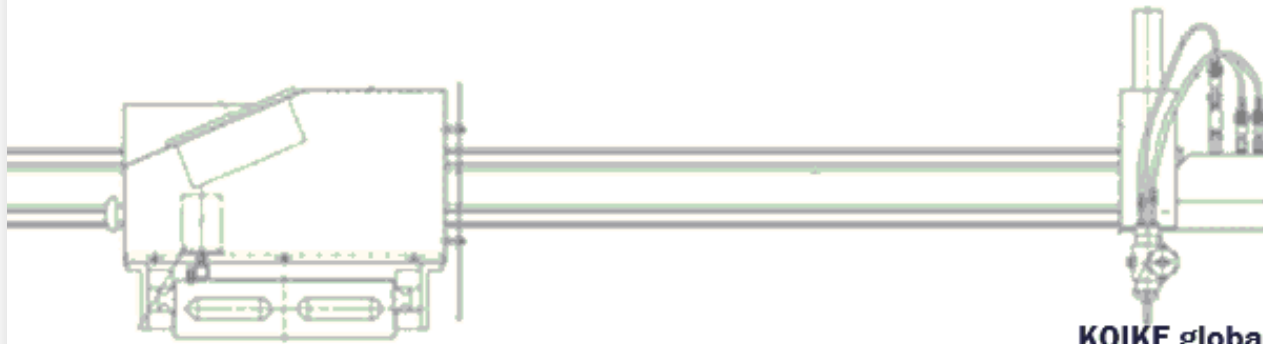


# ***PNC-12 EXTREME***

***Portable CNC Cutting Machine***



KOIKE global website: [www.koike.com](http://www.koike.com)

# Competition ?

Esab Crossbow?  
Steel Tailor?  
ZHAOZHAN?  
動作しません



# PNC-12 EXTREME introduction

“**Portable CNC Cutting Machine**”, with integrated CNC controller.

A perfect compact machine for a small-medium size fabricators who cuts wide variety of plate.

Ultra flexible: Easily convertible between Oxy fuel and Plasma cutting.

Easy and simple installation.



**PNC-12 Extreme machine overview**



**Cross bar is located next to the machine body.**



**Gas hoses are connected at the end of cross bar (quick-connection couplings are optional)**

## D420 Controller

Simple control with integrated panel keyboard.

**47 pre-set cutting patterns** make it possible to cut most of basic patterns without use of special CAD/CAM softwares.

Fully equipped with daily-use functions such as mirror, plate rotation, material rotation, dry run, return, program search, piercing point selection, etc.

NC data can be imported through USB port.



## **PNC-12: The Benefit to Customers**

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### **Minimal lead-time:**

- No delivery lead-time
- On-demand production

### **Flexibility in production:**

- Re-designing of parts at any time
- Production of parts based on fitting to the actual final-product (not only depending on drawing)

### **Lowers parts cost:**

- Purchasing various shapes at small quantity results in higher parts buying price.

### **Better use of in-house materials:**

- Instead of scrapping plates at low-price, gives added-values.
- Reduces stock of “sleeping” plate materials.



# Target Customers

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**Welding houses / Fabricator**

**Repair shop of construction / agricultural machines**

**Steel construction**

**Welding Schools**

**Secondary machine for processing remnant plate, next to large CNC machines.**

## Typical work: Welding houses / fabricator

80%-90% of jobs are welding-related.

Brackets of various shape and thicknesses are used on one structure.

PNC-12 answers those needs with affordable price.



# Typical work: Repair shop for machine and structures

Modification and replacement of ware parts / consumables

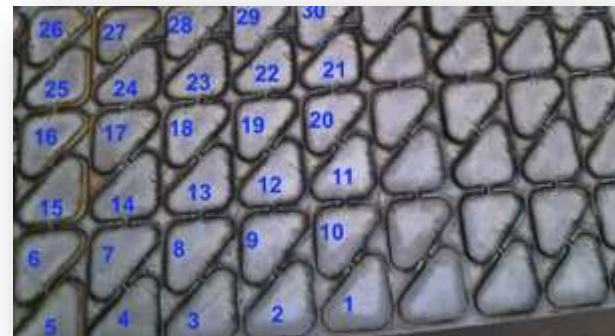




## Typical work: Secondary machine

It is optimal for large CNC cutting machines to focus on high added-value products.

PNC-12 can be used to process simple shapes from remnant plate from high-end machines.



# PNC-12 Extreme Oxy Fuel

De PNC-12 Oxy Fuel configuration comes standard with:

Automatic torchlifter, cutting torch

Automatic gasflow / automatic gas cut off

Intergrated gasdistribution in the cross-bar

Set cutting nozzles 5-50 mm

Multi language software PNC/CAM KAP with Auto Nesting

Machine is able to cut up to **50\*** mm mild steel for thicker material please contact Koike

Oxy Fuel cutting torch suitable for all Koike 100 nozzles.

