**Manufacturing Company Fieldtrip**

1. Agenda
   * 1. Duration: Visiting 4 separate stations spending 15 minutes in each station.

Objective: Give the educators a well-rounded exposure to the technical skills needed for a machinery business to: design, manufacture, build, test, ship, install and support machinery globally.

**A. Arrival**

**B. Introduction to Host Company.**

Company overview including products manufactured. Good idea to show final product produced prior to doing tour.

**C. Tour guide introduction and break into respective group.**

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| Tour Guide | Name | Name |
| Time / Group | **Group 1** | **Group 2** |
|  | Name | Name |
|  | Name | Name |
|  | Name | Name |
|  | Name | Name |
|  | Name | Name |
|  | Name | Name |
| **8:45  -  9:00** | Elec./Mech. Eng. | Fabrication |
| **9:00  -  9:15** | Fabrication | Elec./Mech. Eng. |
| **9:15  -  9:30** | Assembly | Technical Service |
| **9:30  -  9:45** | Technical Service | Assembly |

**B. Closing Questions / Answers**

Tour Guide Responsibility is to take the group from area to area, keep on time, answer Q/A along the way, keeping things open and energetic ensuring safety is number 1. Key point that needs to be covered is to tell the group about yourself, tenure with Company, previous work experience and education. It is important that the educators understand what career path you took to get where you are in the organization. Provide Rest room breaks as required.

Educators should have their questionnaire available and fill out along the way.

Five Areas of Concentration that will focus deeper into sub categories. (These areas are examples of what could be covered during tours. They might have to be modified for your respective manufacturing operation.)

a. Electrical Engineering

1. Designer
2. Programming
3. EE Standards / Safety Standards

(Tour of Controls Lab, Show test equipment used, Discussed different technologies used to control machinery and how to communicate with machinery in the field.)

b. Mechanical Engineering

1. Detailing
2. Designer
3. 2D & 3D Modeling
4. FEA

(Discussed what career path you need to take to become an Engineer, Schooling, Experience, Etc. Discussed problem solving and that not all ideas work the first time. Showed early concept drawings of machinery. Demonstration of Solidworks capability, including Finite Element Analysis.)

c. Fabrication

1. Saw
2. Machinists
3. Painter
4. Welder
5. Inspection / Manufacturing Engineering

(Toured machine shop area. Gave out key chains made on machine (Students like to get some trinket) Demonstration of coordinate measuring machine and other inspection tools.)

d. Technical Service

1. Service Technicians
2. Test Technicians
3. Technical Writing

(Demonstrated a machine in final test and discussed what it takes to test and install the machinery in the customer’s facility. Gave the students product off machine. Discussed manuals and what career path is needed to become a Technical Writer, Schooling, Experience, Etc.)

e. Assembly

1. Electrical Assembly
2. Mechanical Assembly
3. Panel building

(Mocked up some air cylinders and valves for demonstration, sweated in bearings and toured the Assembly area.)