SAP E & C   AUTOMATION EQUIPMENT FOR 'MOBILE SKILL DEVELOPMENT VEHICLE'
(PRODUCT CODE: SAP-93)

The applications and working modules of PLCs which are hooked up with **AUTOMATION EQUIPMENT FOR 'MOBILE SKILL DEVELOPMENT VEHICLE' (SAP-93)** gives an idea regarding the basics of Programmable Logic Controllers & its applications.

Technical Specification: -

No.	Item Name	Technical Specifications
1	PLC -	2 Nos. **MAKE: Siemens S7-1200 CPU 1214C/AB Micrologix 1400/Eqvt.** Digital Inputs- **12** Digital Outputs- **10** Analog input-**2**, Analog output-**2,** PC interface facility, PC-PLC interfacing cable.
2	**Communication-**	Communication Port RS 232 / RS 485 / Ethernet
3	**Power Supply-**	2 Nos., 24VDC, 3A/5A Power source. 4"X2"X2"
4	**Directional Control valve-**	2 Nos., 5/2 solenoid valve, ¼" Connection
5	**Proximity Inductive Sensor-**	4 Nos., 3 wire, 24V DC Operated, PNP NO type, Diameter: 18 mm, Sensing Distance: 5 mm
6	**Proximity capacitive Sensor-**	4 Nos., 3 wire, 24V DC Operated, PNP NO type, Diameter: 18 mm, Sensing Distance: 5 mm
7	**Optical Switch-**	4 Nos., 3 Wire, Sensing Distance: 10/15 cm, 24 VDC
8	**DC motor with time belt-**	2 Nos., 12 / 24VDC, Speed: 0- 60rpm, Torque: 10/20kgcm
9	**Push buttons + indicators + panels-**	2 Nos., 24V DC, Input /Output LED indication on front panel
10	**Indicators-**	2 Nos., RPM indicator & Temperature Indicator