## **CE certification**

Type 1015 effective cutting range 1.000 mm x 1.500 mm

Type 1530 effective cutting range 1.500 mm x 3.000 mm



# PNC-12 Extreme Plasma

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The PNC-12 plasma configuration comes standard with :

Automatic torchlifter

Torch Height Control System (THC)

Torch Brake Away System (TBAS)

Arc Voltage Height Control (AVC)

Multi language software PNC/CAM KAP with Auto Nesting

The PNC-12 Extreme can only be used for air plasma system like Powermax, Cutfire, Thermal Dynamics etc.

Maximum cutting thickness 20 mm mild steel

## **CE certification**

Type 1015 effective cutting range 1.000 mm x 1.500 mm

Type 1530 effective cutting range 1.500 mm x 3.000 mm





# AVC Unit





# Conversion Kit: Oxy-fuel to Plasma

PNC-12 Extreme can be converted from Plasma to Oxy-fuel setup at any time with optional Plasma Conversion Kit.

A optimal choice in case when there is needs for cutting of thin plate or non-ferrous materials.



**Standard PNC-12 Extreme  
Oxy-fuel setup without IHC  
unit.**

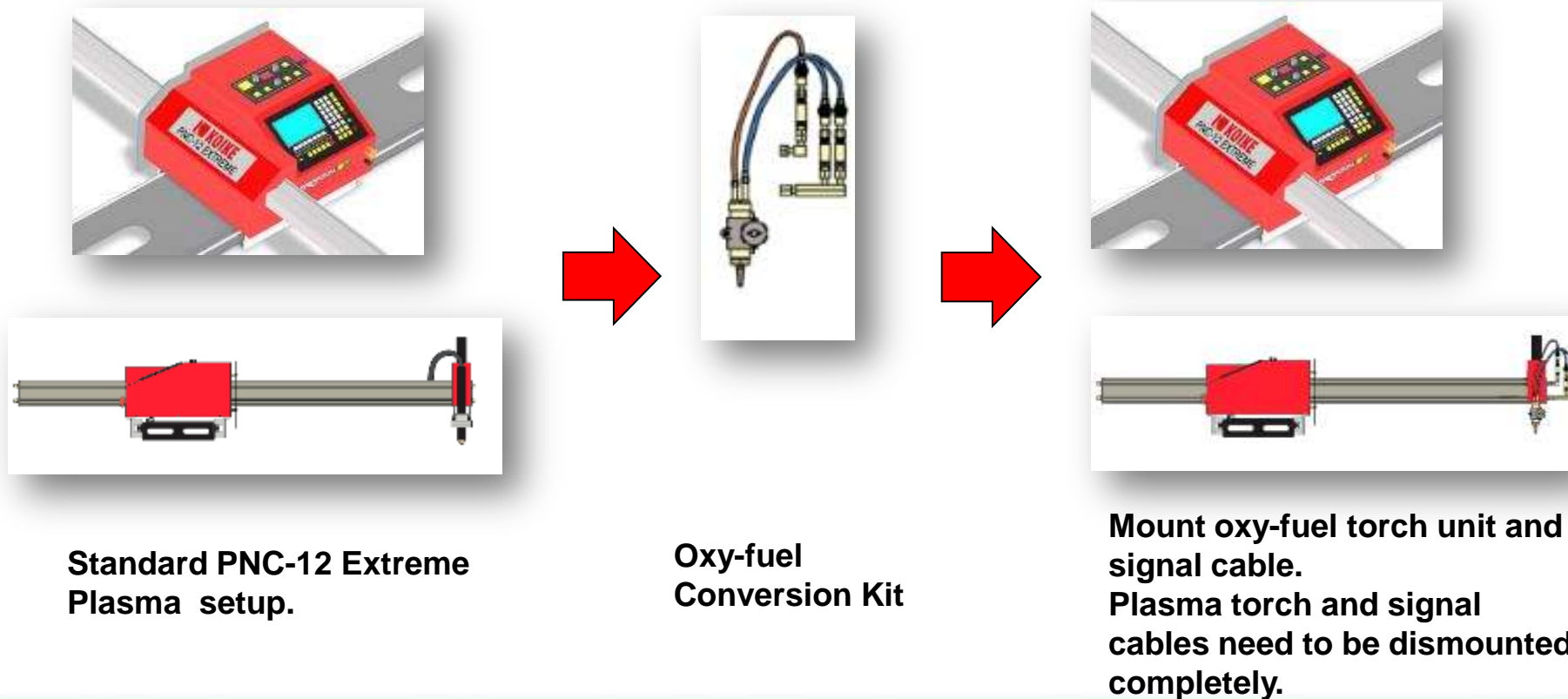
**Plasma  
Conversion Kit**

**Mount plasma torch unit and  
signal cable.  
Oxy-fuel related units and  
signal cable need to be  
dismounted completely.**

# Plasma to Oxy-fuel conversion

Similarly, PNC-12 Extreme can be converted from Plasma to Oxy-fuel setup at any time with optional Oxy-fuel Conversion Kit.

