

Specification



In Constant Pursuit of Technological Advancement

Item	Model	AH53C	AH64C	AH1080CL	AH1260CL
Work Table Specification (mm Inch)		630x310 (24.8 x 12.2 inch)	630x470 (24.8 x 18.5)	950x1100 (37.4 x 43.3)	2020x1110 (79.5 x 43.7)
X,Y axis travel (mm) (INCH)		500x300 (19.7 x 11.8)	600x400 (23.6 x 15.7)	800x1000 (31.5 x 39.4)	1200x1000 (47.2 x 39.4)
Max. Job Load Size (WxDxH) (mm Inch)		700x600x250 (27.6 x 23.6 x 9.8)	800x600x250 (31.5 x 23.6 x 9.8)	1100x1400x600 (43.3 x 55.1 x 23.6)	2300x1500x600 (90.6 x 59.1 x 23.6)
Max. Job Load Weight (kgw) (lb)		1000 (2205)	1200 (2646)	3000 (6614)	4000 (8818)
Z-axis Ram Travel (mm) (INCH)		250 (9.8) opt 600mm	350 (13.8) opt 600mm	600 (23.6)	600 (23.6)
W-axis Travel (mm) (INCH)		360 (14.2) opt 600mm	400 (15.7) opt 600mm	600 (23.6)	600 (23.6)
A axis (Degree) opt		360	360	360	360
A-axis Job Load Weight (kgw)		50	50	500	900
Automatic Tool Change (nos) opt		20	20	20	42
Max. Electrode Diameter (mm) (INCH)		Ø0.2~Ø3.0 * Ø0.008~0.12	Ø0.2~Ø3.0 * Ø0.008~0.12	Ø0.2~Ø3.0 * Ø0.008~0.12	Ø0.2~Ø3.0 * Ø0.008~0.12
Max. Electrode Length (mm) (INCH)		400 (15.7) opt 600mm	500 (19.7) opt 600mm	600 (23.6)	600 (23.6)
Distance from Guide to Table (INCH)		210~460 (8.3 x 18.1)	220~570 (8.7 x 22.4)	200~810 (7.9 x 31.9)	500~1100 (19.7 x 43.3)
Dielectric Capacity (L) (GALLON)		550 (145)	600 (158.5)	2500 (660.5)	4700 (1242)
Dielectric Type		Deionized Water	Deionized Water	Deionized Water	Deionized Water
Outlook Layout (WxDxH mm) (INCH)		2550x2250x2050 (100.4x88.6x80.7)	2630x2350x2150 (103.5x92.5x84.6)	4300x3350x2350 (169.3x131.9x92.5)	5500x5200x3600 (216.5x204.7x141.7)
Machine Body Net Weight (kgw) (lb)		3000 (6614)	3800 (8378)	5500 (12125)	6000 (13227)

※ Remark: Electrode Diameter of ATC can use around in dia.Ø0.2~Ø3mm(opt,Ø3~6mm)
The manufacturer reserves the right to modify the design, specifications, mechanisms....etc. to improve the performance of the machine without prior notice, all the specification as above for reference.

STANDARD ACCESSORIES

- Guide Dia.0.5mm x 1
- Insert Rubber Dia.0.5mm x 1
- Electrode Brass Tube Dia.0.5mm x 1
- Flushing Pipe x 1
- Fluid Filtration System x 1
- Work Lamp x 1
- Remote Control x 1
- Single Axis Linear Motor (AH1080CL/AH1260CL)
- Guide Dia.1.0mm x 1
- Insert Rubber Dia.1.0mm x 1
- Electrode Brass Tube Dia.1.0mm x 1
- Air Fast Connector x 1
- Air Pipe x 1
- Machine Pad x 1
- Tool Box x 1
- Digital Water Conductivity

POWER UNIT

INPUT POWER KVA	3
PULSE GENERATION	Power MOSFET switching
CURRENT AMPERE	47 (OPT. 75A)
CURRENT SETTING	17 Steps
PULSE WIDTH	32 Steps each

OPTIONAL ACCESSORIES

- 1,000 RPM ER Spindle x 1
- Rotary Table (Yukiwa,/MMK,/LCM) x 1
- Generator HV Modules x 1
- Electrode Tool Holder Set (ER Type) x 1
- AEC SYSTEM (Auto Electrode Changer) x 1
- AGC SYSTEM (Auto Guide Holder Changer)x 1
- Generator 75A current x 1
- Water Chiller x 1
- Electrode Tool Holder Set (Precision 3 JAWS Type) x 1
- X,Y axis Linear Motor (AH53C / AH64C)
- Single Axis Linear Motor (AH1080CL/AH1260CL)



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AH SERIES

High Speed Small Hole Drilling Machines

Developed for Aerospace, Gas Turbine and Medical applications



Gantry Style for Rigidity Submerged for Faster Drilling.

