

The documentation for your lab project will be in the form of a manual for the operation and maintenance of your machine. This manual must include:

Instructions for:

1. loading the machine
2. starting the machine
3. clearing jams

Diagrams:

1. mechanical drawings or annotated photos
2. PLC ladder logic
3. State machine(s)
4. Linux CNC programs (if applicable) or Motoman job programs (if applicable)
5. Stepper motor configuration (if using LinuxCNC)
6. Wiring diagram or table, listing all I/O connections between PLC, sensors, pneumatic valves, step motor amplifiers, LinuxCNC breakout boards, or other devices.

Descriptions:

1. Operation of each major section of the machine
2. Maintenance instructions
3. Suggestions for future improvements
4. Performance data

Examples of manuals from previous classes can be seen at:

<http://enr.wallaalla.edu/enr480/reports>

Deadline for turning in manuals (pdf or hard copy) is Friday Dec 17 at 6:00AM. The report is an essential part of the project, which is worth 80% of your grade.