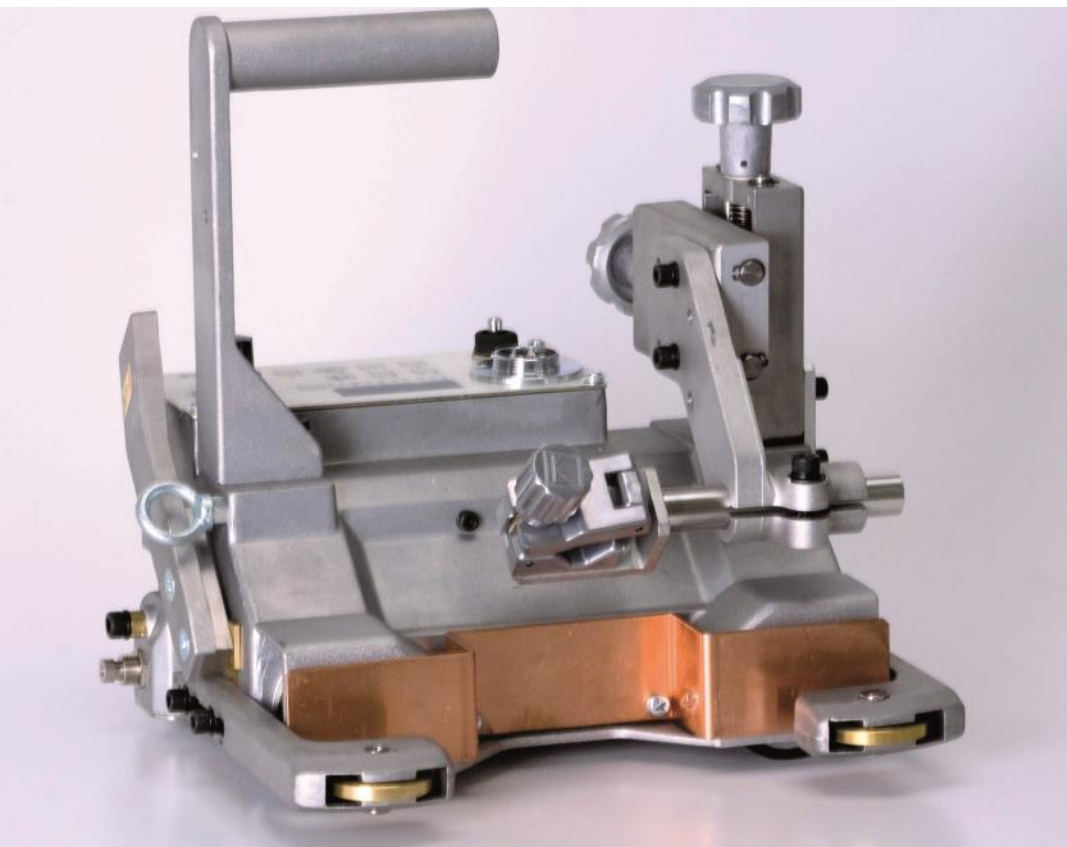
Specification

		PNC-12 Extreme	
Type		1015	1530
Effective cutting area		1000 x 1500 mm	1500 x 3000 mm
Rapid travel speed		4000 mm/min	
Maximum cutting speed		3000 mm/min	
Longitudinal rail		Welded steel construction	
Cross bar		Aluminium extrude with integrated gas piping	
Motor: X-axis and Y-axis		Stepping Motor	
Motor: Torch lifter		DC motor	
Driving method		Rack and Pinion	
Rail system X-axis and Y-axis		Linear guiding	
Input voltage		Single phase 200-240VAC, 50/60 Hz	
CNC: Main features	Model	KOIKE D420	
	Display	7 inch color	
	Language	EN / DE / FR / IT / NL / RU / ES and other	
	Program input	Manual MDI or by USB	
	Preinstalled cutting patterns	47 shapes	
	Program format	EIA format	
	Functions	Rotation, mirror, nesting, cutting recovery, piercing point selection and more.	
Bundled Software: Main features	Version	KOIKE PNC-CAM Expert V2E	
	CAD drawing	2D CAD with many functions, optimizing cutting parts creation	
	CAD data import	DXF, DWG	
	CAD data saving	DXF, PT (Koike part registration format)	
	Auto nesting function	Yes	
	Auto sequence function	Yes	
	# of shape types on 1 plan	12	
	Nesting data export	Direct saving to USB, with PNC-12 Readable format	
Oxy-fuel model features	Maximum cutting thickness	50 mm (*)	
	Number of solenoid valves	Total 3 pcs, 1 for each gas line	
	Piercing sequence	Customizable torch movement and timing	
	Cutting nozzle	5x KOIKE High-speed nozzles included	
Plasma model features	Plasma system	Not included	
	Maximum cutting thickness	Depends on Plasma power	
	Torch holder diameter	For Ø35 mm plasma torch	
	Initial torch height control	Yes	
	Torch collision protection	Yes	
	Arc Voltage torch height control	Yes	
	Compatible arc voltage division ratio	1:1 (raw arc voltage) or 50:1	

(*) with standard setup. Contact Koike for requirements for thicker material cutting using PNC-12 Extreme

PNC-12 Extreme: Selections

Stock #	Model	Gas type	Cutting tool	Cutting area
64030	PNC-12 Extreme Type-1015 ACE	Acetylene	Oxy-fuel	1000 x 1500 mm
64031	PNC-12 Extreme Type-1015 LPG	Propane		
64056	PNC-12 Extreme Type-1015 Plasma	-	Plasma	
64032	PNC-12 Extreme Type-1530 ACE	Acetylene	Oxy-fuel	1500 x 3000 mm
64033	PNC-12 Extreme Type-1530 LPG	Propane		
64057	PNC-12 Extreme Type-1530 Plasma	-	Plasma	



WEL-HANDY MULTI Series

Multi-Purpose Mechanized Welding Carriage

Features and Benefits

- **Multiple weld process and options**

Two models available to perform continuous or stick/tack welding. Wide variety of options to achieve different types of welding needs.

- **50kg permanent magnet**

Equipped with class-leading 50kg permanent magnet, ensuring strong traction and smooth feed in both horizontal and vertical positions.

- **Durable aluminium die cast body**

Designed for the most heavy duty working environment, the aluminium die cast body is highly resistant against spatter, dust and heat.