A useful choice in case when there is needs for cutting of thick mild steel plates.



# PNC-CAM

“PNC-CAM” is a CAD/CAM software specially designed for Koike PNC series.

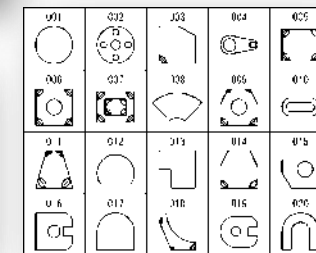
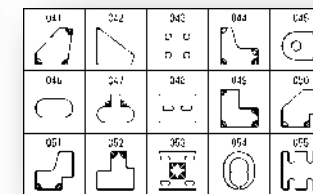
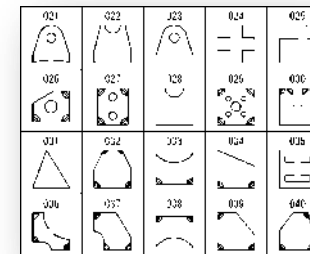
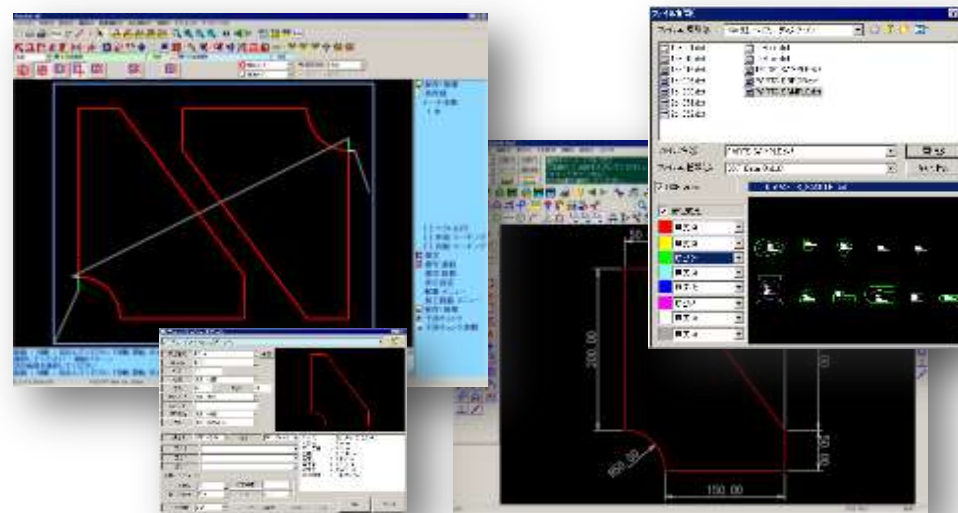
Simple and easy operation.

Increased productivity and efficiency by lead in/out adjustment and nesting.

Virtually every shapes can be programmed for cutting.

Additional pattern shapes for easy shape creation.

**Standard Auto Nesting up to 12 different shapes**



## Feature

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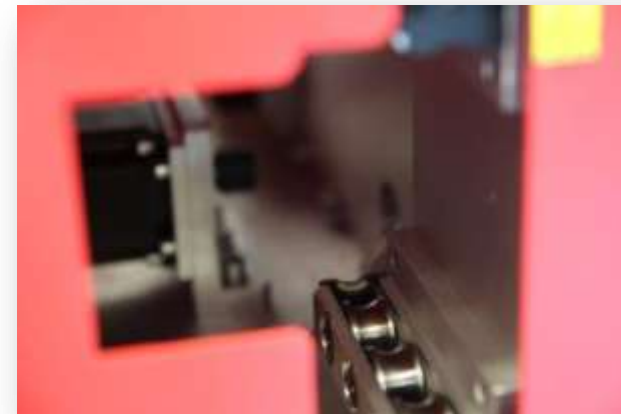
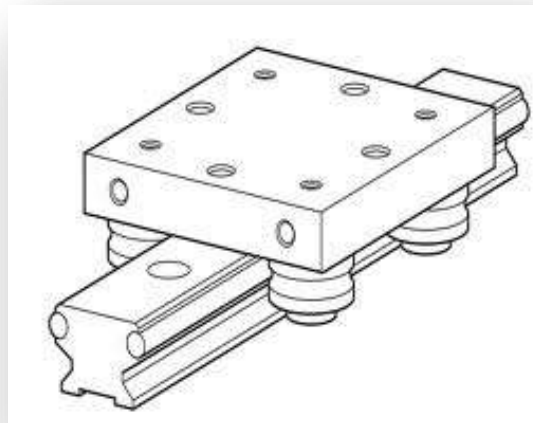
Length rail made of steel all our competitors use Aluminium.

