

**University Visvesvaraya College of Engineering
(Bangalore University), Bangalore, K R Circle, Bangalore**

TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAM - II

**Package No. 114 : WIRECUT ELECTRIC DISCHARGE MACHINING
SYSTEM**

(TEQIP-II/2015/KA2G01/Shopping/45)

A	<p>Max. table size : W:300 to 400 mm, L:500 to 600mm Max. work piece height : 200mm Work piece weight : up to 300kg Main table traverse (X,Y) : X: 250 to 300mm Y: 250 to 300mm Auxiliary table traverse (U,V) :U: 20 to 30mm V: 20 to 30mm Approx. Max. taper angle cutting : +/-5 deg/100mm Wire diameter : 0.25mm (standard) & 0.2mm (optional) Max. wire spool capacity : 6kg Dry run speed : 70-80mm/min</p>
B	<p><u>CNC Pulse Generator</u> Display : 15 " Color CRT Min Input command : 0.001mm Interpolation function : Linear & Circular Simultaneously controlled axes : X, Y, u, v Min. resolution for X, Y, u, v : 0.001mm Memory : Min. 1000 blocks with battery backup Data Input / output : RS232C isolated serial interface & USB /Pen drive Input power supply : 3 phase , AC 415 V,50Hz Connected Load : < 5 KVA</p>
C	<p><u>Dielectric Unit</u> Dielectric fluid : DM Water Tank :Capacity : 125-150 liters Paper Filter : 10 micron, Single Cartridge (0.01mm)</p>

<p>D</p>	<p><u>FEATURES</u> Surface finish : less than 1.5 micron Ra, Dimensional Accuracy : < 5.0 micron Capable of machining all types of electrical conductive material Resume cutting after power failure Machine should run with 0.2 & 0.25mm dia Brass wire Auto centre-find, edge find, pause at wire break, short gap Maximum cutting speed : 70 mm²/minute Hand held remote control Trim cut facility Mid program-To start or end program at any given block Home and pre jog facility Manual Data Input (MDI) Rotation (90 deg)and Mirror image about given point Display of cutting rate in mm/min or mm²/min Display of machining time, error message 2D graphic simulation of wire path Single block execution Operating and programming manual :both soft copy and hard copy to be provided Backlash and Pitch error Compensation Safety and protection Routines continuously active for CPU, SMD and Main Voltage</p>
<p>E</p>	<p><u>ACCESSORIES AND CONSUMABLES</u> One set of standard accessories required for routine cutting operations In addition,1 No each of the following accessories are required to be supplied I) Suitable standard stabilizer for machine II) Mineral bed filtration system III) Vernier - 1 No (150mm) Brass con.EDM wire dia 0.25 mm diameter - 50 kg. Carbide Current Pickups : 1 Set of 2 No's Wire Guide dia 0.25mm-m10 type : 1 Set=2 No's Speed trial plate : 1 No Wire Guide dia 0.25mm m20 type : 1Set of 2 no's Ion exchange resin : 7.5 liters SPARES: One set of standard spares (Like "O"-rings, fuses)</p>
<p>F</p>	<p><u>Software</u> Windows based software (part programming application software) Auto CAD DXF file interface Built in utility packages for gears and curves Graphic programming tool Built in functions: move, rotate, copy, mirror, scale, reverse mirror, etc Multipass and multicavity program generation Tool path reversal All original CD's to be provided Should supply the perpetual license for operating system and programming software. Vendor must supply software in CD along with HELP files</p>

Note:

1. Kindly visit institution website (<http://uvcebanga.org>) for detailed specifications as the Specification mentioned in this mail has limitation of PMSS
2. Kindly mention the prerequisite with respect to size of machinery packing required for easy installation.
3. Kindly mention the requirement (if any) regarding Air conditioner capacity, computer specification, etc for operation of the equipment