



Project ID# _____

Group Letter: _____

PLTW/Robotics Division

RO-1 Basic Robotics (smaller than 1 sq. ft.)

This classification includes any projects involving basic Robotics. Robot must be built of solid materials (Lego's, fischertechnik, or Boe Bot) Each entry must have a complete set of plans and/or schematics, an explanation of robots operation, and operating instructions. This category is not open to First robotics or first tech challenge)

Groups are eligible to participate A and N

Classification RO-1: **Entry Title:** _____

Entry Checklist:

- _____ Physical Robot
- _____ Operation Instructions
- _____ Technical Report
- _____ Program Printout
- _____ Function explanations

RO-2 Computer Integrated Manufacturing- (CIM)

This classification involves any type of manufacturing assembly line or process. The manufacturing center must be built of solid construction (i.e. Legos. Fischertechnik, or other construction materials) and use a programmable interface to complete a series of tasks towards manufacturing or sorting a either real or imaginary part or parts. Each entry must have a complete set of plans or schematics, and an explanation of operation, and operating instructions. (operation at contest is not necessary, but could be beneficial) Not Open to PLTW material Sorters see category EL-3) - *Groups eligible to participate A & N*

Classification RO-2: **Entry Title:** _____

Entry Checklist:

- _____ Manufacturing Center
- _____ Operation Instructions
- _____ Technical Report
- _____ Program Printout
- _____ Function explanations

Scoring Rubric: Each project will be subject to this checklist with negative points deducted from 100.

| Category | -4 or more | -3 | -2 | -1 | -0 | Neg Pts. |
|---|-----------------|----|----|----|----|----------|
| Functional & Well Designed | | | | | | |
| Quality Wiring and Connections | | | | | | |
| Accuracy & Neatness in Program &/or Physical Assembly | | | | | | |
| Robot is solid & stable / Project adheres to codes & safety | | | | | | |
| Complexity – Creativity - Originality | +3 | +1 | 0 | -1 | -3 | |
| Subtract Negative points from 100 Project Rating | Project Rating= | | | | | |

Judges may subtract more than the -4 at there own discretion.

Entry Violation: ___ Missing information. ___ No Technical Report:___ (Total violation) _____

100-90 = I (blue) - 89-80 = II (red) - 79-65 = III (white) **Overall Project Score** _____

- 2 or more pts. = shows effort, but more could have been done.

- 1 pt. = a very good effort - with minimal flaws or defects

- 0 pts. = Excellent effort - no mistakes or visible flaws

Student info / Project ID#. _____

School. _____

Instructor. _____