tru-kut

The AKS Cutting Systems “tru-kut” is a 5’ x 10’ platform CNC Plasma Cutting System that includes many of the preferred features of the AKS “accu-kut”.

The AKS “tru-kut” is a CNC x-y programmable plasma cutting system that can incorporate either traditional non-HyDefinition® “air” plasma power supply unit, or upgraded to the AKS “tru-kut” X to include Hypertherm “HyDefinition®” plasma cutting.

Whether integrated with a HyDefinition® plasma torch, or with a traditional “air” plasma torch, the AKS “tru-kut” is designed and built to the same performance and durability standards as all AKS Cutting Systems. The AKS “tru-kut” unitized machine frame is machined in one single set-up, resulting in the highest achievable accuracies of motion of any plasma cutting system on the market. The AKS “tru-kut” uses the same controls, motors, drives and controller as the AKS “accu-kut” achieving superior motion accuracy and precision.

The AKS “tru-kut” uses standard all Hypertherm technology including:
- Hypertherm Plasma Power Supply Unit
- Hypertherm Edge Connect™ CNC Controller
- Hypertherm Phoenix Operating Software
- Hypertherm ProNest LT Programming Software
- Hypertherm Sensor™ Advanced Torch Height Control (THC)
- Hypertherm Torch Head and Consumables

tru-kut X

The AKS “tru-kut” is also available in the AKS “tru-kut” X model which is for premium HyDefinition® plasma cutting.

The AKS “tru-kut” X includes integration of the Hypertherm HyDefinition® plasma power supply unit, the upgrade to the Hypertherm full ProNest Software, and the Down Draft Air Table.
AKS tru-kut 510

The AKS tru-kut 510 is perfect for shops that need a heavy duty, unitized plasma cutting table, capable of cutting up to 5’X10’. The “tru-kut” comes standard with Hypertherm Powermax or MaxPro plasma power supply for traditional plasma cutting performance. The AKS tru-kut X is upgraded to the HyDefinition® capability and utilizes the HPR or XPR family of cutting power supplies and provides SureCut™ technology included.

The AKS “tru-kut” 510 offers these unique features & benefits:
- Heavy-Duty “Unitized” One-Piece Frame Machine Tool
- Removable/Replaceable Slat Table System
- Cutting Table 2” Thick Full Plate Load Capacity
- Standard Water Table (optional Down Draft Air Table)
- X-axis Dual Synchronized Helical Rack & Pinion Drives on both sides
- Bridge Single Y-axis Helical Rack & Pinion Drive
- Z-axis Hypertherm Sensor™ Advanced Torch Height Control (THC)
- Hypertherm Powermax “air” Plasma Power Unit & Torch (optional Hy-Def Unit)
- Side Clean-Out Doors for Manual Scrap/Slag Removal
- Magnetic Breakaway Torch
- Laser Pointer for Plate Alignment and Location Finding
- Hypertherm Edge Connect™ CNC Controller
- 19” Color Touch Screen Operator Control Console
- Hypertherm ProNest™ LT Programming Software (optional ProNest™)
- +/-0.004” per 3’ Accuracy of Motion
- 1200 ipm travel speed

Hypertherm Edge Connect™
CNC Controller

Y-axis Helical Rack & Pinion Drive

Z-axis Sensor™
Torch Height Control (THC)

Magnetic Breakaway Torch

Standard Powermax “air” Plasma Torch (optional Hy-Def Torch on tru-kut X)

X-axis Helical Rack & Pinion Drive

Hypertherm ProNest™ LT Software
(optional ProNest on tru-kut X)

Laser Pointer

Clean-Out Access Doors (on optional Down Draft Table)

“Unitized” One-Piece System

Standard Water Table (optional Down Draft Table)
The AKS “tru-kut” offers these optional upgrade items:

**Upgrade to “tru-kut” X** – upgrade the standard “tru-kut” into the premium “tru-kut” X, including:

- Upgrading the plasma power supply from the traditional “air” plasma to the Hypertherm HyDefinition® Plasma Power Supply
- Upgrading the software from Hypertherm ProNest LT (light) to full version Hypertherm ProNest including the Advanced Post Processor and the Automatic Nesting Module

By upgrading to the superior HyDefinition® cutting process, the “tru-kut” X 510, which is a True Hole® enabled cutting system, is part of the Hypertherm SureCut™ Technology product, and achieves premium plasma cutting performance including Hypertherm advanced cutting features like:

- True Hole®
- Power Pierce™
- Rapid Part™
- True Bevel™
- Optimized Process Parameters
- Maximized Consumable Component Life

The AKS “tru-kut” X still utilizes all the same exclusive features and benefits of the “tru-kut”, but now, the cutting performance of the “tru-kut” X is improved to the level of similar performance of the industry-leading AKS “accu-kut”. The AKS “tru-kut” X is the highest value small platform machine available on the market, with superior performance and capability over similar competitive machines.

