






RENCANA ANGGARAN BIAYA (RAB) KEAHLIAN TEKNIK PEMESINAN

No.	Kode Juknis	Jenis Barang	Rasio		Harga	Jumlah
1	2.3	CNC Trainer	2	Unit	36,015,000	72,030,000
2	2.7	Mesin Gerinda Alat Potong	2	Set	45,570,000	91,140,000
3	2.10	Kepala Pembagi	2	Set	19,425,000	38,850,000
4	2.8	Mesin Gerinda Tangan	5	Set	1,596,000	7,980,000
						210,000,000

(SPESIFIKASI) KEAHLIAN TEKNIK PEMESINAN

No.	Jenis Peralatan	Deskripsi	Gambar
1.	CNC Trainer	<p>Merk / Type : Swansoft / SSCNC</p> <p>Spesifikasi :</p> <p>1. General Characteristics _____</p> <p>Complete package that includes:</p> <p>a) machine simulation teaches the students the setup and operation of CNC machines .</p> <p>b) CNC program simulation and g-code debugger teaches programming</p> <p>c) Server module allows the instructor to manage students and tests</p> <p>SSCNC Supports simulation of 2,2.5 and 3 axis CNC ,machines</p> <p>The software includes 65 different systems from different manufactures like panuc, Mitsubishi,simens,etc with 119 different operator panel are very detailed to capture as dose as possible the real work environment</p> <p>Free updates for life that can be downloaded directly via internet</p> <p>The system can be customized to include new controls, systems or machines</p> <p>2. 2D and 3 D simulation</p> <p>SSONC supports simulation that uses open GL for fast and accurate 3D rendering modeling</p> <p>Dynamik rotation,zoom,pan,full screen and switch views during simulation in real time</p> <p>Realistic control panel and operator panels</p> <p>Realistic three-dimensional numerical control machine tools and control panelcontrol panel and operator panels</p> <p>Cutter trace simulation</p> <p>Supports multiple monitors</p> <p>Total machining process simulation :selecting the workplece ,select and measure tools ,select the right operation mode for mechine and clearing all the alarms</p> <p>Machine simulation includes real components like coolant,sound for machining operations and chips generations</p> <p>Workplece setting and mounting .Allows to setup zeros and tool offsets and the use of differnt damping devices</p> <p>Three-dimensional measuring of workplece after it is machined</p> <p>Roughness measurements based on tool cutting parameters</p> <p>Materials library,edit and insert new materials</p> <p>Database management tools and tools coustomization</p> <p>The turret can be configured for 4,8 or 12 stations (front or rear),the automatic tool changer for the machining center can be setup horizontally or vertically</p> <p>Use virtual measuring tools: edge finder,feeler gauge,micrometer , calipers etc</p> <p>Windows MACRO recording and replay in AVI format</p> <p>3. Program Editing</p> <p>Program are easily created in ASCII format using any text editor</p> <p>Editions capabilites (cut,copy,paste)</p> <p>Numbering and renumbering of lines</p> <p>Changes in the lines of program are simple and intuitive</p> <p>Help on screen for G/M codes</p> <p>Program verification of canned cycles and language syntax according to the command code for the specific,model</p> <p>4. Advanced Programming functions</p> <p>G.Code parser ,support ISO-1056 preparatory functions codes (G codes),assistant function code (M codes)</p> <p>G.Code debugging tool</p> <p>Capability to simulate canned cycles ,macros and the inclusion of parameters</p> <p>FANUC ,SIMENS polar coordinate programming,G02,G03 spiral interpolation</p> <p>Supports for custom code and cycles by UGS,Pro-E,Master CAM</p> <p>5.Operation of CNC machine</p> <p>Preset zero point G54,G55,G56,G57 etc....</p> <p>Preset tool axes X and Z (lathe) and height of tool (milling)</p> <p>Electronic hand wheel available.</p> <p>Modes JOG,MDI,EDIT,SINGLE BLOCK,AUTOMATIC,DRY RUN,STOP CYCLE,CYCLE START,EMERGENCY etc....</p> <p>Adjust the cooling hose</p> <p>Alarm collision with the plece ,bench or other machine parts</p> <p>Performs all functions of the command operation,facilitating the adpatation of the student with the CNC equipment</p> <p>SSCNC Server Features</p> <p>When the Sofiware is installed on a local network in a server -client configuration it provides the instructor with the capability for mananging students,classes and test.The following features are available :</p>	



