Installation Bill of Materials (BOM) User's Guide

Get the most out of the BOM.

Dragon Wood
10/13/2015

Installation BOMs User's Guide

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Starting a Project

Getting Started

When you first open the Installation BOMs program, you see the **Instructions** page. This will give you a quick walk through on how to use the program. It is not intended to give you the detailed instructions you'll find in this guide. This guide is not meant to replace the **Instructions** page either. Between the two, you should be able to use the Installation BOMs program right from the start.

Enable Editing

Speaking of starting, when you first open the program, you may see this:

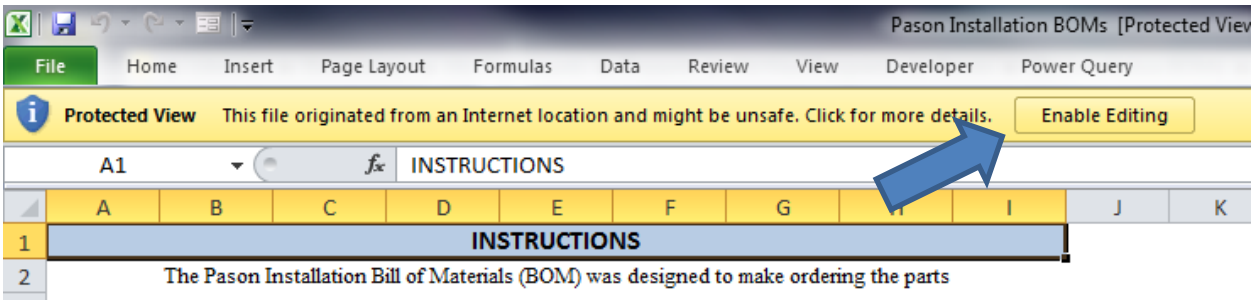

Figure 1 - Protected View - Enable Editing

Note: If you do, you'll need to click the Enable Editing button. This happens as a default protection by Microsoft Office to prevent unknown files from damaging your computer.

You have probably seen this before on other Microsoft Office files that you've either downloaded or received through email. You probably already know that you will need to click the Enable Editing button in order to do anything with this program.

Enable Content

Once you've clicked the Enable Editing button you'll probably see this:

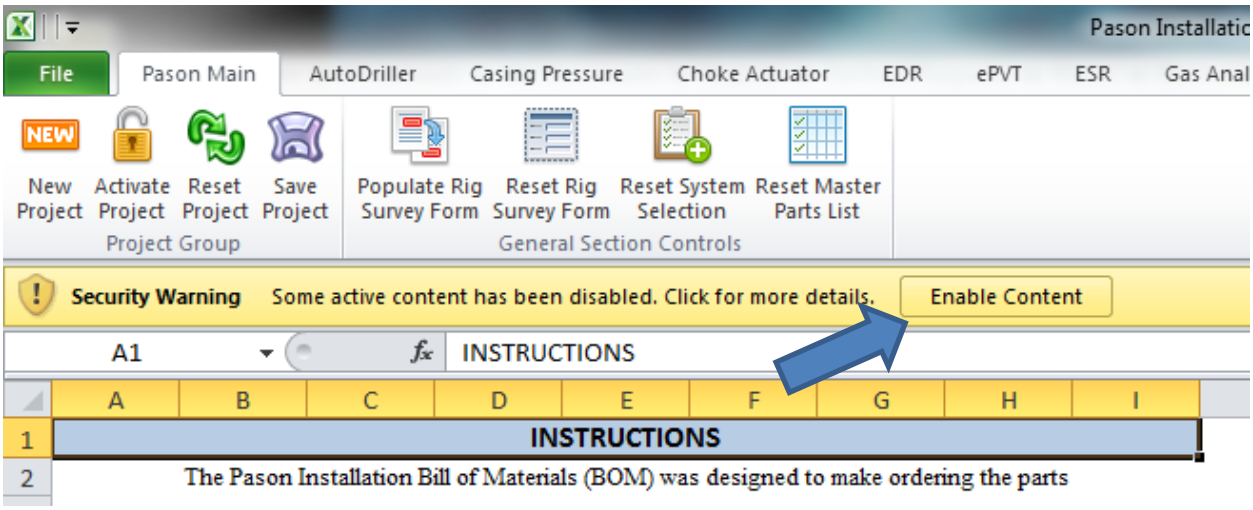

Figure 2 - Security Warning - Enable Content

Note: This is another protection by Microsoft Office to prevent damage to your computer.

As I'm sure you already know this will enable the macros in the program. While it is not recommended that you enable macros in files you've received from unknown sources, most of the macros in this workbook were written by me. The rest I read thoroughly and have verified they will not do any damage to your computer.

