

PORTABLE, H-SHAPE STEEL GAS CUTTING MACHINE

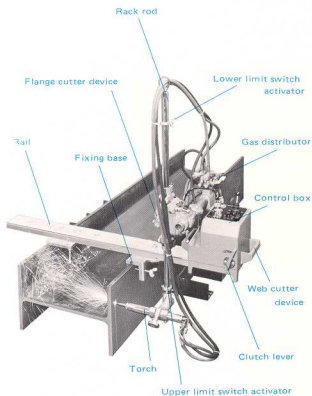
# MINI-MANTIS II



KOIKE SAN SO KOGYO CO., LTD.

FOR EASIER, MORE ACCURATE,  
CLEANER H-SHAPE CUTS

# MINI-MANTIS II



The Mini-Mantis II is an automatic gas cutting unit for rapid and precise cutting of H-shape web and flange. Mini-Mantis II has four features which contribute to on-site efficiency and labor reduction.

- \* Rail and main unit have been combined, so setting-up time is greatly reduced.
- \* Single-lever rail clamping.
- \* SCR control for smooth, even cutting speed.
- \* Unit construction for easy maintenance and checking.

Add to these features the famous KOIKE quality construction which ensures durability and trouble-free operation, and you have an economical, efficient compact gas cutting machine for small H-shape steel. There are two versions of the Mini-Mantis II, the LT long torch and the ST short torch. Choose the one best suited to your job requirements.

## Reasons for choosing the Mini-Mantis II.

### 1) Rapid gas adjustment

Koike's unique "One touch flame adjuster" is used in the gas distribution system, so the flame only has to be adjusted once, after which a flip of a lever stabilizes the flame at that setting, and also the pilot flame can be left on until the next cutting operation, which results in a considerable saving of labor.

### 2) More highly automated

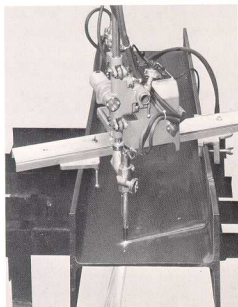
Use the 4-way switch and the cutting oxygen jets out and cutting smoothly commences.

Except for flange → web torch movement, nearly everything is automatic; setting the stop to the flange size, for instance, shuts off the cutting oxygen when flange cut is completed.

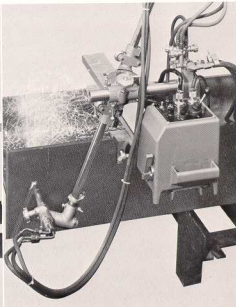
### 3) Functional, simple controls

Power switch, speed control, 4-way torch direction switch, rapid traverse, and indicator lamp are all grouped for easy use on the control panel.

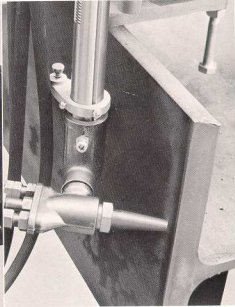
Easy to see, and easy to use — even for someone using it for the first time.



Diagonal web cutting



Diagonal flange cutting



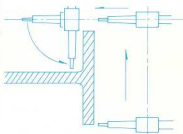
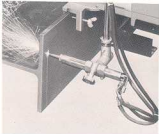
Flange bevel cutting

## Which Mini-Mantis II is the one for you?

### LT model

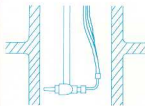
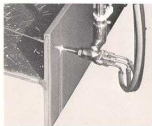
Simplifies web-cutting as the web-to-tip distance can be set with the torch vertical.

Also, no angle adjustment of the torch is necessary when making diagonal web cuts.



### ST model

The short torch means that when cutting several H-shapes together, little spacing is required.



## Easy to use

### 1) No need to prepare or move workpiece

The Mini-Mantis II has two motors, one for web-cutting and one for flange work. For web cuts, the carriage is driven along the rail, and for flange cuts, the torch assembly is moved vertically through a rack-and-pinion drive. Turning and marking the workpiece is unnecessary.

### 2) Can make diagonal cuts of the flange as well as the web, and bevel cutting

The angle is set by adjusting the rail or the vertical rack-bar and the result is a high-precision diagonal cut that is clean and sharp. And, you get the best flange bevel cuts.

### 3) Two for the price of one — plate-cuts also possible.

The Mini-Mantis II is for cutting H-shape, but can also be used on plate as well. Double versatility, and the low price means you get even greater cost-efficiency.

### 4) Quality cut-surface finish

The smooth, steady automatic cutting travel means that no follow-up work is needed, unlike manual cutters. You can start welding as soon as you've finished cutting.

### 5) Light and portable

Very light — total weight including rail is only 20 kg (44 lbs), making it easy to carry from place to place; small, so can be used easily even in small places. The Mini-Mantis II — power with economy.

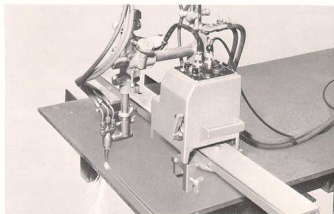
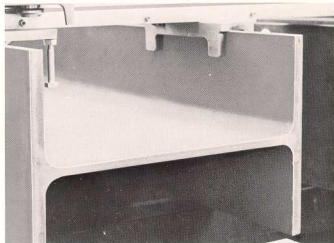
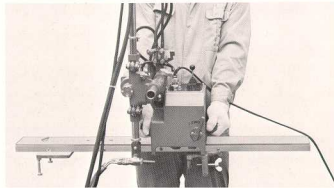


Plate-cuts also possible



Quality cut-surface finish needing no follow-up work



Light and portable

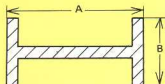
## Capacity

### 1 Right-angle cutting

A = 150 – 600mm (6 – 24")

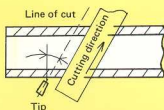
\* Optionally an A of 150 – 900mm (6 – 36") or wider is available.

B = 150 – 400mm (6 – 16")



### 2 Diagonal web cutting

35° at 400mm (16") diagonal web length

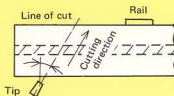


### 3 Bevel cutting

35° for both web and flange

### 4 Flange diagonal cutting

30° at 400mm (16") maximum diagonal flange dimension



## Specifications

	Web cutting	Flange cutting
<b>Cutting</b>		
Cutting capacity	5 – 32mm (0.2 – 1.28")	
Cutting speed	100 – 700mm/min (4-28"/min)	
Cutting dimensions	See above	
<b>General</b>		
Total weight	20kg (44 lbs) with rail	
Drive motor	DC shunt-wound motor, 5W	DC shunt-wound motor, 15W
	(with reduction gear)	(with reduction gear)
Speed control	S.C.R.	
Drive	Friction roller	Rack and pinion
<b>Rail</b>		
Length	1,100mm (44")	
Fixing	Clamping bolts	

## Standard accessories

Cable, 5m long	1
Tips, #0, 1, 2 of type 100	1 each
Fuses, 2A	2
Spanners, 3-spanner set	1 set
Tip cleaner	1 set
Hose band	2
Grease for one touch flame adjuster	1
Cross-head screwdriver	1
Centering jig	1



Total system supplier of welding and cutting

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