Portable machines cutting, welding and gas equipment

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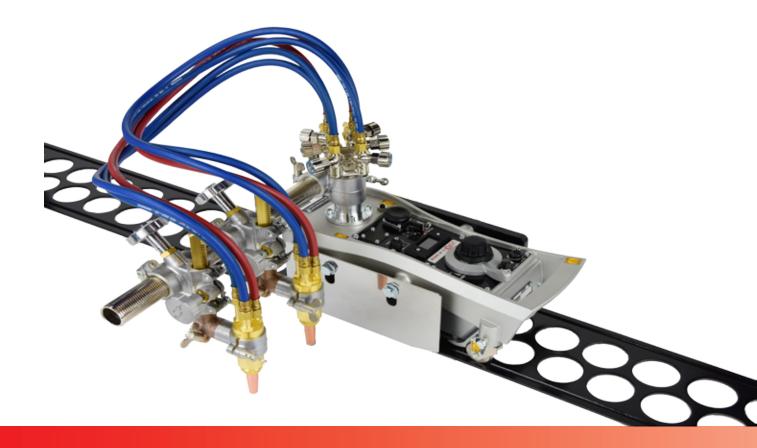
KOIKE – the spirit of cutting

in 1918, Koike was established in Tokyo, Japan. Since then, we played a major role in the development and manufacturing of high-quality metal cutting machine tools of various types, gas apparatus, welding equipment and positioners. Koike can rely on more than 100 years of experience in the industry and we serve many leading industrial customers which include steel service centers, shipyards, heavy equipment manufacturers, steel construction, power plants, offshore and other metal industries.

Koike is the world's leading manufacturer of the most extensive cutting product line for oxy-fuel, plasma and laser cutting machines. Koike combines Japanese technology and implemented knowledge with experience from our local markets and customers' needs to provide our superior technology in handheld torches and portable cutting machines up to complex CNC controlled cutting machines.

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IK-12 NEXT

The Portable Multi-purpose Carriage

Cutting oxy-fuel and plasma, welding

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.

Precise speed control

Ensures stable and accurate speed control, achieved with encoder motor and digital speed indicator, which provides the famous sharp, fine cuts.

Choice of accessory and options

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

Wide speed ranges

Machine travel speed can be adjusted between 40 - 2400 mm/ min precisely. The value is displayed on the digital display for repeatability.

Selectable torch set and rails

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

Versatility

Ready for oxy-fuel cutting, plasma cutting or welding.

The IK-12 NEXT is the successor of the IK-12 Max3, 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 oxy-fuel and plasma cutting and automatic welding. Each component is functionally worked out as an independent unit, selection and assortment are at the customers disposal to create the system needed for the requirement. Enjoy the maximum efficiency, versatility and productivity with the IK-12 NEXT.

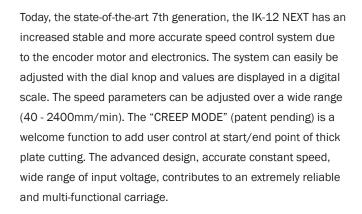


Carriage

The Original.

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

The first generation, Japan, 1951



Overview of the unit

- It offers excellent operability.
- It can travel over a wide speed range, from 40-2400 mm/min.
 It incorporates a motor equipped with an encoder and the actual speed is displayed on a digital display.
- Three speed settings can be saved by using the speed presetting function.
- Pressing the "Creep" button, instantly switches to slow mode travel to help to prevent uncut material being left at the start and finished ends when cutting thick material.
- The incorporated arc coupling function enables both plasma cutting and arc welding by changing the torch set.
- A weaving control function is incorporated, making it possible to perform weaving welding by installing the optional kit to mount the WU-3R weaving unit, with no need to add an extra control box.
- Torch sets, rails and other accessories of the existing IK-12 MAX3 model can be used without modification.

Torch set

Oxy-fuel cutting torch set

(Machine body is sold separately. Pictures for illustration purpose only)



S-100 Torch Set

Standard 1 torch unit



- S-200 Torch Set
- Standard 2 torch unit



L-100 Torch Set

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



SP-100 Torch Set

 1 Torch unit with mechanical automatic torch height control



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

EPOCH-300/600 Torch Set

- A safe, flashback-free out mixing torch, designed to cut up to 600 mm plate thickness
- Water cooled (EPOCH-600)

Cutting and Welding Machines



S-100 Torch set



S-200 Torch set with long slide bar option



S-100 with long slide bar option



EPOCH torch set with heavy duty rail



IK-12 NEXT straight welding



S-100 with long slide bar and bevel attachment option



IK-12 NEXT straight cutting



S-100 Torch set with Long slide bar option



S-100 Torch set with long slide bar and guide roller option

Torch set		S-100	SP-100	S-200	SP-200	SP-300	SP-400	L-100	EPOCH-300	EPOCH-600
Stock #		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 torches		1	1	2	2	2	3	1	1	:
Gas mixing	Tip 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	500	-	-	•	•	-	-	-	-	-
		-	-	•	•	-	-	-	-	-
	s í í	-	-	•	•	•	•	-	-	-
		-	-	•	•	•	•	-	-	-
	D'C	-	-	-	-	-	•	-	-	-
Optional torch accessories										
Long pipe bar		•	•	•	•	•	•	•	•	•
Long slide bar		•	•	•	•	-	-	-	-	-
Snap valve		•	•	•	•	-	-	-	-	-
Pre-set stop valve		•	•	•	•	-	-	-	-	-

(Machine body is sold separately. Pictures for illustration purpose only)

Part numbers

IK-12 NEXT Cutting Set*	Stock #
IK-12 Next carriage	90140
* Select a cutting torch set	

IK-12 NEXT Plasma Set*	Stock #
IK-12 Next carriage	90140
Machine connection cable for IK-12 Next	61005388
Plasma holderset IK-12 Next	20511063
* To be used with a plasma system	

IK-12 NEXT Welding Straight Set*	Stock #
IK-12 Next carriage	90140
Machine connection cable for IK-12 Next	61005388
Welding Holder set IK-12 Next	20511050
* To be used with a welding system	

IK-12 NEXT Welding Weaving Set*	Stock #
IK-12 Next carriage	90140
Machine connection cable for IK-12 Next	61005388
Weaving holder set IK-12 Next	20511064
* To be used with a welding system	

Accessories

Accessory	Stock #	A
IK-12 standard rail 1800 mm	30400	
IK-12 heavy duty rail 1800 mm	90044	
IK-12 MAX3 circle cutting rail	30410	Lo
Circle cutting attachment	30389	
Plate edge guide roller	T60038959	
Preset stop valve:		
1 Torch	80518	Lo
2 Torch	61003543	
Snap valve B-type	80512	
Torch bevel attachment	ON002	St
Twin torch attachment	ON001	
Rail fixing magnet	D6010	FI
MIG torch holder	61000676	

Accessory		Stock #
	145 mm (standard)	30390
	250 mm	30430
Long slide bar	300 mm	30431
	400 mm	30433
	350 mm	30300
	500 mm	30321
Long pipe arm	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

	C	
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Type and	Sherm	Calion

IK-12	NEXT
	110/11

Weight (body)	8.5 Kg/18.74lb
Machine size	432 mm / 17 inch
Machine width	220 mm / 8.66 inch
Max. loaded weight	50 kg / 110.23 lb
Traveling speed	40~2400 mm/min / 1.57~94.49inch/min
Creep speed	40~300 mm/min / 1.57~11.81inch/min
Input power	100~240VAC ±10% / 1.1~0.7A / 50-60Hz
Motor	24VDC motor with an encoder, 23W, 5600rpm
Transmission	Dial accelaration formula, variable speed
Speedometer	Digital display

Scope of delivery

Machine body
Tip support
Hexagon bolt (2 pcs)
Operation manual

Cutting and Welding Machines

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
Alles Sager	 Preset stop valve Single action gas on/off 2 models; single or two torches 	 Twin torch attachment Enables 2-torch parallel cutting by attaching to a torch Torch distance 30 - 300 mm
	 Torch bevel attachment Accurate bevel cutting with angle indicator Cuts bevel without tilting the torch 	Rail fixing magnetHolds the rail onto the place
	 MIG torch holder Simple welding torch holder, clamp diameter Ø16 - 20mm 	Extended stand 105 mm long stand



IK-12 MAX3

The Portable Multi-purpose oxy-fuel 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.