Once you have Enabled Editing and Content, you are ready to start actually using the program. I'm sure you've noticed I keep referring to this as a "program" and not a "workbook". That is because for all intents and purposes, it is a program. There is a tremendous amount of programming code inside that lets it do what it does.

Getting Passed the Instructions

There are three ways to move forward from this point. All will require a little bit of pre-work on your part. If you have a **Rig Survey Form** from the customer, then make sure it is already filled out and any needed corrections are made. If you don't have one of these, then make sure you have the following information:

Contractor, Operator, Customer (which is one of the previous two), and Rig Name & Number.

Now that you have all this, you can start.

Using the Populate Rig Survey Form Button

To begin by using the **Rig Survey Form**, you will start by clicking the **Populate Rig Survey Form** button on the **Pason Main** tab (the default tab when opened).

Figure 3 - Populate Rig Survey Form

This will begin the import process so you can import all the data from the Rig Survey Form that the customer filled out.

The first thing that will happen is the **Rig Survey Form, System Selection, General Use Items,** and **Main Parts List** pages will appear and you will be presented with a document selection box.

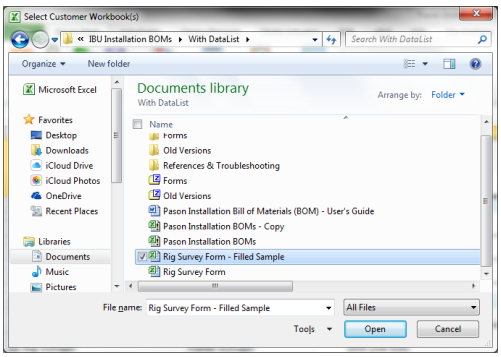

Figure 4 - File Selection Box

Navigate to the **Rig Survey Form** that the customer filled out, select it, and click **Open**.

This will fill in the **Rig Survey Form** in the BOM program.

This is the default way the program was designed to be used. This method allows you to accomplish three things in one step.

1. Unhide the initial pages.
2. Fill in the Rig Survey Form.
3. Provide the first steps toward saving the program.

There is another way to start using the program though.

Using the Activate Project Button

Figure 5 - Activate Project

Although the primary purpose of this button is for when you are opening an old project it can be used to start a new one as well. You start by clicking the **Activate Project** button. All this does is reveal the **Rig Survey Form, System Selection, General Use Items,** and **Main Parts List** pages.

From here, you can still use the **Populate Rig Survey Form** button, or you can manually fill in the **Rig Survey Form.**

Using the New Project Button

Figure 6 - New Project Button

Finally, you can also click the **New Project** button. This will also reveal the **Rig Survey Form, System Selection, General Use Items,** and **Main Parts List** pages. Then it will display a little input box that will ask you for the Contractor, Rig Name & Number, Operator, and Customer information that isn't already filled in. It will then create a new copy of the program and name it after the Customer and Rig Name & Number. It will close the original project book and you will now be working in the new one.

This button was also not originally designed for starting the project. Its actual purpose is to provide you a way to create a new project with the same information as a previous one without having to start over. Keep in mind that if you didn't save the original project, then any changes you have made will be gone.

If you have already created a new project with this button and you have not changed the Customer or Rig Name & Number fields it will ask you if you want to overwrite the existing file. The ways to prevent this are to create a folder and move the other file to it, rename the other file, or change either the Customer or Rig Name & Number fields in the current project prior to selecting **New Project**.

Saving the Project

If you used any of the first two options for starting the project you will still need to save the project you are working on. Using the **New Project** button is the only method that will have already saved the project at this point.

Using the Save Project Button

Figure 7 - Save Project

The **Save Project** button exists in two locations: on the Ribbon Bar under the **Pason Main** tab and on the center bottom of the **System Selection** page. They both do the exact same thing.

If the project has not yet been saved, then the name should be the default "**Pason Installation BOMs**" name. If this is the case, then you will be presented with the same pop-up boxes the **New Project** button gives you which will ask you for the Contractor, Operator, Customer, and Rig Name & Number information that isn't already filled in. It will then use the Customer and Rig Name & Number fields to create a new file with those fields in the name.

If the project does not have the default name, it will only save the current project file.

Figure 8 - Close Button

Note: Using the Close button in the upper right hand corner will also save the project. It will not ask if you want to save, it will just save and close it.

Using the System Selection Page

Declaring the Basics

Before actually selecting systems to install, you should set up your basics.

