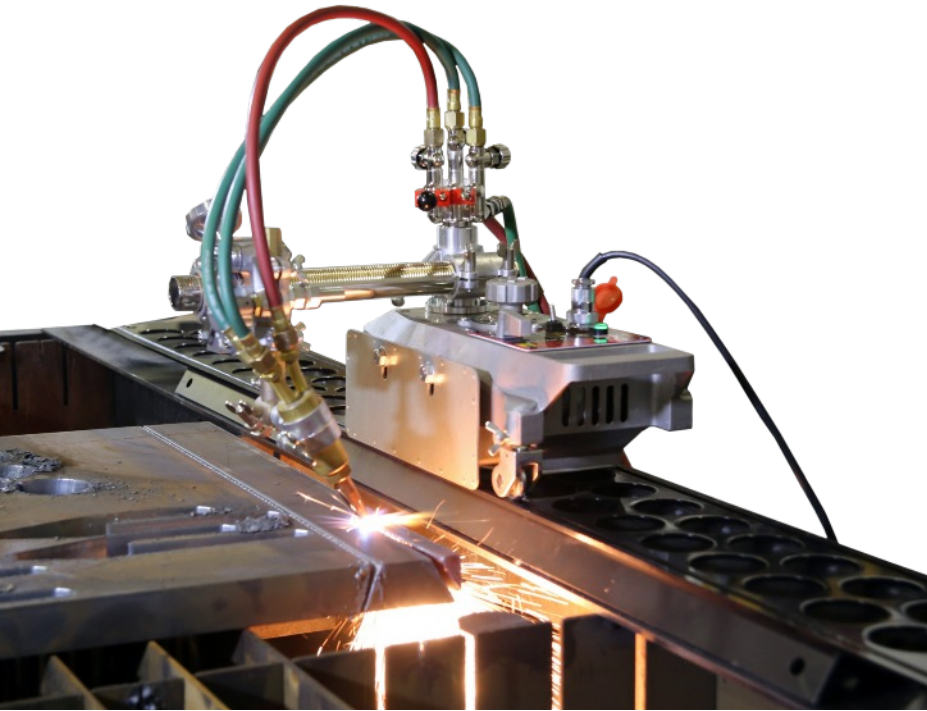


IK-12 MAX3

Portable Welding and Gas/Plasma Cutting



Serves as Both Cutting and Welding Carriage

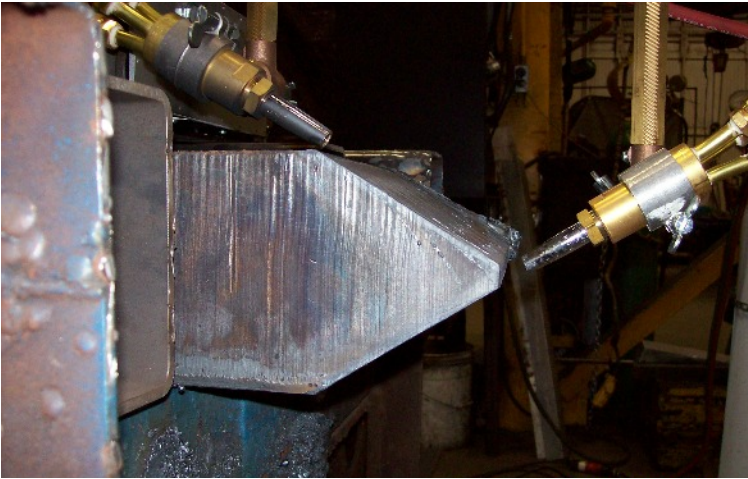
The IK-12 Max3 is an incredibly robust tractor, developed specifically to adapt to different solutions. With the 1 ½-inch diameter mounting post and 100-pound load capacity, the machine can be outfitted with different torch options in a matter of seconds thus saving you time and money by only having to supply one machine to do the job of many. The disk and cone drive system allows for extremely precise control over travel speed and when complimented by the 2-speed gearbox even plasma speeds are achievable. You can customize your machine specifically to your application by adding one of the pre-assembled plasma, welding or oxy-fuel torch sets or pick the specific parts you need on the attached pamphlet.