- **Lightweight and Portable**

Aluminium die cast body allowed integration of strong driving system while maintaining the machine body weight light at 7.5 kg

Light, compact, all wheel drive, magnetic force traction and a low center of gravity allows the **Wel-Handy Multi** to achieve the highest pulling power and stability in the marketplace today.

Automation of welding not only improves quality and production times, it saves money in measurable ways that are very often overlooked. Welding wire and shield gas use are greatly reduced. Working conditions are improved for the welder by reducing fatigue, fumes and sparks.



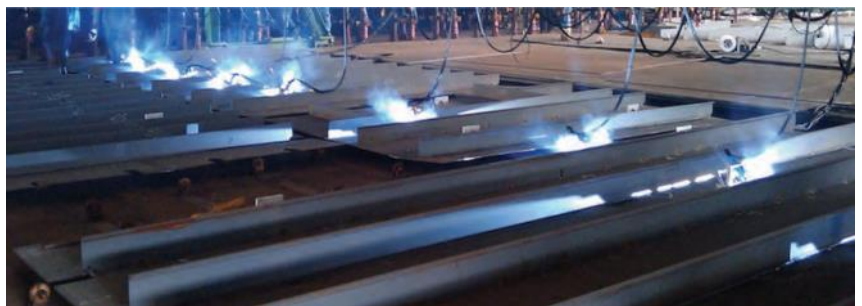
Designed and built for heavy duty working environment

Durable design, reliable performance

- **Compact and lightweight**
L259 x W259 x H264mm, at weight only 7.5kg.
- **Excellent durability**
Maintenance free, single piece aluminium die cast body provides excellent protection against spatter, fume and dust.
- **50kg permanent magnet**
Ensures strong pulling power during horizontal and vertical welding. The magnet can easily be detached from the plate by a lever.
- **Low center of gravity**
Provides stable performance even when climbing on a wall.
- **Durable roller and arm**
Guide roller is made of single-piece cast aluminum for higher durability. Roller is protected against spatters.
- **Heat resistant rubber 4-Wheel drive system**
Provides strong traction, ensuring high quality weld.
- **Absolute dust measures**
Mono-design die-cast body casing with stainless steel bottom plate provides complete dustproof structure.
- **4-wheel drive system**
Provides stable traction and transmits the power to the plate efficiently.
- **High stand off**
6mm stand off enables crossing over welding beads.
- **Easy setup**
No guide rails required. Wel-Handy Multi guide itself along the fillet plate.
- **Limit switches at each end of the carriage**
Automatic Shutdown at the end of the weld
- **Automatic Height Control**
Wel-Handy Multi runs directly on the work piece. Torch to work distance is maintained constant by the machine body and guide rollers.



Dust resistant, single piece aluminium die cast body



Multiple Wel-Handy Multi's in simultaneous operation

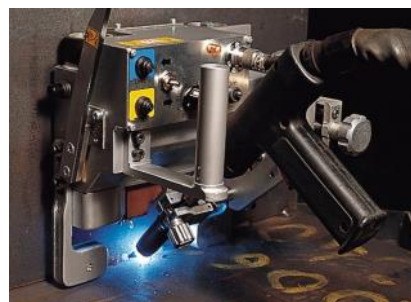
Two models available

STANDARD model

- **Performs:**
 - Continuous welding
- Limit switches
- Interface to power source (signal cable included)
Allows carriage to control arc on/off remotely.
- Travel speed 150-1500 mm/min



Standard model control panel



Wel-Handy Multi Standard on Fillet plate

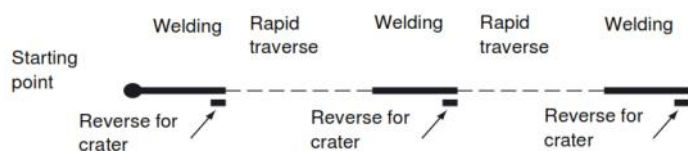
TACK + WEAVING model

- **Performs:**
 - Continuous welding, Continuous welding with weaving
 - Tack (stich) welding
- Programmable controller
- Weaving unit included
- Limit switches
- Interface to power source (signal cable included)
Allows carriage to control arc on/off remotely.
- Travel speed 60-600 mm/min

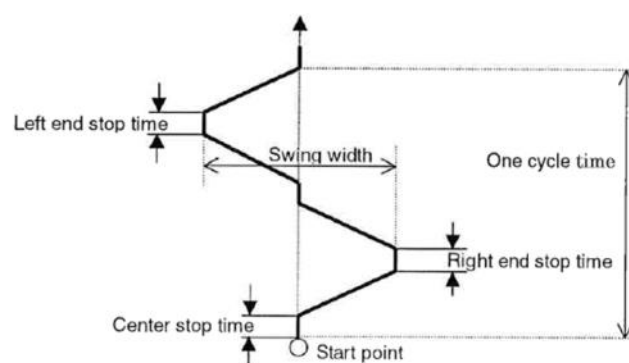


Tack + Weaving model control panel

Tack adjustable parameters



Weaving adjustable parameters



Optional Accessories



Twin torch option

- 2 torch fillet welding
- Upto 500mm fillet height
- Lightweight aluminum arms



Tandem torch option

- Productivity improvement with tandem torch.
- Fan-shaped bracket suitable for delicate torch setting loaded.



Tubular follower guide

- Traverse by vertical guidance of curved plate using bearings on both sides of plate.
- Suitable for welding short pipes onto a plate.



Compact Submerged Arc option

- Makes Wel-Handy Multi an ultra compact carriage for submerged welding.
- Contact Koike for details.

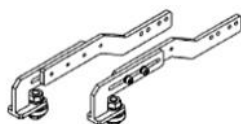


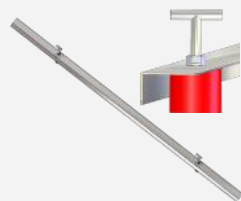
Plate edge guide roller

- Roller adjustable by 50mm forward/backward
- Plate need to be 10mm thickness



Magnet lifting handle

- Makes magnet release much easier



Straight guide rail

- For butt welding in straight line.
- 2m long, 2x magnets included.



Guide roller extension plate

- Extends guide roller by 45mm.



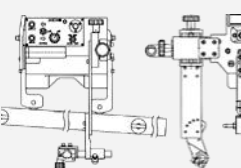
Two-point torch holder (curved)

- Secures the torch tightly with 2 clamps.
- Torch compatibility need to be checked.