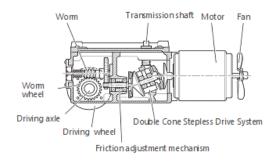
Choice of accessory and options

Features a wide 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 maximum results.

The IK-12 MAX3 is a well trusted, reliable system which has been on the market for several decades. The Double Cone Stepless Drive System functions with a condenser motor rotating at constant speed (1500 rpm @50Hz) to prevent heat and voltage problems, making IK-12 MAX3 a reliable and durable machine for long continuous operation.





For the available torch sets and accessories, please refer to pages ${\bf 6}$ - ${\bf 9}$

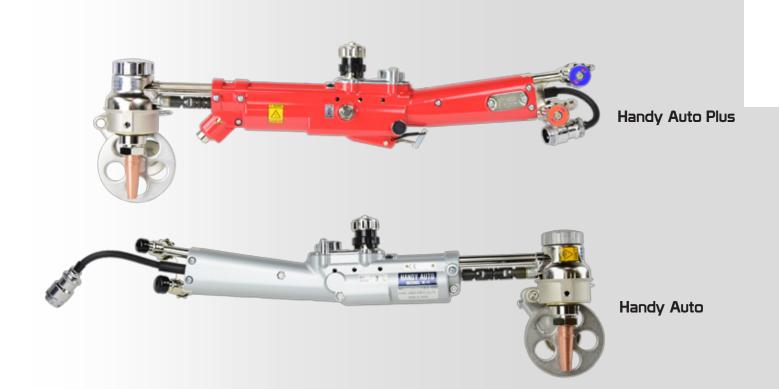
IK-12 MAX3 Standard

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Traveling speed	@50 Hz = 80 - 800 mm/min
	@60 Hz = 100 - 1000 mm/min
Input power	AC 42V / 110V / 220V
Cutting thickness	Depends on torch set
Drive system	Double cone stepless drive system
Motor	Condensor-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

Types		
Model		Stock #
IK-12 MAX3	42V	90029
IK-12 MAX3	110V	90028
IK-12 MAX3T	220V	TBCC31415

Scope of delivery
IK-12 MAX3
Machine body
Power cable
Tip support
Hexagon bolt (2 pcs)
Cutting nozzles (102HC or 106HC, size #0,1, 2)
Operation manual



HANDY AUTO SERIES

Portable Motorized Hand Torch

Features and Benefits

- Motorized oxy-fuel hand torch
 High quality cuts on horizontal plate, pipe, or on vertical surfaces.
- All position drives
 Allows cutting in various position and directions.
- 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

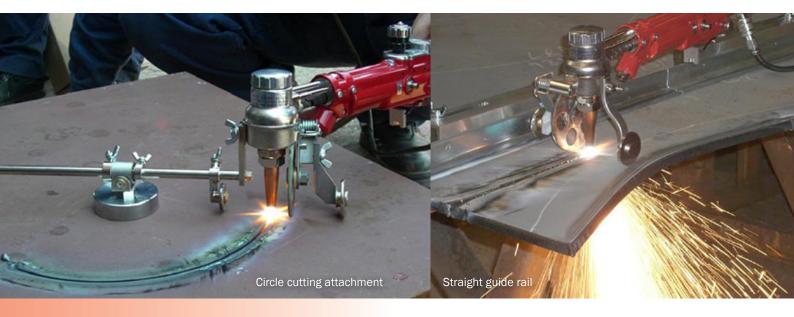
- High quality cutting with hand torch handling
- Modular attachment system
- Tool-free attachment replacement
- Set of basic attachments included*

Handy Auto Plus

- Handy Auto with additional features
- Auto ignition
- One-click gas shutoff
- Flame pre-set valves
- Set of basic attachments included*

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





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 2	25.401.101A	
Large circle extension bar 530 mm	30132	Use with large circle cutting attachment to increase cutting diameter to 1000 mm

		attachment to increase cutting	5
		diameter to 1000 mm	
Specification	Handy Auto KI	T Handy Auto Plus KIT	
Cutting thickness	5	~ 30 mm	
Cutting speed	150 ~	530 mm/min	
Speed control method	Trans	sistor control	_
Drive system	Fri	ction drive	
Power source	AC	AC 100 - 240V	
Input power		DC 12V	
Bevel wheel assembly bevel an	gle 2	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	
Machin	e body	
Small circle	attachment	
Standard whe	el 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. Built robust to be a true workhorse.

Simple operation

All functions are controlled by forward / off / reverse switch, clutch lever and speed adjustment knob.

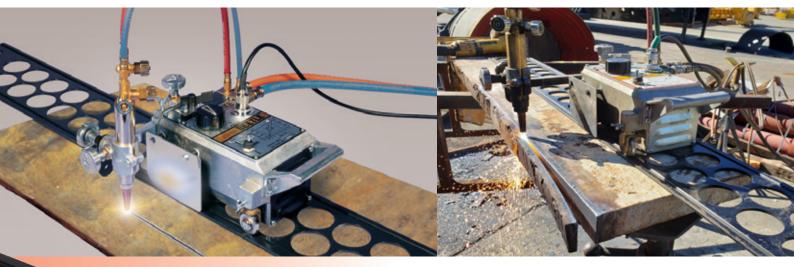
Extendable 1800 mm straight rail

Cut longer parts.

High quality cuts with simple operation

Single Cone Stepless Drive System

Single Cone Stepless Mechanical Drive System equipped on the IK-12 Beetle guarantees a constant and stable movement of the machine, providing 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 a precise positioning of the machine torch (Y - and Z-axis).



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.

