Ultima 1F (High-Precision, High-Speed CNC Wirecut EDM)

Ultima Features

* Most compact footprint
* Directly coupled AC servo motors
* Wire spool capacity 8 kg
* Large surface area paper filter specially designed by MANN, Germany
* Wide cross-section of wire guide arm
* Centralized lubrication
* Stainless steel, non-corrosive hardened worktable
* Resin bowl - Large capacity of 20 Liters
* Auto-align
* LCD touch panel
* Compact wire chopper
* De-coiler unit upto 45 kg wire (Optional)
* High-precision 5 axes CNC
* eWin CNC - Advanced windows based CNC Controller with PMAC motion control technology
* Capability of machining Poly Crystalline Diamond
* Average Power consumption 12KVA
* Low wire consumption Technology based on moderate wire feeds
* "ae²" Pulse Technology
* 16-step programmable flushing
* Windows-based ELCAM
* Ethernet for networking and remote monitoring
* Program transfer through USB and RS 232C
* Auto power recovery
* Best surface finish : 0.39 µ Ra
* Max. Cutting Speed: 200 mm²/min.
* Auto Wire Threading (Optional)
Ultima Specification

Machine Tool: Ultima 1F
Table Size: 800 X 540 mm
Maximum workpiece height: 270 mm
Maximum workpiece weight: 500 kg
Main Table Traverse (X, Y): 500, 300 mm
Aux. table traverse (u, v): 100, 100 mm
Maximum taper angle: ± 35° / 50 mm
Maximum JOG speed: 2000 mm / min
Resolution: 0.0005 mm
Maximum wire spool capacity: 8 kg (16-45 kg optional with de-coiler)
Wire electrode diameter: 0.25 mm (Standard) 0.1, 0.15, 0.20, 0.30 mm (optional)

Pulse Generator
Pulse peak voltage: 2 Steps
CNC controller: EMT 100 W - 5
Controlled axes: X, Y, u, v, Z simultaneous / independent
Interpolation: Linear and Circular
Least input increment: 0.001 mm
Least command input (X, Y, u, v): 0.0005 mm
Maximum programmable dim. (X, Y, u, v): ±99999.999 mm
Input power supply: 3 phase, AC 415V*, 50 Hz
Connected load: 14kVA includes dielectric system and cooling system
Data input / output: Standard ASCII keyboard, Mouse,
Isolated RS 232 C serial interface
USB Port, Ethernet (LAN)
* Alternate rating available on request

Dielectric Unit
Dielectric Fluid: De-ionised water
Tank Capacity: 500/900 Liters
Filteration: Paper filter
Dielectric cooling capacity: 2100 kCal.
Ultima Floor Plan

Room Size: 3700 x 3400 x 3000
All dimensions in mm