Two-point torch holder (straight)

- Secures the torch tightly with 2 clamps.
- Clamping diameter 16-20mm. Torch drag angle fixed at 4 degrees. 80mm clamping distance required.



Torch holder extension bar

- Extends the torch by 140-220mm.
- Suitable for butt welding using guide rail.



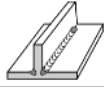
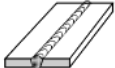
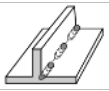
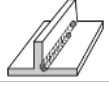
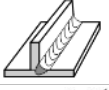
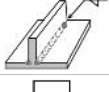
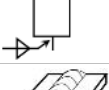
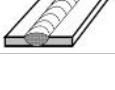
Clamp lever

- Faster torch angle and position adjustment

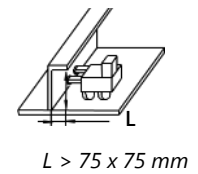
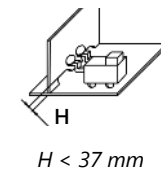
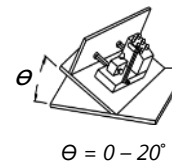
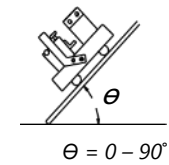
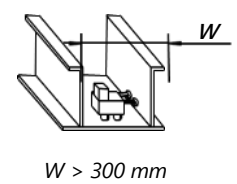
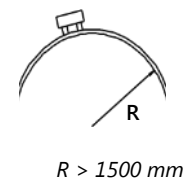
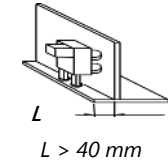
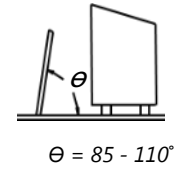
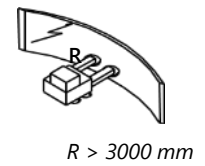
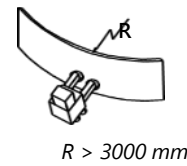
Accessory	Stock #
Twin torch option	90216
Tubular follower guide	1115109100
Plate edge guide roller	T61004332
Straight guide rail	61002282
Two-point torch holder (curved)	61000865
Torch holder extension bar	T61001223

Accessory	Stock #
Tandem torch option	on request
Compact Submerged Arc option	on request
Magnet lifting handle	T61001636
Guide roller extension plate	T61002102
Two-point torch holder (straight)	61000781
Clamp lever	T64000044

Application guide

Model		STANDARD	TACK+WEAVING
Stock No.		TBPJ64004-9	TBPJ64209-02
Fillet weld		•	•
Butt weld		Guide rail option	Guide rail option
Tack / Stich weld		-	•
Vertical weld		•	•
Horizontal position		Guide rail option	Guide rail option
1 run 2 pass		Tandem torch option	Tandem torch option
Contour weld		Tubular follower guide option	Tubular follower guide option
Pendulum Oscillation		-	•
Dual pass		Twin torch option	Twin torch option
Overhanging weld		•	-
Sub-Arc		Compact SAW option	Compact SAW option

• : possible



Vertical up butt welding using guide rail



Twin torch option



Type and Specification

Specifications

		WEL-HANDY MULTI Standard	WEL-HANDY MULTI Tack + Weaving
Machine weight		7.5 kg	9.1 kg
Machine dimension		L259 x W259 x H264 mm	L300 x W300 x H264 mm
Traction Force		16 kg	12 kg
Travel speed		150 ~ 1500 mm/min	60 ~ 600 mm/min
Tracking system		Fillet tracking guide roller	
Standoff (plate to base plate)		6 mm	
Magnet up/down mechanism		Magnet and Lever set	
Driving method		4-wheel Driving Rubber Roller (Chain Transmission)	
Magnet type		50 kg Permanent Magnet	
Torch adjustment	Torch angle	40 ~ 55°	
	Up/down	45 mm	
	Forward/backward	45 mm	
	Drag/pull angle	+/- 5°	
Automatic stop function		Limit switch on each end of carriage	
Unwelded lengths (start & end total)		approx. 270 mm	approx. 305 mm
Weaving unit		-	included
Welding method	Continuous	Yes	Yes
	Tack / Stitch	-	Yes
	Weaving / Oscillation	-	Yes
Power & signal cable		Power and Signal integrated Y-branch cable (Carriage-branch: 6 m, Branch-Power: 10 m, Branch-feeder:0.5 m)	
Torch holder diameter		16 ~ 20 mm	
Input power		AC 42V 50/60Hz	

Types

Carriage Model		Stock #
WEL-HANDY MULTI Standard	42V	TBPJ64004-9
WEL-HANDY MULTI Tack+Weaving	42V	TBPJ64209-02

Scope of delivery

Scope of delivery
Machine body
Weaving unit (Tack+weaving model only)
Power & signal cable
Allen keys (2pcs)
Operation manual



Apollo Global Coupling

Quick-release coupling series

Features and Benefits

- Increase productivity
- High quality
- Easy to use
- Contributes in work-site safety
- Automatic gas supply shutoff
- Double seal packing
- Miss-connection proof
- Designed according to ISO 7298

The **Apollo Global coupling** have been designed to provide quick set up and removal of cutting and welding equipment.

Precisely machined single push system easily connects matching couplings with a click. Safety lock function assures secure connection and prevents unintended disconnection during use.

KOIKE Apollo Global couplings fulfill ISO 7289.



High quality design

- **Brightly colored**

For safety, each coupling socket has lock key made of brightly colored resin. Unlike sticker or paint, color stays on for long time, contributing in safety.

- **Safety lock mechanism**

Each socket is equipped with Safety Lock function, which secures the connection and prevents accidental disconnection.

- **Automatic gas supply shutoff**

Allows flow of supply gas only when couplings are connected. Gas supply is automatically shutoff when couplings are disconnected.

- **Double seal packing**

Two unique seal packings provided between plug and socket assures tight sealing.