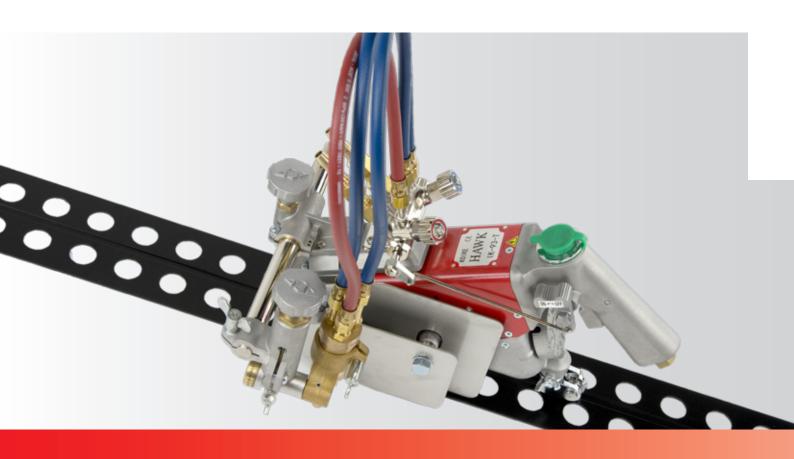
Optional accessories

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

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	Induction motor
Input power	AC 220V / 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

Scope of delivery	
Machine body with torch set	
Cutting nozzles (102HC or 106	5HC, 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

The machine weighs only 7.5 kg. Together with the slim body and handling grip, the machine can be carried from plate to plate easily.

Bevel collar

Torch angle can be set accurately using graduated bevel collar.

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, a wide variety of plate cutting can be achieved with IK-93T Hawk.



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.

Optional accessories

Accessory	Stock #	Description
Extension rail 1800 mm for IK-93	90018	
Circle cutting attachment for 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

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
Speed control Heat shield Input power Dimension (excl. torch unit)	Control IC Doubled shield for thermal protection AC 220V / AC 42V L380 x W130 x H210 mm

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

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-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; the 2D and 3D rails can be connected to each other by use of connector kit, the 1D without.

Clutch lever

Allows quick positioning of machine on rail.

Long flange bar option

For cutting of longer flanges up to 700 mm in diameter.

Amazingly lightweight

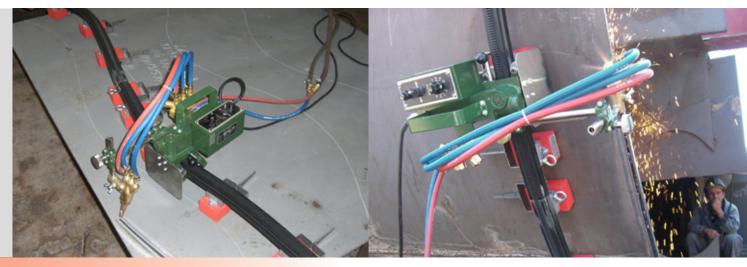
Only 4.5 kg and compact; machine can be carried easily anywhere.

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, 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 a 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.



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

Portability

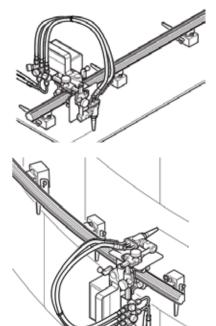
The IK-72T is designed to maximize portability. Aluminium alloy body together with robust gear system made the machine to be extremely light, yet durable in heavy duty working environment.

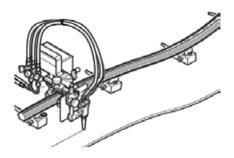
- Light weight: 4.5 kg
- Rack and pinion drive system
- Single-action mechanical clutch system allows quick machine positioning along the rail.





Rail selections
Stock #
TBPJ64025
90154
TBPJ64026





1D Rail 1500 mm

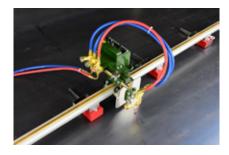
- For flat plate
- Extendable aluminium made straight rail
- Ideal for straight cutting and welding applications
- 4 pcs permanent magnets

2D Rail 1000 mm

- For bended plane
- Extendable flexible rubber rail with steel plate liner; maximum bending radius 2500 mm
- 5 pcs permanent magnets

3D Rail 1000 mm

- For bended and twisted planes
- Extendable flexible rubber rail; bends in any direction
- Maximum bending radius 2000 mm
- 5 pcs permanent magnets







Optional accessories

Accessory	Stock #	Description
Rail connector	33107	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 Different rail types can be connected and combined with the rail connector.

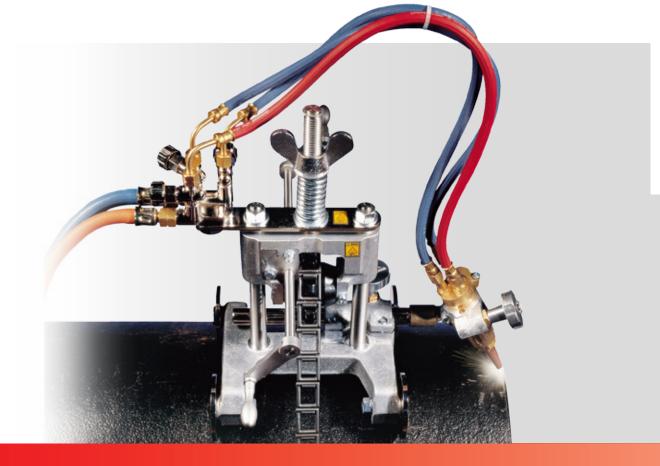




Specification	IK-72T
Cutting thickness	5 - 50 mm
Cutting speed	150 - 700 mm
Type of drive	PWM control
Bevel angle	0 ~ 45°
Driving method	Rack and pinion
Input power	AC 110V / AC 42V
Maximum rail bending radius	2D rail: 2500 mm
	3D rail: 2000 mm
Dimension	L250 x W300 x H190 mm
Weight	4.5 kg

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

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



PICLE-1

Manual Pipe Cutting Machine

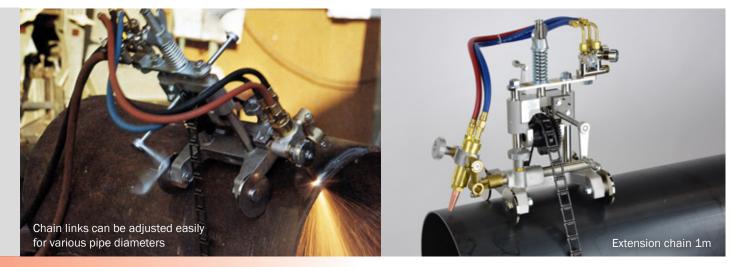
Features and Benefits

- 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

Extremely smooth feed

Quality pipe cutting without electrical power PICLE-1 '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 a 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.



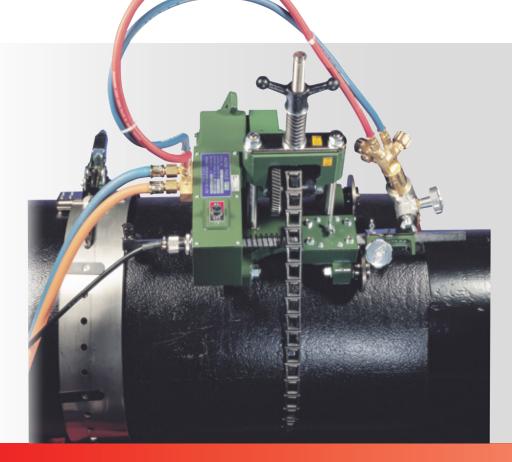
The Picle-1 is a manually operated pipe cutting machine for cutting and bevelling pipes. Equipped with a chain and worm gear drive system with low transmission ratio, leading to an absolutely frictionless feel.

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

Specification	PICLE-1
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	TBGA35002

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



AUTO PICLE-S

Automatic Pipe Cutting Machine

Features and Benefits

Guide rail cuts

Up to 1500 mm diameter pipe accurately; possible to cut pipes in vertical position (up to 500 mm diameter with use of guide rail).

