



Integrated Manufacturing Systems Troubleshooting

AMTEC Simulator Print Reading Exercise

Student Name: _____

Date: _____

For the following questions, use the AMTEC Simulator print package only.

- 1) Refer to page 37 in the AMTEC print package. The left side of load conveyor cycle start push button is fed from a source of power. Follow the wiring backwards to the 480v power source. Note every safety device found on the path back to the 480v. Source. Capture the device name, its rating and page that shows the device.

- 2) Identify the components that require 480v. Ignore the transformers and the circuits that they feed.

- 3) On Page 17 of the prints PLC input I:00/13 (Hydraulic Power OK) is fed from a set of contacts labeled 0450DS. Where are these contacts physically located in the system? Be specific. You may need to look at the trainer.

- 4) On Page 4, fuses feeding the transformer labeled 0416FB are made by which Manufacturer and as illustrated on page 27, who is the manufacturer of the VFD?

- 5) On Page 4, are 0450MCP and 0831MS physically mounted on the same DIN rail?





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- 6) Refer to Page 46 in the prints. Splitter box 3702 is connected to the Load Conveyor Puck Present Photo Eye. Which of the 8 ports shown will have the field device?

- 7) Refer to page 49. The Load Conveyor Stop Solenoid is controlled from which PLC output?

- 8) Refer to page 12, top right. The very top Safety Gate Pusher Door switch on its right side connects to what device?

- 9) Refer to Page 27. Shown are the connectors for the VFD that drives the Load Conveyor. One of the signals turns on the drive. One of the signals controls the speed of the drive. Try to identify these signals and where they come from.

- 10) Identify what pages contain the following information:

- a. Unload Conveyor Junction Box Slot 3 Digital input, DC right connector _____
- b. 480VAC Power Distribution _____
- c. Load Conveyor Drive _____

- 11) Refer to Page 18 of the print package. On the top left of the drawing, there are three relays. Determine how many contacts are used from each relay and where the contacts can be found in the print package. (Give page number and Line number.)

- a. 1803CR
- b. 1804CR
- c. 1805CR





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