Features & Benefits

- **Multiple Application Carriage**
Oxy fuel cut, plasma cut or MIG weld with various attachments
- **Multiple Use Machine**
Performs straight line and circle cutting or welding
- **Double Cone Stepless Drive System**
Maintains constant travel speed even with high temperatures; allows greater speed control
- **10 Optional Torch Kits**
Allows proper torch selection for each application; Koike's superior design Series 100 torch tips are included to ensure fast, smooth cuts
- **Plate Rider Torch Option**
Automatically maintains torch distance during bevel or straight cutting
- **Extendable 72 in (1800mm) Track Sections**
Achieves unlimited cut length
- **Optional Snap Valve**
One-touch on/off gas valve



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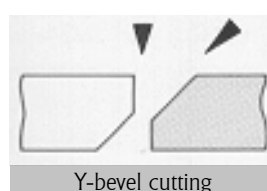
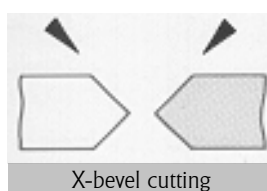
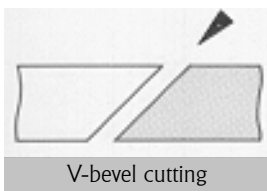
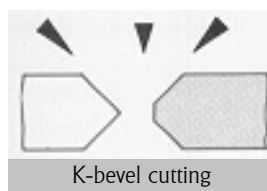
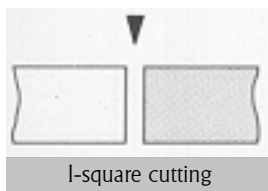


Demonstration of IK-12 Max3 with a S-200 torch set performing an X-bevel with a 1/2 inch land on 4 inch mild steel plate.

Three Part System - Part 1: Advanced Motorized Carriage

The heavy duty driving mechanism of the IK-12 Max3 is not affected by intense heat and fluctuating voltage, therefore ensuring steady travel. The Speed Control utilizes an exclusive Koike Double Cone Stepless Speed System, which functions with a condenser motor rotating at regular speed to prevent heat and voltage problems. In addition, the condenser motor rotates at a constant low speed (1,800 r.p.m./60Hz), extending the service life of bearings. A “zero reduction drive system” is also employed within the mechanism to eliminate any knocking from backlash, noise and vibration. Protection from heat is maximized with the use of heat-resisting grease, high temperature soldering and Teflon wiring ensuring long, continuous operation.

Cutting Examples



Part 2: Cutting Torch Unit

- **S-100 – For Square or V-Bevel:** Single torch unit equipped with a simple holder having no floating function. Standard Pipe Arm Length: 14 in (350mm). Vertical adjustment up to 3 in (80mm).
- **S-200 – For square, V, Y or X-Bevel cutting:** Two torch model of S-100. Standard Pipe Arm Length: 20in (500mm). Counter weight attached. Bevel and parallel cutting possible.
- **SP-100 – For Square or V-Bevel Cutting:** Single torch unit equipped with a plate rider having a floating function to maintain distance between tip and workpiece. Standard Pipe Arm Length: 14 in (350mm). Vertical axis steel pipe and Vertical adjustment up to 5 in (120mm).
- **SP-200 – For Square, V, Y, or X- Bevel Cutting:** Two torch model of SP-100 equipped with a plate rider having a floating function to maintain distance between tip and workpiece. Standard Pipe Arm Length: 20 in (500mm) - Counter weight attached. Bevel and parallel cutting possible.
- **SP-300 (V-Cutting Unit) – For Square, V, Y, or X-Bevel Cutting:** A combination unit of plate rider having floating function and 2 torches of V bevel block. Clean and sharp bevel V, Y and X cutting is ensured.
- **SP-400 (X-Cutting Unit) – For Square, V, Y, X or K-Bevel Cutting:** Combination unit of plate rider having floating function and 3 torches on a bevel block for precision X and K bevel cutting.
- **IK12MAX3P:** The IK-12MAX3P uses standard 1 3/8 in 32-pitch torch holder for use with most plasma systems using remote pendant supplied by the plasma manufacturer. Speed of 4-118 IPM.
- **IK12MAX3W:** The IK-12MAX3W uses standard MIG gun with remote pendant supplied by the MIG machine manufacturer.
- **300LKIT:** The 300LKIT is an add-on torch kit for the the IK-12MAX3 that allows plate cutting from 1/4 - 10 inch plus.
- **EPOCH 300 (EPOCH Thick Plate Cutting Unit):** Having the ability to cut from 4-12 in material with a specifically designed torch tip. Very safe due to external gas mixture. Gas system includes pressure gauges at the machine.



Circle Track
Part # **BCD19109**

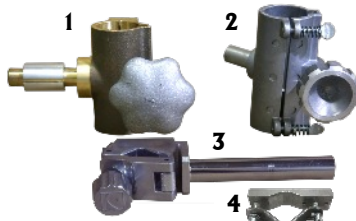
Cuts 1½ - 14 in (40 - 360mm) inside and 30 - 45 in (770 - 1,150mm) outside, counter weight recommended.