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		<p>1. User management Students are registred in the SSCNC server by means of a username and password .Once the student log in from any computer in a local network the instructor can centrally manage ,monitor and tutor the students</p> <p>2. Exercises management Add and edit exercises in SSCNC server .Transmit exercise including pictures to clients (students),Students work on the exercise and transmit the answers back</p> <p>3. Network Monitor SSNC server saves students registration and allows querying and controlling login ,logoff and machine operations broadcast screen information to the Students and remotely assist them via remote view and controlling of the client PC.</p> <p>4. Examination subsystem Includes question library management ,test paper management,the test process management as well as the examinations, paper automatic grading</p> <p>5.Test Administration subsystem Includes test data management ,exam permit management and test results mangement</p> <p>Hardware and Software requirements Including Desktop PC With specifications Type Grafis Intel HD Graphics Single Channel DDR4 2400 MHz (4Gb x 1) With LCD Monitor 19,5" HD+(1600 x 900) Anti Glare LED Backlit Display Processor onboard 7th Generation Intel Core i3 With Card Reader 4in 1 Memory Card Reader</p>	
2.	Mesin Gerinda Alat Potong	<p>Merk / Type : Gongda / GD-6025Q</p> <p>Spesifikasi :</p> <p>Max. External Grinding Dia. : 250mm</p> <p>Max. Internal Grinding Dia. : 80mm</p> <p>Horizontal Travel of the Operating Table : 300mm</p> <p>Longitudinal Travel of the Operating Table : 170mm</p> <p>Elevating Distance of wheel head</p> <p>Rotating of wheel head : 360°</p> <p>Speed of Grinding Wheel : 3600rpm</p> <p>Main Motor</p> <p>Taper of Spindle</p> <p>The Workbench Size</p> <p>Grinding Wheel Size</p> <p>Net Weight/Gross Weight : 165kg/185kg</p> <p>Packing Size</p>	
3.	Kepala Pembagi	<p>Merk / Type : Sier Tools / BSO</p> <p>Spesifikasi :</p> <p>1. Made of FC30 high strength casting iron.</p> <p>2. 3 pieces indexing plates are included, direct indexing plate can rapid index workpiece to be 2, 3, 4, 6, 8, 12, 24 equal parts, with the other interchangeable indexing plates, workpiece can be indexed to be 2 to 380 different divisions.</p> <p>3. Indexing accuracy: 0.01mm.</p> <p>4. Tilt angle: 0-90 degree.</p> <p>5. Ratio: 1:40.(1 turn of the hand crank rotates the spindle by 9 degrees)</p> <p>6. Horizontal height: 170mm; vertical height: 240mm.</p> <p>7. Chuck size: 100mm 3-jaw chuck; central height: 100mm.</p> <p>8. Mounting base size: 168*90mm</p> <p>9. 100mm central height, sharp end tailstock included.</p> <p>2 x Interchangeable indexing plates</p> <p>1 x Headstock Pin with locker</p> <p>1 x Talistock</p> <p>1 x Accessories Kit (locking tool & Nuts)</p>	
4.	Mesin Gerinda Tangan	<p>Merk / Type : BOSCH / GWS 850 CE</p> <p>Spesifikasi :</p> <p>Mains voltage [V] : 230</p> <p>Mains frequency [Hz] : 50</p> <p>Nominal power [W] : 850</p> <p>Diameter of the grinding disk [mm] : 125</p> <p>Diameter of the hole of the grinding disk [mm] : 22</p> <p>Spindle end : M14</p>	