IK-12 NEXT™ Portable Welding and Gas/Plasma Cutting Machine

Features & Benefits

- Multi-function control panel
  The new digital control panel enables the operator to accurately set a wide range of parameters as they relate to each process. With the use of a LCD display, set-up time is greatly reduced and made more repeatable.

- Powertrain
  Allows for extremely accurate positioning and ensures continuous drive speed and pulling force that is not compromised by power fluctuations or varying load weight.

- Multi-purpose cutting and welding
  The machine comes standard with the ability to interface to most power sources. Whether cutting or welding, the IK-12 NEXT has a built-in control that will send command signals directly to an attached power source interlock switch.

IK-12 NEXT is the latest model of straight line cutting & welding carriages

Designed to replace the rugged IK-12 Max3, one of the most popular and longest selling cutting carriages in the fabrication industry.

The IK-12 NEXT is an incredibly strong, versatile tractor that is specifically designed to be compatible with most applications. With the ability to adapt to each process, the machine is versatile but still retains a simplistic operating system.
Newly equipped with welding and plasma cutting capabilities

**Post Bar** (1-9/16 in dia)
Compatible with previous machine “IK-12 Max3.”
Existing torch sets can be used.

**Arc control toggle switch**
Used to send signal to welder or plasma power source; On/Off or momentary.

**Digital display**
Used to view speeds and set parameters (imperial or metric units of measure).

**Mechanical clutch**
Used to engage/disengage drive transmission while jogging machine.

**Heat emission mechanism (Patented)**
Bottom of machine is ergonomically designed to displace heat, up to 45% of all heat effect can be deflected from the machine.

**Weaving control connector**
Sends signal to weaver attachment.

**Input power connector**
Combines power input with an interface switch to reduce to the amount of wires required.

**Function Dial**
Single knob will change all parameters to control the machine.

**Data input dial**
Used to input speeds and parameters in conjunction with function dial.

**Running direction toggle switch**
Used to set the direction of the tractor.

**Creep Button (Patented)**
Used to slow down the machine at the beginning and the end of a cut; primarily for thick plate cutting.
Torch sets
Oxy-fuel cutting torch set

S-100 Torch Set
- Standard 1 torch unit
- Single torch head commonly used for plate stripping or performing compound bevel work.

S-200 Torch Set
- Standard 2 torch unit
- Dual torch head commonly used for plate stripping or performing compound bevel work.

SP-100 Torch Set
- 1 torch unit with mechanical torch height control
- Allows same functions as above but includes a plate tracking system used to maintain accurate plate distance from workpiece. Allows for more accurate beveling.

SP-200 Torch Set
- 2 torch unit with mechanical torch height control on each torch unit.
- Allows same functions as S-200 but includes a plate tracking system used to maintain accurate plate distance from workpiece. Allows for more accurate beveling.

SP-300 Torch Set
- 2 torch unit with mechanical torch height control on a single tracking system
- Commonly used for V-grooves or plate edge beveling.
- Maintains angle of 2 torches for accurate Y and X bevel cuts.

SP-400 Torch Set
- Use for heavy plate beveling

300L Heavy-duty Torch Kit
- Heavy-duty torch designed to cut up to 10 in (2540mm) plate thickness or where a large stand-off is needed.

Welding
Torch set for butt welding

- A type welding holder set
  is a single torch clamp that will give torch angle and tilt in all directions.
  - Allows torch to tilt +/- 45° for easy and accurate positioning.

- Pendulum Weaver
  Weaving unit increasing welding deposition with fewer passes.
  Numerical control for swing width and speed.

- 300L Heavy-duty Torch Kit
  Heavy-duty torch designed to cut up to 10 in (2540mm) plate thickness or where a large stand-off is needed.

Plasma cutting
IK-12 NEXT has arc stabilization inside, which allows for programmable piercing.

- Plasma holder set
  Allows torch to tilt +/- 45° for easy and accurate positioning.
## Accessories

### Optional Accessories

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| **Standard rail 6 ft (1800mm)** | Extendable 6 ft (1800mm) rail  
Built of special steel to ensure longevity  
Easy connection/no tools needed |
| **Heavy-duty heat resistant rail 6 ft (1800mm)** | Extendable, robust structure rail that does not bend  
Recommended when cutting thick plate over 2 in (150mm) |
| **Vertical slide bar** | Extends torch up/down stroke, used when cutting from the side of plate  
Available in different lengths |
| **Horizontal cross bar** | Long cross bars offer flexibility for torch positioning  
Available in different lengths |
| **Snap Valve** | Single action gas on/off  
2 models; single or two torches |
| **Torch bevel attachment** | Accurate bevel cutting with angle indicator  
Cuts bevel without tilting the torch |
| **Circle cutting rail** | Cutting diameter:  
Inside: Ø 1-⅜ - 14-⅝ in (40-360mm)  
Outside: 30-⅛ - 45-⅛ in (770-1150 mm) with standard length cross bar  
Counter weight recommended |
| **Circle cutting attachment** | Cutting diameter ø 15-¾ to 94-½ in (400-2400 mm) |
| **Snap valve B-type** | Single action gas on/off  
Increases productivity by eliminating flame adjustments each time after cut |
| **Twin torch attachment** | Enables 2-torch parallel cutting by attaching to a torch  
Torch distance 1-1/13 - 11-1/16 in (30-300 mm) |
| **Extended post bar** | 11.8 in (300 mm) long stand  
Allows torch head to raise above machine |