Motorized oxy-fuel pipe cutter

Automatically bevel cuts or straight cuts on steel pipes.

Remote Control Pendant

Easy operation from a distance.

Special Fixed Rail Tip Guide System

The mechanically automatic torch guiding provides a high cutting accuracy.

Interlocking link chain system
 Swiftly adapts to any pipe diameter.

On/Off drive clutch

Position and align the machine quickly.

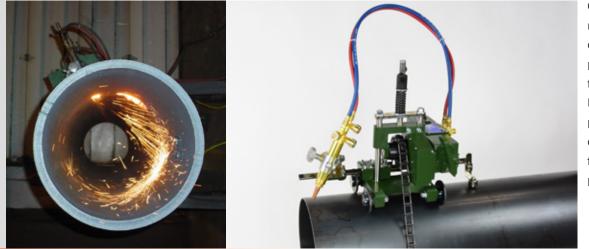
Automatic motorized pipe cutting

Sharp, clean cuts from small to large diameter pipes

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

Cutting operations are carried out from the handy remote controller.

Travel speed adjustment is easily 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.



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

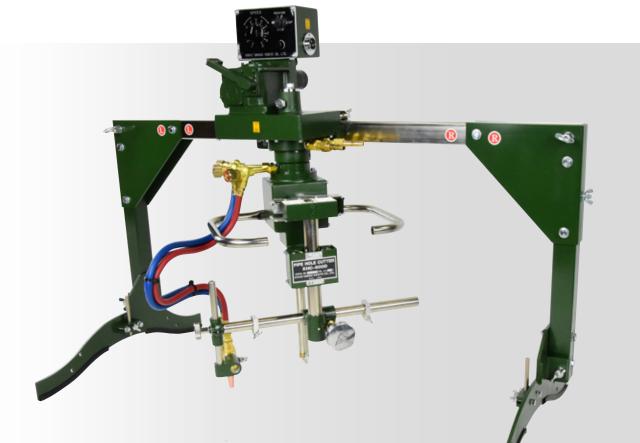
The Auto Picle-S is a motorized oxy-fuel pipe cutting machine with remote control. The optional guide rail provides high cutting accuracy, particularly suitable for large pipes. Countless professionals from metal fabrication, offshore & pipeline and shipbuilding industries have used Koike pipe cutting machines successfully.

Optional accessories

Accessory	Stock #	Description
Transformer AC230V - 42V	222.002.207	For 42V models
Transformer AC230V - 110V	90100	For 110 models
Extension chain 1 m	31131	1 m chain links
Guide rail D-600	90106	For pipe diameter Ø 400 - 600 mm
Guide rail D-900	90107	For pipe diameter Ø 600 - 900 mm
Guide rail D-1200	90108	For pipe diameter Ø 900 - 1200 mm
Guide rail D-1500	90108	For pipe diameter Ø 1200 - 1500 mm

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 Ø 600 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 Machine body with torch	set (including slide bar)
Remote controller and ca	(B /
Chain link (80 pcs. for 600mm pipe diameter)	
Cutting nozzles (102HC o	r 106HC, size #0, 1, 2)
Standard tool set	



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, infinite rotation gas manifold eliminates tension to the torch during cutting, ensuring accurate, sharp & clean cuts.

H-lever handle torch

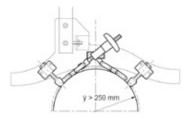
Height is automatically maintained to work distance based on trigonometry function of H-lever; very easy setup with just two adjustments.

On/Off drive clutch

Worm gear with low transmission ratio.

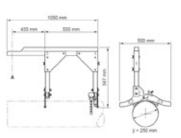
Flat plate circle cutting

Can be used for circle cutting on flat plate.



tion.

Smal diameter pipe fixture



T-Joint pipe hole cutting

High quality cuts with easy operation

The distance between the cutting nozzle and the plate is automatically, mechanically maintained, ensuring

high quality cuts. Very easy to setup with just two

adjustments. Also, an infinite rotation gas manifold

with slip coupling is used on the main gas connection, keeping hoses from becoming tangled during opera-

Overhang cutting fixture



The 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 holes in vessels from the inside or outside.

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

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 42V
Dimension	L1050 x W500 x H760 mm
Weight	26 kg (incl. support leg)

Types	
Model	Stock #
KHC-600D 42V	90122

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

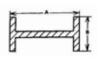
Features and Benefits

- 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
 Easy to carry and use in tight spaces.

Semi-automated H-beam cutting

Ideal for H-beam and I-beam bevelling

The Mini-Mantis II provides straight or angled cuts that are clean and sharp. Two motors drives the torch for both web and flange cutting. There is 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

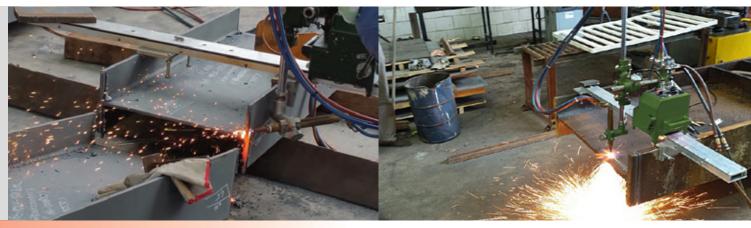


Flange cutting ("B" in the diagram)
 150 - 400 mm : Standard
 150 - 700 mm : With optional slide bar 1200L



Angled cutting capacity

30° maximum for both web and flange cutting



The Mini-Mantis II is a semi-automatic gas cutting unit for rapid and precise cutting of H-beams. The rotatable torch angle allows bevelling cuts on flange and web. The vertical unit can be tiles for cutting flanges in angled directions. KOIKE's quality construction ensures durability and trouble-free operation. The Mini-Mantis II is an economical, efficient and compact gas cutting machine for H-beam steel.

Optional accessories

Accessory	Stock #	Description
600-ST rail	90234	600 mm 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

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	
Machine body	
ST-400 Vertical unit with torch ur	nit
Power cable	
Standard tool set	
Operation manual	
Cutting nozzles	



WEL-HANDY MULTI NEXT

Heavy-Duty Multi Purpose Mechanized Welding Carriage

Features and Benefits

One model with weaving option: Wel-Handy Multi NEXT: Straight/ Tack welding (default).

Wel-Handy Multi NEXT: Straight/ Tack + Weaving welding (option).

Crater fill function

Automatically switches to crater amperage and travel backwards to process high quality crater filling.

Limit switch function

Limit switch has dry-run function, which makes positioning of the carriage possible without lifting. (Patent pending)

- Encoder drive motor and control
 Ensures precise speed control during welding.
- Weaving control only available in combination with weaving set Weaving parameter is adjustable during welding.
 Easy operation with dial control.
- Straight, tack welding and weaving with the same carriage
- Reliability, robustness and durability

The Wel-Handy Multi NEXT welding carriage is a robust machine designed for heavy duty working environments. The 8.8 kg lightweight aluminium die cast body is easy to handle. The strong traction power from the 50 kg magnet provides stable movement to achieve high quality vertical welds.





All-in-one tack and weaving controller



Multiple Wel-Handy Multi's in simultaneous operation

Durable design, reliable performance

Straight and tack welding is standard

The advanced controller is easy to use and provides flexible welding experience with high quality results.