- **Chrome plated**

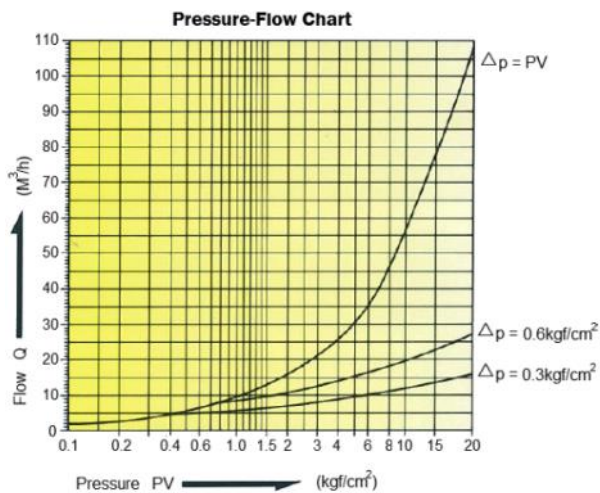
Durable chrome plating finish provide corrosion resistance and ensures smooth coupling to last.

- **Quality**

Designed according to ISO7289 and produced in Japan under excellent quality management.



Technical specification



- **Maximum working pressure**

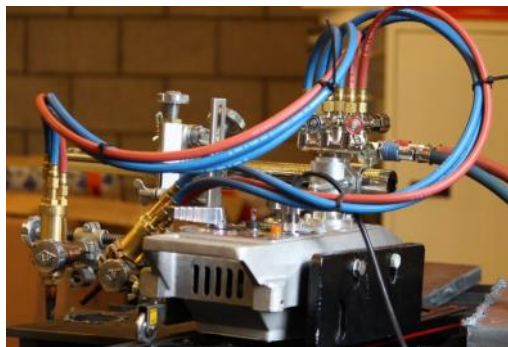
Oxygen	9.8 bar
Fuel gas	2.0 bar
Inert gas (Welding gas)	9.8 bar

- **Check valve working pressure (Z-type coupling only)**

Activation at	0.015 bar
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- **Durability**

Endurance test (by UL) : 30,000 cycles



Sample: **Z O P - 1 A S**

Series

S: "Global" Coupling series

Flashback arrestor

A: Equipped

Gas type

1: Oxygen 2: Fuel gas 3: Inert gas (welding gas)

Connector shape

P: Plug S: Socket

Equipped to

G: Regulator A: Hose O: Machine/Torch

Check valve (back-flow protection)

Z: Equipped

Model: GS

Regulator mount



Model	Connection	Type of gas	Installation	Stock #
GS-1S	G1/4 RH	Oxygen	Regulator	CG2311
	G3/8 RH	Oxygen	Regulator	CG2321
	M16 x 1.5 RH	Oxygen	Regulator	CG2821
	BSPF 3/8" RH	Oxygen	Regulator	CG2621
	US 9/16"-18 UNF RH	Oxygen	Regulator	CG2021
GS-2S	G1/4 LH	Fuel gas	Regulator	CG2333
	G3/8 LH	Fuel gas	Regulator	CG2331
	M16 x 1.5 LH	Fuel gas	Regulator	CG2841
	BSPF 3/8" LH	Fuel gas	Regulator	CG2641
	US 9/16"-18 UNF LH	Fuel gas	Regulator	CG2041
GS-3S	G1/4 RH	Inert gas (Welding gas)	Regulator	CG3031
	G3/8 RH	Inert gas (Welding gas)	Regulator	CG3321
	M16 x 1.5 RH	Inert gas (Welding gas)	Regulator	CG3821
	BSPF 3/8" RH	Inert gas (Welding gas)	Regulator	CG3621
	US 9/16"-18 UNF RH	Inert gas (Welding gas)	Regulator	CG3021

Model: AP / ZAP

Hose mount, regulator side



Model	Max. hose diameter	Type of gas	Installation	Stock #
AP-1S	6.0 mm	Oxygen	Hose	CG2500
	8.2 mm	Oxygen	Hose	CG2414
	9.2 mm	Oxygen	Hose	CG2424
AP-2S	6.0 mm	Fuel gas	Hose	CG2501
	8.2 mm	Fuel gas	Hose	CG2474
	9.2 mm	Fuel gas	Hose	CG2502
	11 mm	Fuel gas	Hose	CG2434
AP-3S	6.0 mm	Inert gas (Welding gas)	Hose	CG3432
	8.2 mm	Inert gas (Welding gas)	Hose	CG3414
	9.2 mm	Inert gas (Welding gas)	Hose	CG3424



ZAP-1S	6.0 mm	Oxygen	Hose	CG2924
	7.0 mm	Oxygen	Hose	CG2926
	8.2 mm	Oxygen	Hose	CG2312
	9.2 mm	Oxygen	Hose	CG2322
	11 mm	Oxygen	Hose	CG2922
ZAP-2S	6.0 mm	Fuel gas	Hose	CG2944
	7.0 mm	Fuel gas	Hose	CG2946
	8.2 mm	Fuel gas	Hose	CG2334
	9.2 mm	Fuel gas	Hose	CG2942
	11 mm	Fuel gas	Hose	CG2332
ZAP-3S	6.0 mm	Inert gas (Welding gas)	Hose	CG3924
	8.2 mm	Inert gas (Welding gas)	Hose	CG3312
	9.2 mm	Inert gas (Welding gas)	Hose	CG3322



Model: **AS**

Hose mount, machine / torch side



Model	Max. hose diameter	Type of gas	Installation	Stock #
AS-1S	6.0 mm	Oxygen	Hose	CG2963
	7.0 mm	Oxygen	Hose	CG2967
	8.2 mm	Oxygen	Hose	CG2341
	9.2 mm	Oxygen	Hose	CG2351
	11 mm	Oxygen	Hose	CG2961
AS-2S	6.0 mm	Fuel gas	Hose	CG2983
	7.0 mm	Fuel gas	Hose	CG2987
	8.2 mm	Fuel gas	Hose	CG2363
	9.2 mm	Fuel gas	Hose	CG2981
	11 mm	Fuel gas	Hose	CG2361
AS-3S	6.0 mm	Inert gas (Welding gas)	Hose	CG3132
	8.2 mm	Inert gas (Welding gas)	Hose	CG3341
	9.2 mm	Inert gas (Welding gas)	Hose	CG3351