1. Finish filling in the header.
    a. Customer PO#
    b. Estimated Ship Date
2. Declare the Rig Basics.
    a. Voltage
    b. Units
    c. Torque Type
3. Declare the System Basics
    a. Flow
    b. Type of Mud Probe
    c. SideKick
    d. UJB

Filling in the Header

While these two fields don't have anything to do with the systems you are installing, they are used in RMS when placing your order. After all, that is the point of this program, making it easier to be ready to use RMS.

Declare the Rig Basics

You should already have the rig basic information filled in one the **Rig Survey Form**, however, you still need to select these three parts on the **System Selection** page because they are used to help you chose the correct parts for each system.

Voltage

Since the computers are usually the only things that go in the trailers, this is based on the Rig Voltage. Changing this from 110V to 220V will actually change some of the equipment where there is a difference between the items and part numbers. It will make others so they cannot be selected.

Units

This, like the Voltage selection box determines the units the rig runs in. This will also change certain equipment based on the units it can run in. There are three choices in this box:

1. Imperial
2. Metric
3. Mixed

Select the main Units the rig wants the data in. If you are unsure, then contact the customer. However, since other than the old style PVT our systems will work with either, it is a safe bet to just leave the Units at Imperial.

Torque Type

When you are installing our own Torque sensor, you will want to make sure this is set to the type of torque the rig uses. Like the Voltage and Units selection boxes, it will change equipment and make some items not selectable based on what this box says.

Declare the System Basics

Much like selecting the Rig Basics, what you select for the System Basics will determine what you can and cannot select for each system. And in some cases, will determine if you can even select certain systems.

Flow

Since some rigs may not want a **Flow** sensor, or in the rare case can't have a **Flow** sensor. You can turn that piece of equipment off here. When this is off, you cannot select a Flow paddle of any kind and it will not automatically add it to your order either.

Type of Mud Probe

Since most the rigs overseas use the **Radar Probe**, it is the default setting. However, you can change this to the standard **Mud Probe** or even a mixture of both kinds. Make sure you select the type of mud probe you plan on using because like the rest of the basic selection boxes, this turns equipment on and off so you don't accidentally select the wrong thing.

SideKick

This only affects the **AutoDriller** system. Since sometimes the customer will not want a **SideKick.**

UJB

This one will actually turn off systems if you don't select it. The **ePVT**, **ESR** and **PRD** systems cannot be selected if you do not have a **UJB**. The program will not let you attempt to order anything from any of these systems if the **UJB** box says "**No**".

Selecting the Systems

Now that you have the basics all set you are ready to start selecting which systems you want to order parts for.

Keep in mind this program is designed to be used for one rig at a time. So if this current project is going to use the **ePVT**, but the next one is going to use the **PVT**, don't try to order the parts for the next project now. Just focus on this project.

The systems are broken down by what can be installed independently without the parent system. For example, you can install a **Casing Pressure** sensor without installing a **Choke Actuator**, so it can be selected by itself.

Once you have gone through the System Selection page and selected all the systems you are going to install you can begin going through each system page and selecting the individual items from each page.

Going Through the System Pages

The Legend

As you will notice, there is a Legend for these pages that tells you what each color code means and suggests that you use the **Tab Key** to navigate through the pages. This Legend is designed to stay on top but still allow you to use the page. So if you like having it up, then feel free to simply move it aside so you can see and get to work.

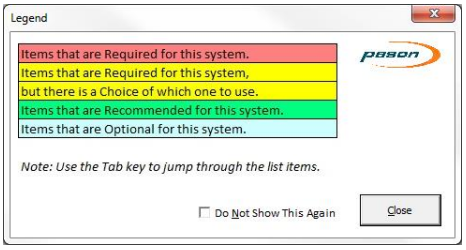

Figure 9 - The Legend

However, if you don't like having the Legend sitting there, you can close it. Closing the legend, however, will only hide it while you stay on the page. Once you have gone to another system page, or left and come back to the current system page, the legend will reappear.

There is a "Do Not Show This Again" option on the Legend. If you select this and close the legend, it will never come back again in the current project unless you select the **Reset Legend** button on the **System Resets** tab.

Figure 10 - Reset Legend Button

Selecting the Equipment

Every system has equipment that is either Required, Recommended, or Optional. However, some of the Required equipment has a variety of choices for the part (Depth Sensors, for example). So these are in their own category Required with Choice.

Required Equipment

Every system has certain equipment that is Required in order for that system to work. For example, you cannot install the ePVT without the PRD. All the Required equipment for each system will automatically be selected and the default Quantity will be filled in.

Because it is possible that there are already spares of any given piece of equipment either in your possession or already with the customer, you can change any item to either be unselected, or you can change the quantity to any amount.