Vertical slide bars for roller bracket
Part#**ZS30390**: 6 in (145mm) (standard length)
Part#**ZS30430**: 10 in (250mm)
Part#**ZS30433**: 16 in (400mm)



Rail Clamp- Magnet
Part#**ZA3236020**
Holds rail steady onto plate



1. **Plasma Torch Holder**
Part#**ZM61278**
2. **Oxy-Fuel Torch Holder**
Part#**ZS61108**
3. **MIG Gun Torch Holder**
Part#**61000676**
4. **Subarc clamp**
Part#**1115992900**

Note: MIG Gun Torch Holder (3) and Subarc clamp (4) must be ordered together.

Part 3: Track, Accessories and Options



Straight Track 72 in (1,800mm)
Part #**ZM30400**
Tracks can be interconnected as required



Extreme Duty Track 72 in (1,800mm)
Part #**ZS30407**
Recommended when cutting thick plate over 6 in (150mm); tracks can be interconnected as required



Circle Cutting (Adjustable Radius Bar)
Part #**ZS31858**

Allows cutting of circles from 1½ - 104 in (40 - 2,650mm) (1½ - 104 in) diameter.



IK-12 Max3 Plasma Interface Kit
Part#**61004469**

Same speed capabilities as above machine but includes a true plasma machine interface, limit switch and 1½ in torch holder with 32-pitch rack.



Snap Valve

One-time On/Off Gas Valve

Part#**SNAPVALVEI**: used on IK-12Max3 with 1 torch

Part#**SNAPVALVEII**: used on IK-12Max3 with 2 torches

Part#**SNAPVALVEV**: used on IK-12 Max3 with 300L Torch kit

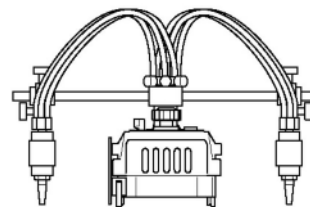
SPECIAL MODELS

IK-12Max3 S-Type High/Low Speed Machine Unit
Part#**ZA4051703**

Ultra versatile allows changing from low speed setting of 4-39 in/min (100-1,000mm/min) to 12-118 in/min (300-3,000 mm/min). Great for oxy-fuel, plasma and welding use.

SPECIFICATIONS FOR STANDARD MODELS



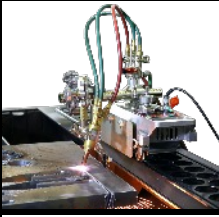


Traveling Speed	3-31 in/min (80-800mm/min) 50Hz 4-39 in/min (100-1000mm/min) 60Hz
Speed Control	Double cone stepless system
Motor	Condenser type induction output 9/10W (50Hz/60Hz)
Speed Indicator	Dial indication
Weight	25 lb (11.5kg) S-100 model
Max. Loading Weight	100 lb (50kg)
Overall Dimensions	17 (L) x 7(W) x 8-1/2(H) in (430 x 170 x 215mm)



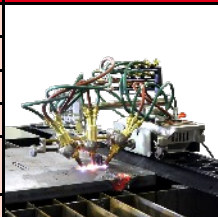
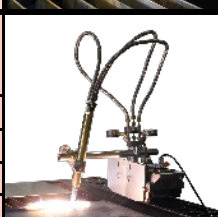
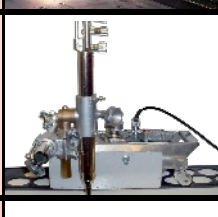
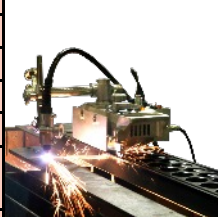

Longer Cross Bar Applications

CROSS BARS	PART#
13.7 in (350mm) as in S-100 set	ZS30300
19.6 in (500mm)	ZS30321
30.3 in (770mm)	ZS61213
31.5 in (800mm)	ZS30424
47.4 in (1200mm)	ZS30426
98.4 in (2500mm)	ZS30429