Model: **ZOP**

Machine / torch mount



Model	Connection	Type of gas	Installation	Stock #
ZOP-1S	G1/4 RH	Oxygen	Machine / Torch	CG2342
	G3/8 RH	Oxygen	Machine / Torch	CG2352
	M16 x 1.5 RH	Oxygen	Machine / Torch	CG2862
	BSPF 3/8" RH	Oxygen	Machine / Torch	CG2662
	US 9/16"-18 UNF RH	Oxygen	Machine / Torch	CG2062
ZOP-2S	G1/4 LH	Fuel gas	Machine / Torch	CG2364
	G3/8 LH	Fuel gas	Machine / Torch	CG2362
	M16 x 1.5 LH	Fuel gas	Machine / Torch	CG2882
	BSPF 3/8" LH	Fuel gas	Machine / Torch	CG2682
	US 9/16"-18 UNF LH	Fuel gas	Machine / Torch	CG2082
ZOP-3S	G1/4 RH	Inert gas (Welding gas)	Machine / Torch	CG3342
	G3/8 RH	Inert gas (Welding gas)	Machine / Torch	CG3352
	BSPF 3/8" RH	Inert gas (Welding gas)	Machine / Torch	CG3662
	US 9/16"-18 UNF RH	Inert gas (Welding gas)	Machine / Torch	CG3062
ZOP-1S	G1/4 RH	Oxygen	Machine / Torch	CG2372
	G3/8 RH	Oxygen	Machine / Torch	CG2472
	M16 x 1.5 RH	Oxygen	Machine / Torch	-
ZOP-2S	G3/8 LH	Fuel gas	Machine / Torch	CG2392
	M16 x 1.5 LH	Fuel gas	Machine / Torch	-



Hand Torch

Heavy Duty Gas Cutting Torches

Features and Benefits

- **Tip mixing system**
- **Precisely balanced**
- **Heavy ribbed round handle**
- **Internal tip nut**
- **Easy grip gas valves**

Each cutting torch is built to the highest standards, then stringently tested to insure safe; long life operation. Designed for the professional for use in industries such as metal fabrication, shipyards, salvage, construction and other general purpose uses.



Ergonomics

Precisely balanced, long lasting hand torches

- **Tip mixing system**
The triple-seat nozzle mixing system assures greater safety and reduces the risk of flashback and backfire
- **Precisely balanced**
Each torch is designed to provide ease of use in any application.
- **Heavy ribbed round handle**
Provides good ventilation and a sure handed grip on the torch
- **Internal tip nut**
Protects threads in torch head
- **Easy grip gas valves**
Allows gloved hands to quickly and accurately set preheat flame



SILVER-CUT Series

- **Lightweight and compact**, well balanced heavy duty hand cutting torch
- **Chrome plated**
- **Triangular tube configuration** for greater strengths

SILVER-CUT K250



SILVER-CUT K250

Torch lengths	495 mm
Weight	1.0 kg
Cutting capacity	Max. 250 mm
Torch head angle	90°
Fuel gas type	Any medium pressure fuel gas

Types	Connection	Stock #
SILVER-CUT K250	G3/8 RH-LH	80496
SILVER-CUT K250 9/16	9/16" RH-LH	80495



MK Series

- **Expertly crafted in Japan**
- **Robust**, Heavy duty hand cutting torch
- **Three stainless steel tubes** provides strengths and durability while keeping gases separated to mix safe in the cutting nozzle.
- Cutting oxygen **lever with lock function**. (excl. MK-36)
- **Die forged head**, increased strengths and service life

MK-150



MK-150	
Torch lengths	466 mm
Weight	0.9 kg
Cutting capacity	Max. 150 mm
Torch head angle	90°
Torch connection	G3/8 RH-LH
Fuel gas type	Any medium pressure fuel gas

Types	Stock #
MK-150	80497

MK-250



MK-250	
Torch lengths	525 mm (standard, 90° head)
Weight	1.5 kg
Cutting capacity	Max. 250 mm
Fuel gas type	Any medium pressure fuel gas

Types	Angle	Connection (RH, LH)	Stock #
MK-250-75D	75°	G1/4, G3/8	80503
MK-250-90D	90°	G3/8, G3/8	80504
MK-250-180D	180°	G3/8, G3/8	DA222815

MK-300



MK-300	
Torch lengths	661 mm (standard, 90° head)
Weight	1.55 kg
Cutting capacity	Max. 300 mm
Torch head angle	75° and 90°
Torch connection	G1/4RH, G3/8LH
Fuel gas type	Any medium pressure fuel gas

Types	Torch angle	Stock #
MK-300-75D	75°	80507
MK-300-90D	90°	80508

MK-36



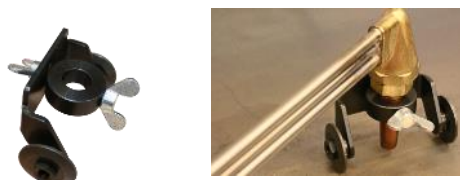
MK-36	
Torch lengths	915mm
Weight	1.5 kg
Cutting capacity	Max. 200 mm
Torch head angle	75° and 90°
Torch connection	G3/8 RH-LH
Fuel gas type	Any medium pressure fuel gas

Types	Torch angle	Stock #
MK-36 75D	75°	DA212825
MK-36 90D	90°	-

Hand Torch Accessory

■ Dual roller guide

Enables stable cutting. Equipped with two smooth rollers and a tip holder.



	Stock #
Dual roller guide	80515

■ Circle bar with center pin

Attachment to Dual Roller Guide, enabling circle cutting using hand torch. Cutting diameter adjustable upto Ø 550mm



	Stock #
Circle bar with center pin	80516



Koike Cutting Nozzles

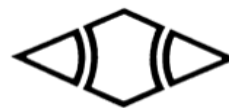
The Trademark for High Quality Cutting

Features and Benefits

- **Sharp, high quality cuts**
- **Small kerf**
- **Limited upper edge melt**
- **Limited upper edge slag**
- **Limited under slag**
- **Steady and safe cutting operation**
- **Cutting with small gas consumption**
- **Variety of selections**
 - Standard nozzle
 - Divergent high-speed nozzle
 - Out-mixing heavy duty nozzle
 - Speciality nozzles
- **Excellent quality management**

All Koike 100 Series cutting tips are designed to mix the fuel and the oxygen used for preheating inside the cutting tip. This is recognized as one of the safest methods.

The Koike D7 cutting tips are one of the most technically advanced cutting tips available, providing safety and accuracy while saving money in time and gas costs. Our high speed D7 Series of Cutting tips with a divergent tip increase cutting speed by upto 28% over standard tips and Gas consumption is reduced up to 26%. A stainless steel liner helps them last up to 5 times longer.