Compact and lightweight

L280 x W280 x H250 mm, at weight only 8.8kg.

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 manually disengaged from the plate by a lever.

Low center of gravity

Provides stable performance even when climbing vertically.

Durable roller and arm

The guide rollers are made of a single-piece cast aluminium for higher durability. The rollers are protected against spatters.

- Heat resistant rubber 4-Wheel drive system Provides strong traction, ensuring high quality welds.
- Maintenance-friendly by dustproof structure 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

6 mm Stand off enables crossing over any possible welding beads.

Easy setup

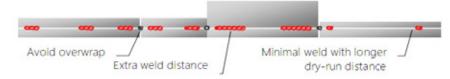
No guide rails required, the Wel-Handy Multi NEXT guides itself along the fillet plate.

Limit switches

Automatic Shutdown at the end of the weld. Limit switches can be used to adjust machine starting position.

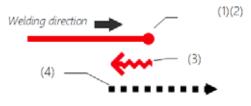
The advanced tack controller

WEL-HANDY MULTI NEXT TACK control - Controllable tack distance



Controllable tack welding distance

- Tack and dry-run distance can be controlled during welding just by simple click on a toggle switch.
- Equipped with an encoder motor, the Wel-Handy Multi NEXT calculates travel distance by counting motor rotations, ensuring accurate distance control.
- All parameter values are shown on the digital display for easier parameter management and repeatability.



Crater filling function (*)

(*) requires welding machine with crater function with matching control.

Automatically switches to crater amperage at the end of each weld for crater fill sequence.

- At the end of each weld, the carriage gives a signal to the welding power source to switch to a crater amperage.
- 2) The carriage stops for a set period of time.
- With crater amperage, carriage welds backwards at a set speed for a set distance.
- After a crater sequence, the carriage dry-runs to the starting point of the next tack weld (in tack welding mode).



WU-3R Weaving Unit and mounting kit (Option: weaving)

This is an option for the Wel-Handy Multi NEXT to perform weaving welding. The weaving function is possible after mounting the weaving unit (WU-3R) together with the mounting kit. Weaving is controlled by a motor with an encoder.

- Weaving speed (*): 400 1500 mm/min
- Weaving widths (*): 0 100.0 mm/min
- Stop timer (left/center/right): 0.0 10.0 seconds
 (*) at radius= 100 +mm from the center of rotation control.







Optional accessories

Flexible guide rail





Guide roller

For Wel-Handy Multi flexible guide rail.





Clamp lever

Faster torch angle and position adjustment.

Transformer

Primary AC 100 - 240V / Secondary DC24V.

Aluminum-made solid guide rail

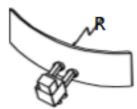


Accessories

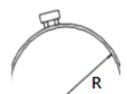
Accessory	Stock #
Flexible guide rail 1500 mm	T89002484
Aluminum-made solid guide rail 1500 mm	T89002479
Guide roller for flexible/solid guide rail	T30004039
Weaving unit WU-3R	20508486
WHM NEXT Weaving Mounting Kit	20505397
Clamp lever	T64000044
Transformer PR 100-240V - SEC 24V 65W	222.002.256

Application guide

Model Stock #		STRAIGHT + TACK 90224	STRAIGHT + TACK + WEAVING 90224 + Weaving kit
Fillet weld	<u>A</u>	•	•
Butt weld		Guide rail option	Guide rail option
Tack / Stich weld	<u>K</u>	٠	•
Vertical weld		•	•
Horizontal weld	T	Guide rail option	Guide rail option
1 Run 2 pass	<u> I</u>	Tandem torch option	Tandem torch option
Contour weld		Tubular follower guide option	Tubular follower guide option
Pendulum oscillation	<u> </u>	-	•
Dual pass	<u></u> Æ	Twin torch option	Twin torch option
Overhanging weld		•	-
Sub-arc	L]]	Compact SAW option	Compact SAW option
			•: Possible



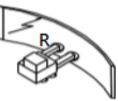
R > 3000 mm



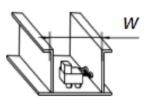
R > 1500 mm



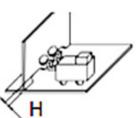
θ=0-20°



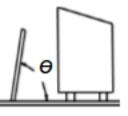
R > 3000 mm



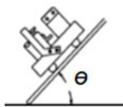
W > 300 mm



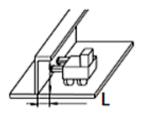
H < 37 mm



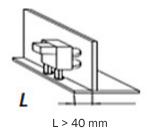
θ = 85 - 110°



⊖=0-90°



L > 75 x 75 mm



Specifications

Model name		Wel-Handy Multi NEXT Tack	Wel-Handy Multi NEXT Weaving Welding	
Driving system	n	4 Wheel driving		
Gap (floor - bo	ottom)	5.5 mm		
Magnet up an	d down mechanism	Magnet release / light a	Magnet release / light action lever at body side	
Magnet type		Permanent magn	Permanent magnet (strong 50 kg)	
Travel speed		50 - 1500 mm/min		
Tracking meth	nod	Vertical tracking by guide roller / edge tracking by guide roller		
Applicable pos	sture	Horizontal fillet & inferior fillet		
Start interlock	king welding	•		
Automatic sto	p by limit switch	•	•	
Arc test		•	•	
Arc stabilizatio	on time (sec)	0 - 10.0		
Crater current	correspondence	•	•	
Tack		•		
	Weaving speed (mm/min)	-	400 - 1500	
Weaving	Weaving width (mm)	-	0.0 - 100.0	
	Stop time on left, middle, right	-	0.0 - 10.0	
Body weight (I	kg)	8.8	10.8	
External dime	nsions W x D x H (mm)	280 x 280 x 250	310 x 280 x 250	
Input power s	upply	DC 2	24V	
			• : Possible	

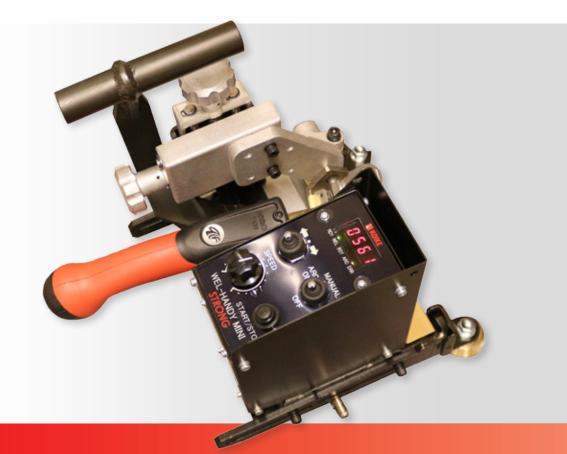
: Possible

Types	WHM NEXT Stra	aight/ Tack Set
Description		Stock #
WHM NEXT tack 50kg MG w	ith signal cable	90224
Transformer PR 100-240V-S	EC 24V 50W	222.002.256

Types	WHM NEXT Weaving Set	
Description		Stock #
WHM NEXT tack 50kg MG w	ith signal cable	90224
WHM NEXT weaving mounti	ng kit	20505397
Weaving unit WU-3R (withou	t holder) for WHM NEXT	20508486
Transformer PR 100-240V-S	EC 24V 50W	222.002.256

Scope of delivery

Wel-Handy Multi NEXT
Machine body
Power & signal cable
Allen keys (2 pcs)
Operation manual



WEL-HANDY MINI STRONG

Compact Welding Carriage for Continuous Welding

Features and Benefits

- Compact, portable design
- Constant speed by motor feedback control
- Strong 35 kg permanent magnet and traction power
- Overload detection function
- Carriage positioning by limit switch
- Widely adjustable guide roller positions
- Lifting handle with magnet detachment mechanism
- Digital display for welding repeatability
- Limit switches on both sides of the machine
- Designed for continuous welding

Advanced control with simple operation

Constant speed control by motor feedback (Servo driver) The controller on Wel-Handy Mini Strong adopted advanced motor feedback control with servo driver, which maintains constant carriage traveling speed under any load(*). Changes in load, either from weight of welding torch lead or welding positions will not slow down the carriage. Wel-Handy Mini Strong provides constant, high quality welds from the beginning to the end.