Large workpiece capacity for A/B Indexers and work pieces.

Features:

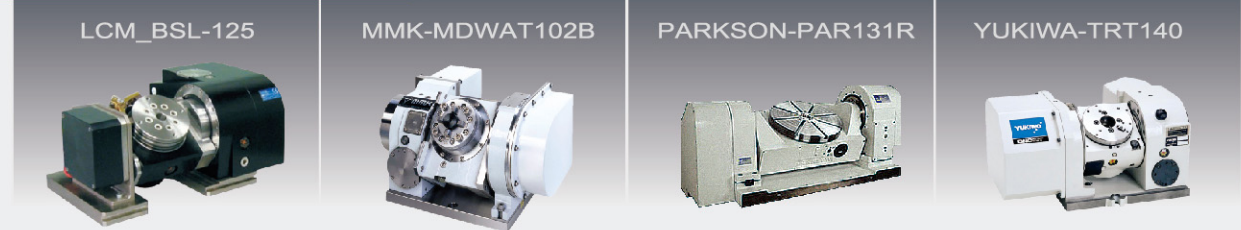
- Gantry type construction assures excellent rigidity and stability.
- All XYZ axis use AC Servo Drive + linear guide ways Precision Encoders (scales opt).
- $\pm 0.01\text{mm}$ pitch accuracy.
- Available to equip with A / B axis.
- Accurate Fine Feeding is controlled for stable machining and faster Break-Through.
- Automatic Depth Measurement Function is available for blind-hole drilling.
- Drills Deep, angled holes in hardened alloy (Stainless Steel, Titanium, Nickle-based superalloy) using electrode from special $\varnothing 0.2\sim 3.0\text{mm}$ (optional from $\varnothing 3.1\sim 6.0\text{mm}$).

- ✓ **Advanced Design**
- ✓ **Excellent Performance**
- ✓ **Ideal for drilling Aerospace, Power Generation and Medical parts**
- ✓ **3D Shape machining for Micro EDMing**



AH SERIES

Hardware Features



Flexible working range, suitable for all kinds of jet engine turbine blades
 Optional submersible A and AB indexers from MMK, Yukiwa, and others, allow for full 6 axes positioning and edming. All 6 axes X,Y,Z,W and optional A and B axis, are controlled from the CHMER CNC Control. No extra PLC control box required.

Superior Electronic Hardware

New 140 Volts High Voltage power supply is standard for improving performance in special alloy like nickle-based material. Optional 25 amp booster for 75 amps total with ER spindle for larger electrodes 3~6.0 mm dia.



AEC, AGC DEVICE

Automatic Electrode Changer and Automatic Guide Changer are optional features that allow for unattended operation and greater productivity. AEC 20 loaded with Electrodes and AGC with 5-10 Guides up to 6" long.

*Controller will automatically compensate for depth if an electrode change is required in the middle of the burn.

All XYZ axis use AC Servo Drive + linear guide ways precision encoders (scales opt)

All X,Y and Z axes use AC servo drives with Linear guideways that are automatically lubricated. Precision rotary encoders provide the semi-closed loop feedback. Linear glass scales are optional.

Linear Motor (opt for X,Y axis)

Linear motors are optional on the AH1080 and AH1260 models with glass scale feedback.

Large Water Reservoir

Standard 250 liter (65 gallon) reservoir with 2 filters and Deionization system for supplying dielectric. (larger units are available for the AH 1080 and AH 1260 models).

Electrode Stabilizer

Automatically stabilizes the electrode by securing it in the middle and moving down as it wears, with the 400 mm electrodes and the optional 600 mm.