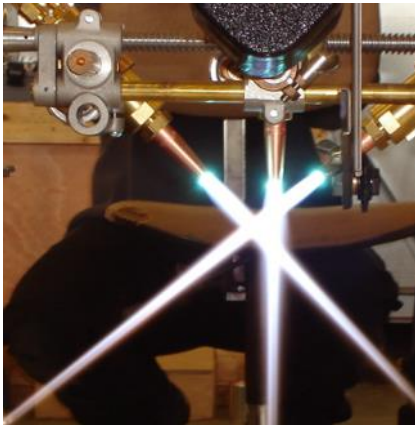


The trademark of Quality

All genuine KOIKE cutting nozzles are marked with KOIKE Japan logo.

Designed for High Quality Cutting

Commitment to research, design, manufacturing and inspection



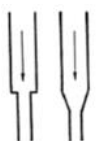
- **Design**
Each KOIKE cutting nozzle is designed for proper gas efficiency and to provide the highest cutting accuracy.
- **Quality**
Made in Japan. Koike's top level production facility and quality management system ensure each cutting nozzle to be of Koike quality.
- **Safety**
All 100 series cutting nozzles are designed to help prevent damaging flashbacks and backfires into the torch.

Koike Divergent Nozzle

- **State-of-the-Art design**
The cutting oxygen outlet of Koike High-speed Nozzles forms a divergent shape, designed through a high technical calculation to accelerate cutting oxygen flow upto 2 times faster the speed of sound.
- **Productivity**
Cutting speed is increased by upto 28% over standard nozzles.
- **Cost efficiency**
Due to faster cutting speed, gas consumption is reduced upto 26%.
- **Durability**
Stainless steel insert at the nozzle tip improves life time of the nozzle and ensures long lasting performance.
- **100% ignition tested**
All Divergent Nozzles are flame tested prior to packaging, ensuring every nozzle to perform as designed. Carbon adherence may remain on a new nozzle, but it is the sign of our quality.

Designed to perform.

KOIKE Standard
Straight Nozzle



Jet speed
Mach <1.0

KOIKE High-speed
Divergent Nozzle



Jet speed
D7: Mach 2.0
D5: Mach 1.8

Slow-speed
Divergent Nozzle



Jet speed
Mach 1.0<2.0

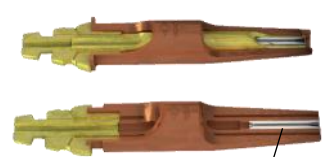
KOIKE EPOCH
Thick Cutting
Straight Nozzle



Jet speed
Mach <1.0



Strong cutting oxygen stream from a Divergent nozzle: Photo taken from Koike in-house performance test. Nozzle tip at 275mm above the plate, nozzle 106-D7#0.



Stainless steel liner

102-HC Standard Nozzle

Acetylene

- Koike Standard nozzle
- Suitable for both hand and machine cutting



Stock #	Thickness (mm)	tip #	Pressure (bar)		Consumption (NI/h)			Cutting speed (mm/min)
			Oxygen	Fuel gas	Cutting O ²	Preheat O ²	Fuel gas	
80011	5	00	1.5	0.2	690	410	370	-660
80012	5-10	0	2.0	0.2	1200	410	370	660-550
80013	10-15	1	2.5	0.2	2100	480	430	550-490
80014	15-30	2	3.0	0.20	3400	480	430	490-400
80015	30-40	3	3.0	0.20	4300	480	430	400-350
80016	40-50	4	3.5	0.3	6500	550	500	350-320
80017	50-100	5	4.0	0.3	11000	690	630	320-200
80018	100-150	6	4.0	0.4	15000	770	700	200-150
80019	150-250	7	4.5	0.4	22000	1060	960	150-80
80051	250-300	8	4.5	0.4	28000	1060	960	80-45

102-D5 High-speed Nozzle (5 bar)

Acetylene

- Divergent technology (5 Bar cutting oxygen)
- Stainless steel inner tube



Stock #	Thickness (mm)	tip #	Pressure (bar)		Consumption (NI/h)			Cutting speed (mm/min)
			Oxygen	Fuel gas	Cutting O ²	Preheat O ²	Fuel gas	
80201	-5	00	5.0	0.2	850	520	470	-700
80202	5-10	0	5.0	0.2	1600	520	470	700-625
80203	10-15	1	5.0	0.2	2400	600	550	625-550
80204	15-30	2	5.0	0.2	3600	600	550	550-475
80205	30-40	3	5.0	0.2	4800	600	550	475-425
80206	40-50	4	5.0	0.2	5600	750	680	425-350
80207	50-100	5	5.0	0.3	8800	860	780	350-250
80208	100-150	6	5.0	0.3	13500	950	860	250-175
80209	150-250	7	5.0	0.3	24000	1330	1210	175-90
80210	250-300	8	5.0	0.4	31000	1600	1450	90-60

102-D7 High-speed Nozzle (7 bar)

Acetylene

- Divergent technology (7 Bar cutting oxygen)
- Stainless steel inner tube



Stock #	Thickness (mm)	tip #	Pressure (bar)		Consumption (NI/h)			Cutting speed (mm/min)
			Oxygen	Fuel gas	Cutting O ²	Preheat O ²	Fuel gas	
80221	5	00	7.0	0.2	750	520	470	-750
80222	5-10	0	7.0	0.2	1100	520	470	750-680
80223	10-15	1	7.0	0.2	2500	600	550	680-600
80224	15-30	2	7.0	0.20	3800	600	550	600-500
80225	30-40	3	7.0	0.20	5400	600	550	500-450
80226	40-50	4	7.0	0.2	7300	750	680	450-400
80227	50-100	5	7.0	0.3	10000	860	780	400-260
80228	100-150	6	7.0	0.3	14000	950	860	260-180
80229	150-250	7	7.0	0.3	22000	1330	1210	180-100
80230	250-300	8	7.0	0.4	35000	1600	1450	100-70

402-ST For IK-82 series

Acetylene

- For IK-82 series cutting machine only.