Overload detection function

When excessive load is given to the carriage, Wel-Handy Mini Strong stops traveling and stops welding arc automatically.

Increased reliability

Greatly reduces chance of machine components breakage from excessive load.

 Minimizes material damage by automatic arc OFF
 Avoids further damage to the welding work piece, making it easier to restart.



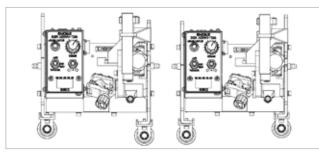
The Wel-Handy Mini Strong is a compact design welding carriage designed to perform horizontal, vertical, and overhang welding. A 35 kg magnet and 16 kg traction power provides reliable performance and quality welds. The machine is easily carried around with the handle with magnet detachment mechanism.

Carriage position adjustment without lifting

Repositions the carriage without the need of lifting. Machine travels when limit switch is being pressed. Precise starting position adjustment can be done in much easier way.

Automatic stop by limit switch

The Wel-Handy Mini Strong is equipped with limit switches on both ends of the machine. When a limit switch is pressed during welding, the machine stops traveling and the arc turns off automatically. Simultaneous welding operation can be done easily with the Wel-Handy Mini Strong.









Ergonomic design

- Lifting handle with magnet detachment mechanism
 Pulling the handle detaches the magnet in single action.
- Large torch adjustment knob
 Allows fine tuning of torch position with welding gloves.
- Tool-free torch clamp
 Torch can be mounted to the machine without any tools.

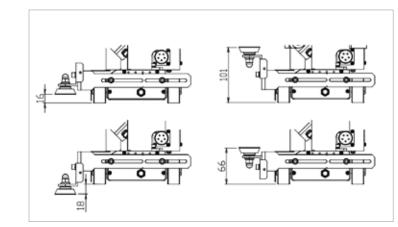


Strong permanent magnet power (35 kg)

 Enables the Wel-Handy Mini Strong to weld in vertical and overhang welding positions.

Widely adjustable guide roller positions

- Flexible guide roller height adjustment.
- Guide roller can be flipped over to position on the back.







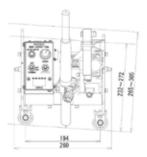
Optional accessories

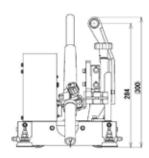
Accessory	Stock #	Description	
Transformer PR 100-240V-SEC 24V 65W	222.002.256	AC100-240V / DC 24V	
Mini twin torch option	90260	For fillet height <160 mm	

Specification	Wel-Handy Mini Strong	
Machine weight	8.2 kg	
Traction force	16 kg	
Travel speed	100 - 1000 mm/min	
Guiding system	Fillet tracking guide roller	
Stand off (plate to base plate)	5.5 mm	
Magnet detachment mechanis	sm Lifting handle integrated	
Driving method 4-whe	el driving rubber roller (chain transmission)	
Magnet type	35 kg permanent magnet	
Torch adjustment:		
Torch angle	40 ~ 55°	
Up/down	45 mm	
Forward / backward	45 mm	
Automatic stop functions	Limit switch on each of carriage	
Unwelded lengths (start & end	l total) Approx. 260 mm	
Welding method	Continuous welding	
Power & signal cable Pow	wer and signal integrated Y-branch cable	
Torch holder diameter	16 ~20 mm	
Input power	DC 24V	

Types	
Model	Stock #
Wel-Handy Mini Strong	90240

Scope of delivery	
Machine body	
Power & signal cable	
Allen keys (2 pcs)	
Operation manual	



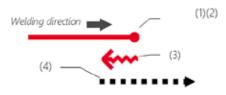


IK-72W SERIES

Rail traveling carriage for all position welding

Features and Benefits

- Light weight at 5.5 kg (W) / 7.6 kg (WEAVING)
- Two models:
 - IK-72W: Tack welding
 - IK-72W WEAVING: Tack and weaving welding
- Carriage positioning by limit switch
- Advanced tack welding functions
- Digitally controlled weaving and tack welding (Weaving model)
- Shares the same rail system as the cutting machine IK- 72T; making it possible to weld after cut.



The advanced tack controller

Controllable tack welding distance

- Tack and dry-run distance can be controlled during welding just by simple click on a toggle switch.
- Equipped with an encoder motor, the IK-72T calculates the travel distance by counting motor rotations, ensuring accurate distance control.
- All parameter values are shown on the digital display for easier parameter management and repeatability.

Crater filling function (*)

- (*) Requires welding machine with crater function with matching control.
- Automatically switches to crater amperage at the end of each weld for crater fill sequence.
- At the end of each weld, the carriage gives a signal to the welding power source to switch to the crater amperage.
- 2) Carriage stops for a set period of time.
- With crater amperage, carriage welds backwards at a set speed for a set distance.
- 4) After the crater sequence, the carriage dry-runs to the starting point of the next tack weld (in tack welding mode).

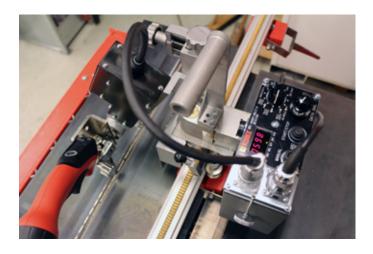


The IK-72W series is used for straight welding in horizontal and vertical positions using 1 dimensional rail and curved and twisted plane welding using 2 and 3 dimensional rails. By using same rail system as the cutting machine IK-72T, cutting and welding can be done with IK-72 system in convenient and lightweight package.

WU-5R Weaving Unit (Option for IK-72W Standard with IK-72W WEAVING model)

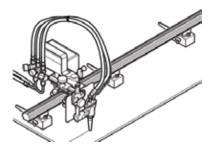
Option for IK-72W to perform weaving welding. Includes mounting bracket. Weaving is controlled by encoder motor.