**Down Draft Table** – commonly on the “tru-kut” X, this enhancement offers improved HyDefinition® cutting and improved smoke collection (smoke collector filtration unit or blower fan unit must also be purchased.) Unlike water tables, which sometimes interfere with the HyDefinition® cutting process, the Down Draft table provides a simpler, smoother and cleaner cutting operation, which eliminates the environmental concern to discharge waste water. The AKS “tru-kut” includes single 5’x10’ zone with optimized air draw, and includes access doors on both sides of the tank for easy cleanout and maintenance.

**AKS robo-kut** – is the most powerful plasma cutting 5-axis bevel head in the industry and is protected by several U.S. Patents. The AKS “robo-kut” is capable of +/-45 degrees for A,V,K, X, top-Y and bottom-Y style bevel cuts for weld prep applications, countersinks, and chamfers, and also is capable of precision taper compensation or “back-beveling”. Most importantly, the AKS “robo-kut” can produce a ½” dia “bolt ready hole” in 1” thick steel plate, for a ½ : 1 ratio for hole diameter: thickness in many applications, which is superior over competitive machines which are limited to traditional 1 : 1 ratio only. The AKS plasma “robo-kut” incorporates robotic style precision gearing and planetary gearboxes that can be incremented in arc-seconds, or fractions of degrees, for tightest precision and accuracy. The “robo-kut” performs continuous unlimited rotation without interruption, for cutting of the most complex 5-axis parts without having to stop and unwind; and includes a magnetic breakaway head to prevent damage upon a crash.

**Smoke Collector Filtration Unit** – coupled with the Down Draft Table, the Smoke/Dust Collector Filtration Unit provides suction air capable of both removing and filtering the plasma cutting process smoke. It is a stand-alone unit either installed indoors, near the plasma cutting machine, or outdoors for quieter operation. The Smoke Collector unit contains a series of high capacity HEPA filters which efficiently re-circulate clean air back into your plant.

**Oxy-Fuel Torch** – complimentary technology cutting torch on a separate carriage, but on the same bridge, next to the plasma torch. The Oxy-Fuel torch is powered by either independent servo control, or mechanical slave linkage. Also included standard are auto gas control and remote ignition. The Oxy-Fuel torch is for cutting 2”-6” thick carbon steel and cannot cut stainless steel and aluminum. The AKS Oxy-Fuel torch is a premium design, able to withstand the harsh, ultra-hot, cutting process.
HYPERTHERM EDGE CONNECT™ CONTROLLER

The AKS “tru-kut” utilizes the Hypertherm EDGE Connect™ CNC Controller, the leading plasma cutting controls package in the industry. The EDGE Connect™ combines Hypertherm’s embedded expertise foundation with AKS Cutting Systems customization.

- Utilizes Hypertherm Phoenix™ Operating Software
- 19” Color Projected Capacitive Touch Screen
- One touch access for support documentation including cutting optimization tips, consumable change instructions and diagnostic tools
- Configurable Watch Windows™ enable on-screen real time monitoring of key process performance parameters while cutting
- Two Year Warranty
- Remote Help™ over the internet reduces down time and the need for on-site visits

HYPERTHERM PRONEST LT PROGRAMMING SOFTWARE

- Powerful single solution CAD/CAM nesting software designed for light industrial production
- Increases material savings, boosts productivity, reduces operating costs and improves part quality
- Compatible with most drawing formats with direct import of .dxf, .dwg, and CNC simple shapes
- Uses the patented CutPro® Wizard, with database cut charts, so even new operators can be ready to cut production parts in minutes
- Enables users to obtain optimal part cut quality with automatic nesting and automatic process optimization
- Backed by Hypertherm's global network of professionals for service, support and troubleshooting