Stock #	Thickness (mm)	tip #	Pressure (bar)		Consumption (NI/h)			Cutting speed (mm/min)
			Oxygen	Fuel gas	Cutting O ²	Preheat O ²	Fuel gas	
80082	5-10	0	2.0	0.2	1200	380	340	500-450
80083	10-15	1	2.5	0.2	2100	485	440	450-400
80084	15-30	2	3.0	0.2	3400	485	440	400-350
80085	30-40	3	3.0	0.2	4300	550	500	350-300
80086	40-50	4	3.5	0.25	6500	640	580	300-250
80087	50-100	5	4.0	0.3	11000	730	660	250-200

103-D7 High-speed Nozzle (7 bar)

Ethylene

- Divergent technology (7 Bar cutting oxygen)
- Stainless steel inner tube



Stock #	Thickness (mm)	tip #	Pressure (bar)		Consumption (NI/h)			Cutting speed (mm/min)
			Oxygen	Fuel gas	Cutting O ²	Preheat O ²	Fuel gas	
80179	5	00	7.0	0.2	750	800	460	-750
80180	5-10	0	7.0	0.2	1100	800	460	750-680
80181	10-15	1	7.0	0.2	2500	800	460	680-600
80182	15-30	2	7.0	0.25	3800	900	500	600-500
80183	30-40	3	7.0	0.25	5400	900	500	500-450
80184	40-50	4	7.0	0.35	7300	1200	660	450-400
80185	50-100	5	7.0	0.35	10000	1200	660	400-260
80186	100-150	6	7.0	0.35	14000	2200	1280	260-180
80187	150-250	7	7.0	0.35	22000	2200	1280	180-100
80188	250-300	8	7.0	0.35	35000	2200	1280	100-70

107 Standard Nozzle

Natural gas

- Koike Standard nozzles
- Suitable for both hand and machine cutting



Stock #	Thickness (mm)	tip #	Pressure (bar)		Consumption (NI/h)			Cutting speed (mm/min)
			Oxygen	Fuel gas	Cutting O ²	Preheat O ²	Fuel gas	
80061	5	00	1.5	0.15	690	1000	600	-660
80062	5-10	0	2.0	0.15	1200	1000	600	660-550
80063	10-15	1	2.5	0.15	2100	1200	700	550-490
80064	15-30	2	3.0	0.15	3400	1200	700	490-400
80065	30-40	3	3.0	0.15	4300	1350	800	400-350
80066	40-50	4	3.5	0.15	6500	1350	800	350-320
80067	50-100	5	4.0	0.15	11000	1700	1000	320-200
80068	100-150	6	4.0	0.15	15000	1700	1000	200-150

107-D7 High-speed Nozzle (7 bar)

Natural gas

- Divergent technology (7 Bar cutting oxygen)
- Stainless steel inner tube



Stock #	Thickness (mm)	tip #	Pressure (bar)		Consumption (NI/h)			Cutting speed (mm/min)
			Oxygen	Fuel gas	Cutting O ²	Preheat O ²	Fuel gas	
80282	5-10	0	7.0	0.15	1100	1350	800	750-680
80283	10-15	1	7.0	0.15	2500	1500	900	680-600
80284	15-30	2	7.0	0.15	3800	1500	900	600-500
80285	30-40	3	7.0	0.15	5400	1700	1000	500-450
80286	40-50	4	7.0	0.15	7300	1700	1000	450-400
80287	50-100	5	7.0	0.15	10000	1850	1100	400-260
80288	100-150	6	7.0	0.2	14000	2200	1300	260-180

106-HC Standard Nozzle

Propane

- Koike Standard nozzles
- Suitable for both hand and machine cutting



Stock #	Thickness (mm)	tip #	Pressure (bar)		Consumption (NI/h)			Cutting speed (mm/min)
			Oxygen	Fuel gas	Cutting O ²	Preheat O ²	Fuel gas	
80041	5	00	1.5	0.2	690	1180	310	-660
80042	5-10	0	2.0	0.2	1200	1180	310	660-550
80043	10-15	1	2.5	0.2	2100	1180	310	550-490
80044	15-30	2	3.0	0.25	3400	1370	360	490-400
80045	30-40	3	3.0	0.25	4300	1370	360	400-350
80046	40-50	4	3.5	0.3	6500	1860	490	350-320
80047	50-100	5	4.0	0.3	11000	1860	490	320-200
80048	100-150	6	4.0	0.3	15000	3040	800	200-150
80049	150-250	7	4.5	0.4	22000	3720	980	150-80
80050	250-300	8	4.5	0.4	28000	3720	980	80-45

106-D5 High-speed Nozzle

Propane

- Divergent technology (5 Bar cutting oxygen)
- Stainless steel inner tube



Stock #	Thickness (mm)	tip #	Pressure (bar)		Consumption (NI/h)			Cutting speed (mm/min)
			Oxygen	Fuel gas	Cutting O ²	Preheat O ²	Fuel gas	
80191	-5	00	5.0	0.2	850	1180	310	-700
80192	5-10	0	5.0	0.2	1600	1180	310	700-625
80193	10-15	1	5.0	0.2	2400	1180	310	625-550
80194	15-30	2	5.0	0.25	3600	1370	360	550-475
80195	30-40	3	5.0	0.25	4800	1370	360	475-425
80196	40-50	4	5.0	0.3	5600	1860	490	425-350
80197	50-100	5	5.0	0.3	8800	1860	490	350-250
80198	100-150	6	5.0	0.3	13500	3040	800	250-175
80199	150-250	7	5.0	0.4	24000	3720	980	175-90
80200	250-300	8	5.0	0.4	31000	3720	980	90-60

106-D7 High-speed Nozzle

Propane

- Divergent technology (7 Bar cutting oxygen)
- Stainless steel inner tube



Stock #	Thickness (mm)	tip #	Pressure (bar)		Consumption (NI/h)			Cutting speed (mm/min)
			Oxygen	Fuel gas	Cutting O ²	Preheat O ²	Fuel gas	
80241	5	00	7.0	0.2	750	1180	310	-750
80242	5-10	0	7.0	0.2	1100	1180	310	750-680
80243	10-15	1	7.0	0.2	2500	1180	310	680-600
80244	15-30	2	7.0	0.25	3800	1370	360	600-500
80245	30-40	3	7.0	0.25	5400	1370	360	500-450
80246	40-50	4	7.0	0.3	7300	1860	490	450-400
80247	50-100	5	7.0	0.3	10000	1860	490	400-260
80248	100-150	6	7.0	0.3	14000	3040	800	260-180
80249	150-250	7	7.0	0.4	22000	3720	980	180-100
80250	250-300	8	7.0	0.4	35000	3720	980	100-70

406-NT For IK-82 series

Propane

- For IK-82 series cutting machine only.