The chose for using steel is simple because it is more stabel an has less vibration the less vibration the better the cut!

The rail is heavy and robust aprox 120KG

The rail comes standard with Rigid Linear Guiding System both X and Y-axis

**Machine can be used with or with out cutting table**





## Feature

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The cross bar makes use of a linear guiding. As such the crossbar smoothly but also stable moves.

The cross bar is provided with integrated Gas Distribution System.

All the cables and plasma torch lead walk through a hollow space behind the cross bar for maximum protection.

Type 1015 effective cutting range 1.000 mm x 1.500 mm

Type 1530 effective cutting range 1.500 mm x 3.000 mm



# Feature

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## Plasma torch holder comes standard with:

Arc Voltage High Control System (AVC)

Torch Height Control Sensor

Torch Brake Away System (TBAS)

All needed cables

Oxy Fuel torch holder comes standard with:

Automatic torch holder

Automatic pre-heat and cutting gas supply

Automatic gas stop when cutting is done

Gas hoses

All needed cables



# Cutting tables and filter units

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## **MCT Modular Cutting Table for Oxy-Fuel**

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

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

MCT 1530 contains 2 Modules for PNC-12 Extreme Type-1530.

Important: 90% of each module surface must be covered for effective fume extraction.

Easy Transport

Easy Installation.

Including rail support to mount PNC-12 Extreme.

## **HELIOS Cutting Table for PNC only in combination with plasma cutting**

A 1500 mm x 3000 mm cutting table, suitable for plasma cutting. The table has 6 divided internal sections (500mm x 1500mm each). As machine travels, fume extraction opening of each section open/close automatically by mechanically triggered pneumatic valves, allowing effective fume extraction. Delivered complete, Including rail support, pneumatic valves and tubing.

# Cutting tables and filter units

## VDS2-H5C Filter system

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

Maximum flow capacity of 4000m<sup>3</sup>/hr

Maximum pressure of 2000 Pa

Includes PTFE made 2 cartridges. Each cartridge has filter surface of 20m<sup>2</sup>, 80L dustbin capacity.

## Filter Kit H5C

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





# Specifications

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7" 256 color display 800\*480 pixels

Multi language display.

47 preset contours which can be edited

64 Mb SDRAM working memory`.

USB connection for transfer data and cutting plans

**Cuttingspeed up-to 3000 mm/min / JOG Speed to 5000 mm/min**

Complete steel casing, internal protection from electromagnetic field and other radiations

Integrated GDS system, AVC, torch collision and brake-away protection, linear guide for both X and Y-axis

Rail length and width of rail steel for less vibration, guiding the side instead of on the top concern for stability

Multi language software FidDef8 (CAD) end PNC-CAM including auto Nesting up to 12 different shapes / parts

Same machine can be used for plasma and oxy by using simple conversion kits

230V / 115V **CE approved with certificate**

Very solid and robust

# Options

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Conversion kit from plasma > gas

Conversion kit from gas > plasma always in combination with AVC unit

Filter unit / filter kit

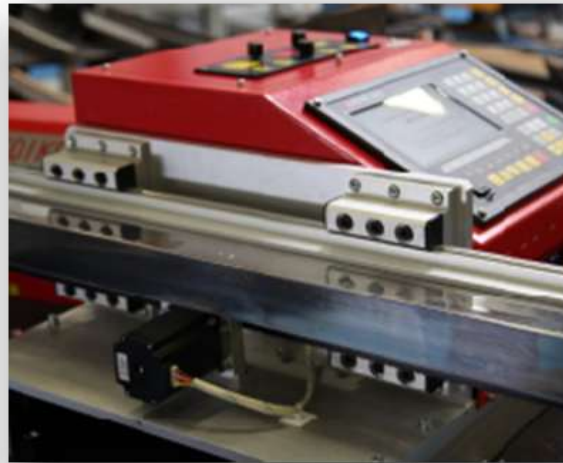
Training and installation done by Koike

MCT Modular Cutting Table for oxy-fuel

HELIOS Cutting Table for PNC only for plasma cutting

Twin torch option ( only oxy fuel )

Heavy duty torch set ( only oxy fuel )





**KOIKE**

*Your cutting needs – achieved.*