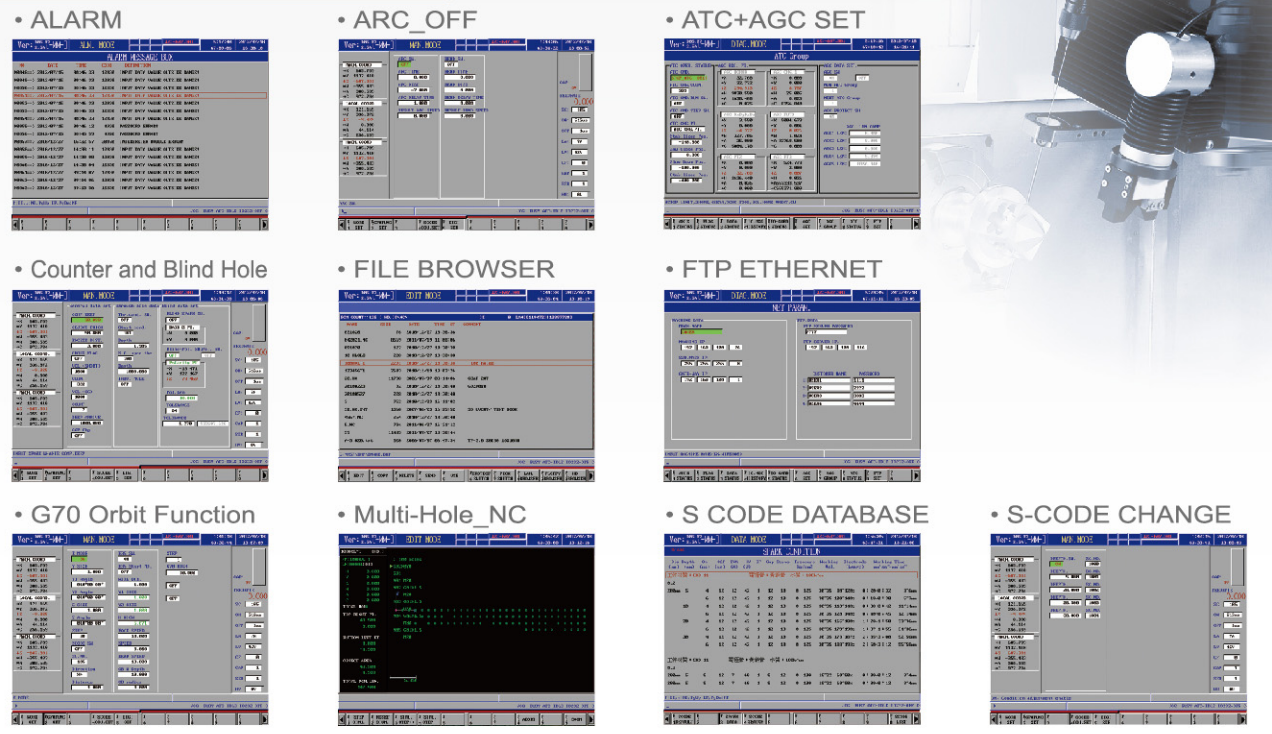
1,000 RPM Spindle

Programmed speeds from 10-1000 RPMs for increased speed and reduced electrode wear

Water Chiller optional

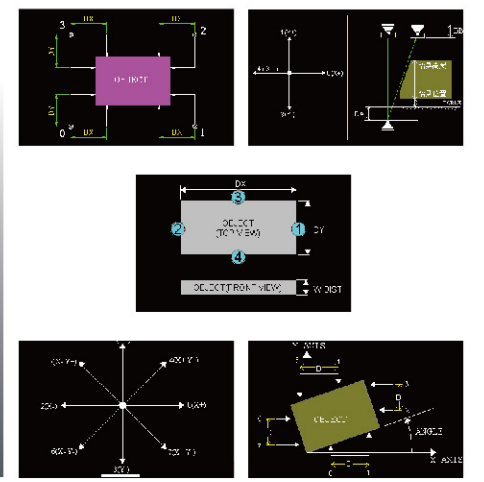
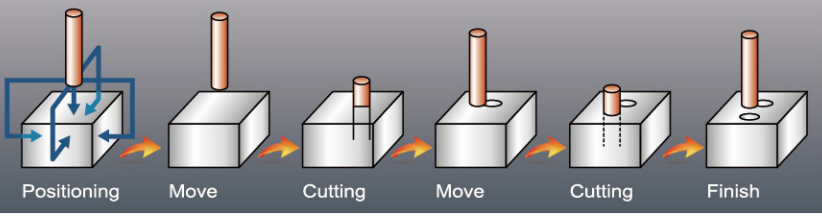
An essential hardware function for a precision discharging hole.

Software Features

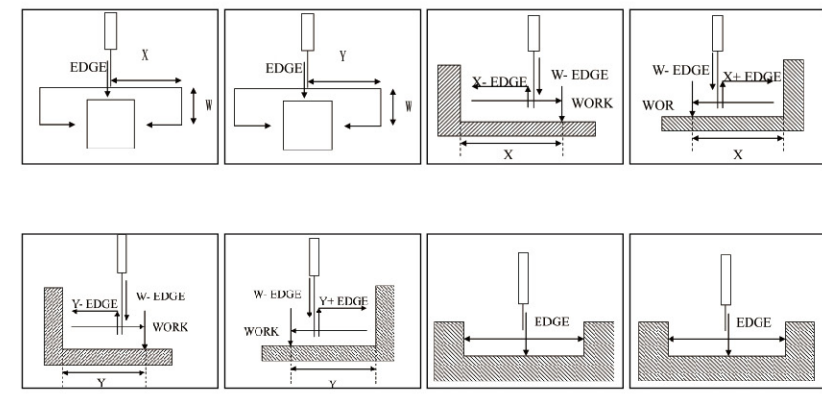


H5F CNC Controller

Conversational Graphic CNC Controller for Easy operation From Automatic edge, center and outside pick up and compensation, to Move commands and Burn commands, including Macro functions, the H5F is simple to program.



G46 Macro Command example



G01 ISO Machining Command