Stock #	Thickness (mm)	tip #	Pressure (bar)		Consumption (NI/h)			Cutting speed (mm/min)
			Oxygen	Fuel gas	Cutting O ²	Preheat O ²	Fuel gas	
80102	5-10	0	2.0	0.2	1200	1640	410	500-450
80103	10-15	1	2.5	0.2	2100	1640	410	450-400
80104	15-30	2	3.0	0.2	3400	1640	410	400-350
80105	30-40	3	3.0	0.2	4300	1640	410	350-300
80106	40-50	4	3.5	0.2	6500	2160	540	300-250
80107	50-100	5	4.5	0.2	11000	2160	540	250-200

106-M Heavy Preheat Nozzle

Propane

- Suitable for bevel and chamfer cutting.



Stock #	Thickness (mm)	tip #	Pressure (bar)		Consumption (NI/h)			Cutting speed (mm/min)
			Oxygen	Fuel gas	Cutting O ²	Preheat O ²	Fuel gas	
80141	5	00	1.5	0.2	690	1710	450	-660
80142	5-10	0	2.0	0.2	1200	1710	450	660-550
80143	10-15	1	2.5	0.2	2100	1710	450	550-490
80144	15-30	2	3.0	0.2	3400	2470	650	490-400
80145	30-40	3	3.0	0.2	4300	2470	650	400-350
80146	40-50	4	3.5	0.2	6500	2470	650	350-320
80147	50-100	5	4.0	0.25	11000	2890	760	320-200
80148	100-150	6	4.0	0.25	15000	3570	940	200-150
80149	150-250	7	4.5	0.3	22000	3990	1050	150-80
80150	250-300	8	4.5	0.3	28000	3990	1050	80-45

106-M7 High-speed Heavy Preheat Nozzle

Propane

- Suitable for bevel and chamfer cutting.
- Divergent technology (7 Bar cutting oxygen)
- Stainless steel inner tube



Stock #	Thickness (mm)	tip #	Pressure (bar)		Consumption (NI/h)			Cutting speed (mm/min)
			Oxygen	Fuel gas	Cutting O ²	Preheat O ²	Fuel gas	
80151	5	00	7.0	0.2	750	1710	450	-750
80152	5-10	0	7.0	0.2	1100	1710	450	750-680
80153	10-15	1	7.0	0.2	2500	1710	450	680-600
80154	15-30	2	7.0	0.2	3800	2470	650	600-500
80155	30-40	3	7.0	0.2	5400	2470	650	500-450
80156	40-50	4	7.0	0.2	7300	2470	650	450-400
80157	50-100	5	7.0	0.25	10000	2890	760	400-260
80158	100-150	6	7.0	0.25	14000	3570	940	260-180
80159	150-250	7	7.0	0.3	22000	3990	1050	180-100
80160	250-300	8	7.0	0.3	35000	3990	1050	100-70

EPOCH 300 / EPOCH 600 Thick plate cutting Nozzle

Propane

- For Epoch Torch only
- Very safe, Out-mixing nozzle.



Stock #	Tip #	Thickness (mm)	Pressure (bar)			Consumption (Nm ³ /h)			Cutting speed (mm/min)	Kerf (mm)
			Cutting O ²	Preheat O ²	Fuel gas	Cutting O ²	Preheat O ²	Fuel gas		
80397	EPOCH-300	100	4	0.5-0.6	0.3-0.4	27	3.3-4.0	2.3-2.7	250-290	5.5-7.0
		200	4.5	0.5-0.6	0.3-0.4	30	3.3-4.0	2.3-2.7	170-190	6.0-8.0
		300	5	0.6-0.7	0.4-0.5	32	4.0-4.8	2.7-3.1	130-150	7.0-9.0
80398	EPOCH-600	300	5	0.6-0.7	0.4-0.5	60	4.0-4.8	2.7-3.1	130-150	8.0-12.0
		400	6	0.7-1.0	0.5-0.6	70	4.8-7.0	3.1-3.4	80-90	10.0-13.0
		500	7	0.7-1.0	0.5-0.6	80	4.8-7.0	3.1-3.4	60-70	11.0-14.0
		600	10	0.7-1.0	0.5-0.6	110	4.8-7.0	3.1-3.4	50-60	12.0-15.0

2VKP7 Victor™ style High-speed Nozzle

Propane

- Divergent technology (7 Bar cutting oxygen)
- Stainless steel inner tube



Stock #	Thickness (mm)	tip #	Pressure (bar)		Cutting speed (mm/min)
			Oxygen	Fuel gas	
DB12452B	5	00	7.0	0.1-0.25	-750
DB12452C	5-10	0	7.0	0.1-0.25	750-680
DB12452D	10-15	1	7.0	0.1-0.25	680-600
DB12452E	15-30	2	7.0	0.1-0.25	600-500
DB12452F	30-40	3	7.0	0.1-0.25	500-450
DB12452G	40-50	4	7.0	0.15-0.3	450-400
DB12452H	50-100	5	7.0	0.15-0.3	400-260
DB12452J	100-150	6	7.0	0.15-0.3	260-180
DB12452K	150-250	7	7.0	0.2-0.4	180-110
DB12452L	250-300	8	7.0	0.15-0.3	110-100

General Oxy-fuel Cutting Accessories



"Rock Lighter"

Pistol-shaped igniter. Easy operation

Accessory	Stock #
Rock Lighter	31102



"Tip Cleaner"

A set of 10 nozzle cleaning needles and 1 file plate. Suitable for cleaning Koike cutting nozzles. Metal casing to protect needle from bending.

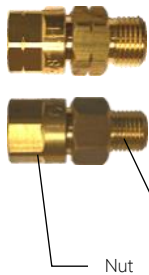
Accessory	Stock #
Tip cleaner	30311



Tip fixing Nut

Tip fixing nut for Koike portable and hand torches, except IK-82 series and epoch torch.

Accessory	Stock #
Tip fixing nut	05020



Thread connection adaptor

Adaptor to change hose connector threading.

Accessory	Nut (Female thread)	Connector (Male thread)	Stock #
Adaptor	G3/8 RH	G1/4 RH	222.023.200
	G3/8 RH	M16 RH	222.023.232
	G1/4 RH	M16 RH	222.023.202
	G1/4 RH	G3/8 RH	222.023.270
	M16 RH	G3/8 RH	222.023.204
	M16 RH	G1/4 RH	222.023.206
	M12 RH	G3/8 RH	19715506
	9/16" UNF RH	G3/8 RH	222.023.205
	G3/8 LH	M16 LH	222.023.201
	M16 LH	G3/8 LH	222.023.203
	9/16" UNF LH	G3/8 LH	222.023.207
	M12 LH	G3/8 LH	222.003.225



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