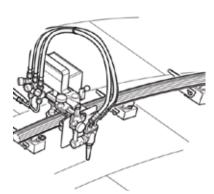
Weaving speed (*): 400 - 1500 mm/minWeaving widths:(*): 0 - 100 mm/minStop timer (left/center/right) : 0.0 - 10.0 seconds(*) at radius=100mm from the center of rotation

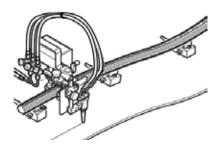




Rail selections
Stock #
TBPJ64025
90154
TBPJ64026







1D Rail 1500 mm

- For flat plate
- Extendable aluminium made straight rail
- Ideal for straight welding applications
- 4 pcs. permanent magnets

2D Rail 1000 mm

- For bended plane
- Extendable flexible rubber rail with steel plate liner; maximum bending radius 2500 mm
- 5 pcs. permanent magnets
- Upto 30° slope from horizontal position

3D Rail 1000 mm

- For bended and twisted planes
- Extendable flexible rubber rail; bends in any directions
- Maximum bending radius 2000 mm
- 5 pcs. permanent magnets
- Upto 30° slope from horizontal position







Optional accessories

Accessory	Stock #	Description
Rail connector	33107	Parts to connect 1D rail to 2D / 3D rail
Transformer PR 100-240V-SEC 24V 65W	222.002.256	Primary 100-240V / Secondary DC 24V
Weaving unit WU-5R	90255	



Specification		IK-72W	IK-72W WEAVING	
Machine weight		5.5 kg 7.6 kg		
Travel speed	speed 20-600 mm/min			
Guiding method		IK-72	rail system	
Driving method		Rack	and pinion	
Torch adjustment:	Up / down	4	5 mm	
	Forward / backward	4	5 mm	
Torch holder diamete	er	16 -	~ 20 mm	
Automatic stop funct	ion	Limit switch on	each end of carriage	
Weaving unit WU-5R		- Included		
Welding method:	Continuous	Yes	Yes	
	Tack / stitch	Yes	Yes	
	Weaving / Oscillation	Optional	Standard	
Power & signal cable	9	Power and signal cable integrated Y-branch cable		
		(Carriage-branch: 6 m, branch-power: 10 m branch-feeder: 0.5		
Torch holder diamete	er	16-20 mm		
Position adjustment	by limit switch	Yes		
Encoder motor for precise speed control		Yes		
Digital display		,	Yes	
Crater fill function		,	Yes	
Input power		DC	C 24V	

Types	
Model	Stock #
IK-72W	90250
IK-72W Weaving	90251

Scope of delivery
Machine body
Power & signal cable
Rail mounting bracket for limit switch (2pcs)
Allen keys (2pcs)
Operation manual



APOLLO GLOBAL COUPLINGS

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 7289

The Apollo Global couplings are designed to provide a quick set up and removal of cutting and welding equipment. A precisely machined single push system easily connects matching couplings with a click. The safety lock function ensures a secure connection and prevents unintended disconnection during operation. KOIKE Apollo Global couplings are designed according to 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 is permanent, contributing in safety.

Safety lock mechanism

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

Automatic gas supply shutoff

This allows the flow of supply gas only when couplings are connected. Gas supply is automatically shutoff when couplings are disconnected.

Double seal packing

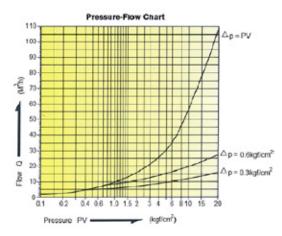
The double seal packings between the plug and the socket assures tight sealing.

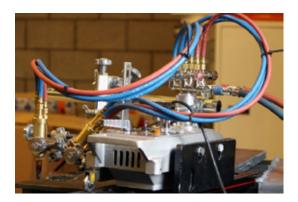
Chrome plated

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

Quality

Designed according to ISO 7289 and produced in Japan under strict quality management.







Technical specifications

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

Durability

Endurance test (by UL) 30,000 cycles



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







Model: AP / ZAP













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

Hose m	nount, regulator side			
Model	Max. hose diameter	Type of gas	Installation	Stock #
	6.0 mm	Oxygen	Hose	CG2500
AP-1S	8.2 mm	Oxygen	Hose	CG2414
	9.2 mm	Oxygen	Hose	CG2424
	6.0 mm	Fuel gas	Hose	CG2501
AP-2S	8.2 mm	Fuel gas	Hose	CG2474
	9.2 mm	Fuel gas	Hose	CG2502
	11 mm	Fuel gas	Hose	CG2434
	6.0 mm	Inert gas (Welding gas)	Hose	CG3432
AP-3S	8.2 mm	Inert gas (Welding gas)	Hose	CG3414
	9.2 mm	Inert gas (Welding gas)	Hose	CG3424
	6.0 mm	Oxygen	Hose	CG2924
	7.0 mm	Oxygen	Hose	CG2926
ZAP-1S	8.2 mm	Oxygen	Hose	CG2312
	9.2 mm	Oxygen	Hose	CG2322
	11 mm	Oxygen	Hose	CG2922
	6.0 mm	Fuel gas	Hose	CG2944
	7.0 mm	Fuel gas	Hose	CG2946
ZAP-2S	8.2 mm	Fuel gas	Hose	CG2334
	9.2 mm	Fuel gas	Hose	CG2942
	11 mm	Fuel gas	Hose	CG2332
	6.0 mm	Inert gas (Welding gas)	Hose	CG3924
ZAP-3S	8.2 mm	Inert gas (Welding gas)	Hose	CG3312
	9.2 mm	Inert gas (Welding gas)	Hose	CG3322

Quick couplings



Model: AS







Model: ZOP





1
 5



Hose mount, machine / torch side					
Model	Max. hose diameter	Type of gas	Installation	Stock #	
6.0 mm	Oxygen	Hose	CG2963		
	7.0 mm	Oxygen	Hose	CG2967	
AS-1S	8.2 mm	Oxygen	Hose	CG2341	
	9.2 mm	Oxygen	Hose	CG2351	
	11 mm	Oxygen	Hose	CG2961	
6.0 mm 7.0 mm AS-2S 8.2 mm 9.2 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	
	6.0 mm	Inert gas (Welding gas)	Hose	CG3132	
AS-3S	8.2 mm	Inert gas (Welding gas)	Hose	CG3341	
	9.2 mm	Inert gas (Welding gas)	Hose	CG3351	

Machin	e / torch mount			
Model	Max. hose diameter	Type of gas	Installation	Stock #
	G1/4 RH	Oxygen	Machine / Torch	CG2342
	G3/8 RH	Oxygen	Machine / Torch	CG2352
ZOP-1S	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
	G1/4 LH	Fuel gas	Machine / Torch	CG2364
-	G3/8 LH	Fuel gas	Machine / Torch	CG2362
ZOP-2S	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
	G1/4 RH	Inert gas (Welding gas)	Machine / Torch	CG3342
ZOP-3S	G3/8 RH	Inert gas (Welding gas)	Machine / Torch	CG3352
201-50	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-1AS	G1/4 RH	Oxygen	Machine / Torch	CG2372
20, 20	G3/8 RH	Oxygen	Machine / Torch	CG2472
70P-2AS	G3/8 LH	Fuelgas	Machine / Torch	CG2392
LUP-ZAS	1/4 LH	Fuelgas	Machine / Torch	CG2492



HAND TORCHES

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 ensure a safe, long life operation. Designed for the professional for use in industries such as metal fabrication, shipyards, salvage, construction and other general purpose uses.