Counter Weight - Part#**ZS30346** may be required for above Cross Bars

MODELS DESCRIPTIONS	PART #	
S-100 Set Acetylene Kit	MAX3S100102	
S-100 Set LPG Kit	MAX3S100106	
(1) IK-12Max3 Unit*	TBCC21404	
(1) S-100 1 Torch Set	BCG25001	
(3) Cutting Tips -102 for Acetylene, 106 for LPG	Koike 100 Series	
(1) Rail 72in (1800mm)	ZM30400	
S-200 Set Acetylene Kit	MAX3S200102	
S-200 Set LPG Kit	MAX3S200106	
(1) IK-12Max3 Unit*	TBCC21404	
(1) S-200 2 Torch Set	ZA4052018	
(6) Cutting Tips -102 for Acetylene, 106 for LPG	Koike 100 Series	
(1) Rail 72in (1800mm)	ZM30400	
SP-100 Set Acetylene Kit	MAX3SP100102	
SP-100 Set LPG Kit	MAX3SP100106	
(1) IK-12Max3 Unit*	TBCC21404	
(1) SP100 Torch Set	ZA4052019	
(3) Cutting Tips -102 for Acetylene, 106 for LPG	Koike 100 Series	
(1) Rail 72in (1800mm)	ZM30400	
SP-200 Set Acetylene Kit	MAX3SP200102	
SP-200 Set LPG Kit	MAX3SP200106	
(1) IK-12Max3 Unit*	TBCC21404	
(1) SP200 Torch Set	ZA4052020	
(6) Cutting Tips -102 for Acetylene, 106 for LPG	Koike 100 Series	
(1) Rail 72in (1800mm)	ZM30400	
SP-300 Set Acetylene Kit	MAX3SP300102	
SP-300 Set LPG Kit	MAX3SP300106	
(1) IK-12Max3 Unit*	TBCC21404	
(1) SP300 Torch Set	ZA4052021	
(6) Cutting Tips -102 for Acetylene, 106 for LPG	Koike 100 Series	
(1) Rail 72in (1800mm)	ZM30400	

OPTIONAL EQUIPMENT	
IK-12Max3 Standard Unit	TBCC21404
IK-12Max3 S-Type Convertible High/Low Speed Machine Unit	ZA4051703
IK-12Max3 Plasma machine w/ Torch Holder and Interface Box	ZM4051753
IK-12Max3 Unit Only 220V	ZA4051406
Circle Cutting Radius Bar Set	ZS31858
Add Plasma to existing machine (required parts below)	
(1) Torch Roller Bar Bracket	ZM61278
(1) 1½ in Plasma Torch Holder	K866842800

MODELS DESCRIPTION	PART #	
SP-400 Set Acetylene Kit	MAX3SP400102	
SP-400 Set LPG Kit	MAX3SP400106	
(1) IK-12Max3 Unit*	TBCC21404	
(1) SP400 Torch Set	ZA4052022	
(9) Cutting Tip-102 for Acetylene, 106 for LPG	Koike 100 Series	
(1) Rail 72in (1800mm)	ZA30400	
EPOCH 300 Set cuts from 4 -12 in (100-300 mm) thick	MAX3EPOCH	
(1) IK-12Max3 Unit*	TBCC21404	
(1) EPOCH 300 Torch Set	ZA4052024	
(2) Cutting Tips	EPOCH 300 Series	
(1) Heavy-duty Straight Rail	ZS30407	
300L Torch Kit Cuts ¼ -12 in (3-300mm)	300LKIT	
(1) IK-12Max3 Unit	TBCC21404	
(1) 300L Machine Torch Kit	ZM3251018	
(1) Rail 72in (1800mm)	ZM30400	
(3) Cutting Tips (1) Safety-Z Coupling Set	Koike 100 Series ZA3232260	
Plasma Kit	IK12MAX3P	
(1) IK-12Max3 S-type HS Unit	ZA4051703	
(1) Bar Holder	ZS30301	
(1) Cross Bar 30 in (900mm)	ZS30424	
(1) Torch Roller Bar Bracket	ZM61278	
(1) 32 Pitch Pinion Plasma Torch Holder, 1½ in Ø	K866842800	
(1) Rail 72in (1800mm)	ZM30400	
Welding Kit (optional)	IK12MAX3W	
(1) IK-12Max3 S-type HS Unit	ZA4051703	
(1) Torch Set for Gooseneck Gun	ZA4404110	
(1) Rail 72in (1800mm)	ZM30400	

OPTIONAL EQUIPMENT	
Torch Set Only for IK-12Max3**	
S-100 1 Torch Set w/ 3 tips†	BCG25001
S-200 2 Torch Set w/ 6 tips†	ZA4052018
SP-100 1 Torch Set w/ 3 tips†	ZA4052019
SP-200 2 Torch Set w/ 6 tips†	ZA4052020
SP-300 2 Torch Set w/ 6 tips†	ZA4052021
SP-400 3 Torch Set w/ 9 tips†	ZA4052022
EPOCH 300 1 Torch Set w/ 2 tips	ZA4052024
Rails	
For IK-12 Beetle or IK-12Max3	ZM30400
Circle Track IK-12Max3 only	BCD19109
Extreme Duty Rail for IK-12Max3	ZS30407

* Below units may be used to substitute standard unit.
 ** Specify Cutting Tip - 102 for Acetylene, 106 for LPG.
 † Cutting Thickness ¼ - 4 in (3-100mm)



JQA-2093

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IK-12MAX3 01/16 KENG