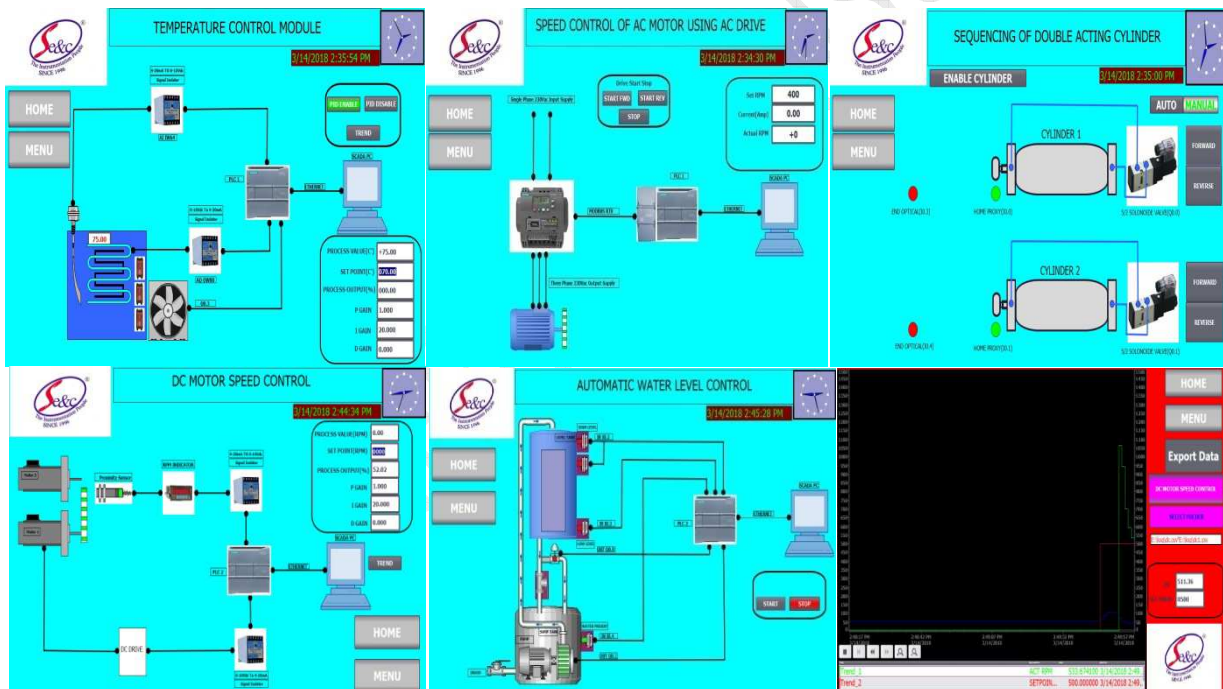| 11	HMI and SCADA-	2 Nos. each, **HMI:** Make: Mitsubishi/Schneider/Eqvt. Size: 7 Inch Color Display **SCADA:** Make: Siemens WinCC Basic SCADA/GE Proficy Ifix/Eqvt.
12	**Ladder Programming Software-**	1 No., TIA PORTAL STEP 7 BASIC V13/V14 LICENSED/RSLogix Microstarter/Eqvt.
13	**Electric Motor-**	1 No., 0.25 HP, Single phase 230V
14	**Tachometer-**	1 No., Non contact type, Hand held speed measurement device
15	**VFD-**	1 No., Make: Siemens /Eqvt Model Name: Sinamics V20/Eqvt. ½ HP, 1500 RPM, I/P: 1ϕ 230 VAC, O/P: 1ϕ 230 VAC
16	**Pump-**	1 No., 230VAC (Submersible Type)
17	**Level Tank-**	1 No., 6"X6"X16" (P.P. 5 mm thick)
18	**Level Switch-**	3 Nos., Magnetic Type, Float operated, NO Contact, 24VDC Operated
19	**Double Acting Cylinders-**	2 No., Bore: 25 mm $\times$ Stroke: - 100mm, Mounting: Foot
20	**Power supply for load-**	1 No., 24V DC 5A Power supply
21	**Temperature control setup-**	1 No., Thyresterized card to control the temperature, Electric Kettle/furnace, Temperature Indicator
22	**Air Compressor-**	1 No., **Noiseless Air compressor**, 25 Ltr., 1 HP, Single Phase, 230V AC, Working Pressure 5-6Kg/cm^2.
23	**Fabricated PLC panel-**	Dimensions- 1.5 Ft. X 1 Ft. X 1.5 Ft. MS Powder coated panel with switches, indicator, test Points, controller on front fascia, UK 2.5 Terminal Connectors mounted on DIN rail channel, Use of 0.5sq mm multi-strand wire with proper insulated Lugs, Feruling & neat wire dressing & clamping. Wires & power cables are seated through 1''×1''PVC cable tray. Can be accessible from both side doors of EECO Van.
24	**Generator set-**	1 No., Honda 750 VA Handy Series Portable Generator EP1000
25	**Monitor-**	1 No., Size: 32 Inches Color LED Monitor
26	**Laptop-**	1 No., Make: HP/Dell/Lenovo/Eqvt. Intel i3 Processor, 4 GB RAM, 500 GB Hard Disk, Keyboard & Mouse and supporting Operating system

Actual Panel Photos:

SCADA Screen:

Features: -

- ❖ Compact Ergonomic Design.
- ❖ User Friendly, Self Explanatory Systems.
- ❖ Training Manuals for operation ease
- ❖ Robust Construction.
- ❖ Enhanced Electrical Safety Considerations.
- ❖ Self-explanatory instruction manuals, copy of S/W are provided.
- ❖ Inbuilt Safety Measures to avoid improper usage.
- ❖ Computer Interface (Optional).
- ❖ Computerized control system trainer (Optional).

Services Required-

❖ Electric Supply of 1φ 230 V AC

Note-

All descriptive matter and illustrations are intended to give only a general idea of the equipment Detailed specifications may be altered at the company's discretion without any notice.

Manufactured/Marketed By

SAP ENGINEERS & CONSULTANTS

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