Hand torches



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 hand cutting torch
- Chrome plated tubes
- **Triangular tube configuration,** for extra strengths



SILVER-CUT K250

Torch length	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 safely in the cutting nozzle
- Cutting oxygen lever with lock function. (excl. MK-36)
- Die forged head, increased strengths and service life





MK-150	
Torch length	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	
Torch length	525 mm (standard, 90° head)
Weight	1.5 kg
Cutting capacity	Max. 250 mm
Fuel gas type	Any medium pressure fuel gas

Types	Torch angle	Connection	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				
Torch lengths	661 mm (stand	661 mm (standard, 90° head)		
Weight	1.55 kg	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		
Torch length	915mm	
Weight	1.5 kg	
Cutting capacity	Max. 200 mm	
Torch head angle	$75^{\circ}\text{and}90^{\circ}$	
Torch connection	G3/8 RH-LH	
Fuel gas type	Any medium p	ressure 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.

Circle	bar	with	center	pin
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Attachment to dual roller guide, for circular cutting using any hand torch. Cutting diameter adjustable up to \emptyset 550 mm.

Stock #

Dual roller guide	

Stock # 80515





Circle bar with center pin	80516
×	



KOIKE CUTTING NOZZLES

The Trademark for High Quality Cutting

Features and Benefits

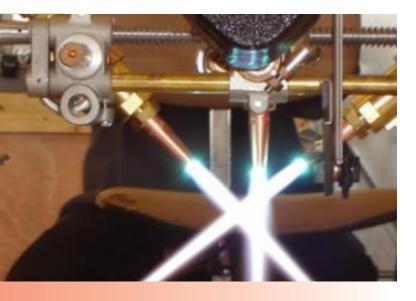
- Sharp, high quality cuts
- Small kerf
- Limited upper edge melt
- Limited upper edge slag
- Limited under slag
- Steady and safe cutting operation
- Cutting with small gas consumption
- Variety of selections
 - * Standard nozzle
 - * Divergent high-speed nozzle
 - * Out-mixing heavy duty nozzle
 - * 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 cuttingtip. 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 cutting tips with the divergent tip increases cutting speed up to 28% over standard tips and gas consumption is reduced to 26%. A stainless steel liner helps them to last up to 5 times longer.



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

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 economic cutting and to provide the highest cutting accuracy.

Quality

Made in Japan at KOIKE's top level production facility and quality management system, the KOIKE nozzles ensure each cutting nozzle to be of the 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 up to 2 times faster the speed of sound.

Productivity

Cutting speed is increased by up to 28% over standard nozzles.

Cost efficiency

Due to faster cutting speeds, gas consumption is reduced to 26%. (Compared to non-divergent nozzle).

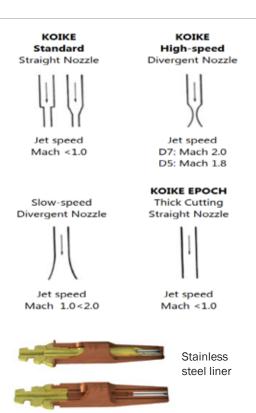
Durability

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 manually 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



102-HC

Standa	rd nozzle							Acetylene	
Stock #	Thickness	Tip #	Pre	ssure (bar)	Consur	Consumption (NI/h)			
	(mm)		Oxygen	Fuel Gas	Cutting O ²	Preheat 0 ²	Fuel gas	(mm/min)	
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	0.2	3400	480	430	490-400	
80015	30-40	3	3.0	0.2	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)

High-sp		Acetylene						
Stock #	Thickness	Tip #	Pre		Cutting speed			
	(mm)		Oxygen	Fuel Gas	Cutting O ²	Preheat 0 ²	Fuel gas	(mm/min)
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)

								· · · · ·
Stock #	Thickness	Tip #	Pre	Pressure (bar) Consumption (NI/h)				
	(mm)		Oxygen	Fuel Gas	Cutting 0 ²	Preheat 0 ²	Fuel gas	(mm/min)
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	0.2	3800	600	550	600-500
80225	30-40	3	7.0	0.2	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

Acetylene

Cutting nozzles



pozzla (7 bac)



Hign-sp	peed nozz	ie (/ Da	arj					Ethylene	
Stock #	Thickness	Tip #	Pre	ssure (bar)	Consur	Consumption (NI/h)			
	(mm)		Oxygen	Fuel Gas	Cutting O ²	Preheat O ²	Fuel gas	(mm/min)	
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	



Standa	rd nozzie							Natural gas	
Stock #	Thickness	Tip #	Pre	ssure (bar)	Consur	Consumption (NI/h)			
	(mm)		Oxygen	Fuel Gas	Cutting O ²	Preheat O ²	Fuel gas	(mm/min)	
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)



High-sp		Natural gas						
Stock #	Thickness	Tip #	Pre	Pressure (bar) Consumption (NI/h)				
	(mm)		Oxygen	Fuel Gas	Cutting 0 ²	Preheat 0 ²	Fuel gas	(mm/min)
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 Pressure (bar) Stock # Thickness Tip # Consumption (NI/h) **Cutting speed** Cutting O² (mm) Oxygen **Fuel Gas** Preheat O² Fuel gas (mm/min) 80041 5 00 1.5 0.2 690 1180 310 >660 1200 660-550 80042 5-10 0 2.0 0.2 1180 310 80043 10-15 1 2.5 0.2 2100 1180 310 550-490 15-30 2 0.25 3400 360 490-400 80044 3.0 1370 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



High-sp	peed nozzl	e						Propane	
Stock #	Thickness	Tip #	Pre	ssure (bar)	Consur	mption (NI/h)		Cutting speed	
	(mm)		Oxygen	gen Fuel Gas Cutting O ² Preheat O ² Fuel gas		Fuel gas	(mm/min)		
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

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High-sp	eed nozz	e						Propane	
Stock #	Thickness	Tip #	Pre	Pressure (bar) Consumption (NI/h)					
	(mm)		Oxygen	Fuel Gas	Cutting O ²	Preheat O ²	Fuel gas	(mm/min)	
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	

Cutting nozzles





High-speed heavy preheat nozzle										
Stock #	Thickness	Tip #	Pre	Pressure (bar) Consumption (NI/h)						
	(mm)		Oxygen	Fuel Gas	Cutting 0 ²	Preheat O ²	Fuel gas	(mm/min)		
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		



Thick p	late cutti	n <mark>g nozzl</mark> e	2					F	ropane
Stock #	Thick-		Pressure (ba	ır)	Co	nsumption (NI/h)	Cutting	Kerf
	ness	Cutting	Preheat	Fuel Gas	Cutting	Preheat	Fuel gas	speed	(mm)
	(mm)	0 ²	0 ²		0 ²	0 ²		mm/min	
80397	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

EPOCH-600

		ng nozzle		<u>,</u>				Propane	
Stock # 80398	Thick- ness	Pressure (bar)			Consumption (NI/h)			Cutting	Kerf
		Cutting	Preheat	Fuel Gas	Cutting	Preheat	Fuel gas	speed	(mm)
	(mm)	0 ²	0 ²		0 ²	0 ²		mm/min	
	300	5	0.6-0.7	0.4-0.5	60	4.0-4.8	2.7-3.1	130-150	8.0-12.
	400	6	0.7-1.0	0.5-0.6	70	4.8-7.0	3.1-3.4	80-90	10.0-13
	500	7	0.7-1.0	0.5-0.6	80	4.8-7.0	3.1-3.4	60-70	11.0-14
	600	10	0.7-1.0	0.5-0.6	110	4.8-7.0	3.1-3.4	50-60	12.0-15

Notes	

Notes	



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