

Agricultural Mechanics – Project Book: Explanations and Descriptions

Please read the descriptions of the following sections so you have a better understanding of items needed on a traditional Project Book used for Agricultural Mechanics shows. A Project Book is the best source of information regarding the process you have undergone to complete your Agricultural Mechanics project. This book will serve as a step by step guide while providing as much detail as possible. It is best to think of it as a set of directions so that somebody could complete the same project without any outside help. In any situation, more information is better than very little. It is important that you include as many pictures, detailed descriptions, and any other requested information so that you show a complete understanding for your project.

Tab 1 – Bill of Materials

A Bill of Materials is a comprehensive list of parts, items, assemblies and other materials required to create a product. The Bill of Materials can be understood as the recipe and shopping list for creating a final product. The Bill of Materials explains the cost, quantity, and product description. Everyone working in building products, regardless of their industry, begin by creating a Bill of Materials. Please see the provided example.

Tab 2 – Equipment List

An Equipment List is a listing of all equipment used, accompanied by a brief description of that item and its purpose. An Equipment List needs to be complete, containing every single item used. It is safer in this regard to list something you are unsure about rather than leave it out. Remember, the more information you provide the better! Please see the provided example.

Tab 3 – Working Drawings

A Working Drawing is a scale drawing which serves as a guide for the construction or manufacturing of something built. It is important that you use as much detail as needed to replicate the project with no confusion. Make sure to include a key which expresses the scale at which your project will be constructed. (i.e.: 1:64 is the scale of a hot wheels car). Multiple drawings are expected from multiple angles. Please see the provided example.

Tab 4 - Photographs

In this section you will include any and all photographs of you and/or your project while being constructed. It is easy to complete this section so as you have remembered to take pictures as you move on from one step to another. As an exhibitor, your goal is to create an album of pictures which lay out the step by step plans you have provided.

Remember, wear all of your appropriate Personal Protective Equipment (PPE) while working on your project. You will lose points and be questioned by the judges on any unsafe practices that become apparent while looking through your Project Book. Please use the example provided to insert and add a description to each photograph. You may print more than one picture per page which will save you a lot of space. Also, make sure your text is easily read!

Tab 5 – Hours Worked

Within this section you will include a record of all your time spent on your project. Make sure to include it all whether it be planning, fabricating, or finishing. This section is important so that everyone can see your dedication and hard work as it translates to time spent on this individual project. In order to capture the times you only spend a half hour or a quarter of an hour you must use decimal places. (i.e. 30 minutes = .5 hours; 15 minutes = .25 hours). Please take a look at the attached example.

Tab 6 – MSDS Sheets

A Material Safety Data Sheet (MSDS) is a document that contains information on the potential hazards (health, fire, reactivity and environmental) and how to work safely with the chemical product. It is an essential starting point for the development of a complete health and safety program. It also contains information on the use, storage, handling and emergency procedures all related to the hazards of the material. MSDSs are prepared by the supplier or manufacturer of the material and can be found with little research. Work to acquire any MSDS Sheets produced for products used within your project. This could simply be a copy of an MSDS Sheet printed directly from the manufacturer's website. It is very important that you include any and all MSDS Sheets you can find so anyone working with your project could respond quickly to any unexpected accidents. Please see the attached copy of a MSDS Sheet.

Tab 7 – Equipment Manuals

This section is used for reference when needing to find specific information about tools used during your project. For instance, if you run into an issue with your Makita Angle Grinder you could easily refer to this section for the Equipment Manual. Again, this could simply be a copy of an Equipment Manual printed directly from the manufacturer's website. It is very important that you include any and all Equipment Manuals you can find so anyone working with your project could refer to them in need. Please see the attached copy of an Equipment Manual.