Required Equipment with a Choice

Because this equipment offers a choice as to which you are going to use the program does not automatically select them. Instead, it monitors them and will warn you if you do not select something from the group of options for given equipment.

These warnings will not appear until you select to preview your order. Most of the warnings will only warn you, but the program will continue to go through and create your order preview. You will need to go back to each system page and select the items you were warned about, if you actually want them.

Recommended Equipment

The Recommended category is not entirely filled with "**Recommended**" equipment. Some of the items in this category are actually "**Required**". However, these are mostly the items that you will most likely have spares on hand for. It is also where the items that are used for multiple systems are located (such as Woodheads).

While a lot of the items in this category are important, they are not monitored by the program and you will not be warned if you do not order something you need from it.

Optional Equipment

This category is actually as it says. The items in this category are the "nice to haves"; the things that would help make the installation cleaner and maybe even help the system work better. But they are not necessarily needed.

Determining Quantities

As mentioned in the **System Selection** page area, you should be using this program to plan only one install at a time. Along with that, you should be planning only one system at a time too. So when you are going through the **AutoDriller** page, **DO NOT** put the 422 Comm Cables that you might need for the rest of the **EDR** on this page. Only select the ones you need for this particular system.

Then as you go through the **EDR** page, you will add the 422 Comm Cables that you need for this system and not worry about what you may need for another system. The program provides a way to consolidate everything.

The Order Creation Process

Previewing Your Order

When you have finished going through each of the systems you plan to install and you feel you are ready to place your order you should review it first. To do this, use the **Preview Order** button on the **Order** tab in the ribbon.

Preview Order Button

The **Preview Order** button does a few things. First, it goes through every system that you have selected and pulls all the items to the **Order Summary** page. While it is doing this, it is checking to make sure that you have ordered specific items that are required for each system. If you have forgotten to order something, it will warn you what it was.

Figure 11 - Preview Order Button

Warning Message

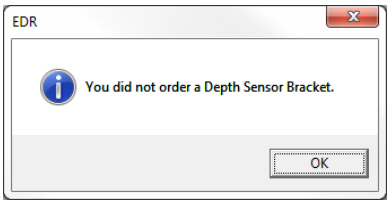

Figure 12 - Warning Message

This warning box tells you that you forgot to order a Depth Sensor Bracket for the EDR system. Notice, the system affected is at the top of the message box.

The only option you have with these warning boxes is to acknowledge it. After the program has finished going through all the pages you will need to go back to each system page and add the things that were missed. It will sit there and wait for you, so you have time to write down the items it is warning you about.

Advanced Warning Message

Some of the warning boxes are a little more advanced; specifically, the warnings for Monitors and UJBs. These will warn you that you did not order a monitor and ask if you want one. If you say **No**, then it will ask if you are sure. If you say **Yes**, then it will automatically order the same number of monitors as workstations you have ordered.

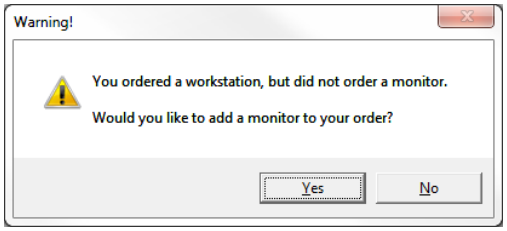

Figure 13 - Monitor Warning System

Order Summary Page

Once you have acknowledged all the warnings the program will finish going through all the systems you have selected and put all the parts in the **Order Summary** page. These parts will be in alphabetical order by **Part Name**, but separated by each system. Since the System Pages are also in

alphabetical order, the **AutoDriller** parts will be at the top, followed by the **Casing Pressure**, **Choke Actuator**, **EDR**, etc.

After reviewing these parts to make sure you have everything you need and after going back through the System pages to make the changes, click on the **Preview Order** button again.

Consolidate Duplicates Button

After you have gone back and made your changes and are happy with your equipment selections. Click the **Consolidate Duplicates** button on the **Order** tab of the ribbon. This simply goes through the **Order Summary** page and combines like items (based on **Part Number**) and adds the quantities together.

Figure 14 - Consolidate Duplicates Button

Creating Your Order

After previewing the order and consolidating the duplicate items, you are ready to start the final steps. First you will **Create** the order in this program. Then you will **Export** the order to PDF.

Create Order Button

Figure 15 - Create Order Button

While this button does say "**Create**" it does not put the order in **RMS** for you. What it does do however, is to put all the items into the **RMS Order** page within this program. While doing that, it sorts the items alphabetically by **Part Number**. There is also another Header on the **RMS Order** page that contains all the information you need to put your order in **RMS**. So it populates that header from the information you filled in on the **Rig Survey Form** and the **System Selection** page.

Here you will be given one final chance to review your parts. You are also provided a location to put notes in for the different items. This is to make it a little easier once you get online to put your order in **RMS**.

Export as PDF

This button will export the **RMS Order** page to the same folder this program is currently in. It will name that PDF based on the **Customer**, **Rig Name**, and **Estimated Ship Date** fields. Now you have a complete order that is ready to be entered into **RMS**. You should be the person entering this, however, you can also send this PDF to other techs, you manager, the warehouse, or anyone else that may be able to help you review it to make sure you haven't missed something. This program was designed to help you make sure you haven't but another set of eyes on your potential order couldn't hurt. However, it is ultimately your responsibility to make sure you have ordered everything you need for your project.

Resetting the Program

Resetting Individual Pages

You may have noticed there are several buttons on both the **Pason Main** and the **Order** tabs of the ribbon that say "**Reset…**" You may also have noticed that there is another tab along the top of the ribbon called **System Resets**. This tab holds the reset buttons for each system and the legend. Currently there is only a "**Reset**" button for the given systems.

If you realize you made a mistake on any given page and clearing that page and starting over seems to be the simplest approach to fixing it, you have the option of resetting just that page. This approach will work no matter if you have saved the program or not.

Reset Project Button

The **Reset Project** Button does exactly what it claims. It will reset everything in the project to the original blank version. The only thing it does not do is change the file name.

Figure 16 - Reset Project Button

1. Changing the name of the file back to the original.
    a. If you used the **Save Project** or **New Project** buttons, then you should still have that copy.

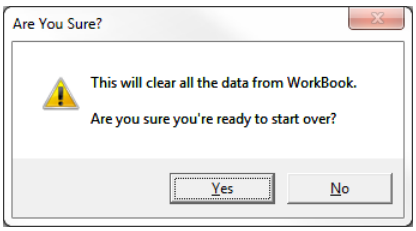

Figure 17 - Reset Project Warning

Due to the close proximity of this button to the **Save Project** button, it will ask if you are sure you want to reset everything when you select it. This will help prevent you from accidentally resetting the project when you are really trying to save it.

New Project

Now that you have a clean program, you are ready to start a new project.

Additional Features

Extra Little Things

You may notice that navigating to some of the system pages, **EDR**, **ESR**, and **ePVT** specifically, takes a little while. This is because the program likes to try and make sure you are looking at the correct information. In order to do this, it runs through the entire list of **Part Numbers** everytime you go to a system page. It is comparing these part numbers to a Master Data List and is making sure that the **Part Name** and **Image** matches the **Part Number**.

Progress Bar

Because of the fact the program automatically checks each system page when it is visited, resetting the entire program takes a while. This is because the program activates each system page and resets it to the default settings one at a time. When the page activates, the program checks the Part Numbers against the Master Data List.

So you will know that Excel is actually doing something and not just sitting there it displays a progress bar while this feature runs. This is the only feature in the program that uses the progress bar.

Closing and AutoSave

Figure 18 - Close Button

As mentioned before when you select the **Close Button**, the program will Save and Close. However, that is not all it does. If you have not changed the name of the file and it is still called "**Pason Installation BOMs**" it will also hide all the pages except the **Instructions** page. If you have made changes to the file, but not used the **Save Project** button, it will all be saved. However, when you open the program again, you will have to use the **Activate Project** button to get the **System Selection** page back and then select the systems you wanted again. If you made any changes to the **Required** parts, they will reset to the default settings. All other changes made to parts will remain.

On the other hand, if you did use the **New Project**, or **Save Project** buttons and the file name is no longer "**Pason Installation BOMs**" the **Close Button** will still Save and Close the program, but it will not hide any of the pages.

Edit Selected Item

This little button, on the **Pason Main** tab, is there to let you **Edit** the **Part Number** of any item on any system page. While this button will not let you enter data in any page that isn't a system page, and it will not let you edit any field other than the **Part Number**. Once you have changed the **Part Number**, the **Reset** buttons **DO NOT** put the original **Part Number** back.

Figure 19 - Edit Selected Item Button

RMS Online

Figure 20 - RMS Online Button

Since the whole purpose of this program is to help with the Online RMS order that needs to be placed for your project I have included a button that will open your default internet browser and take you to RMS.

When you use this button it will ask you for your credentials to enter RMS. Even if you select the Remember My Credentials box, it will ask again. Then it will open your browser and you may need to enter them again.

This has nothing to do with this program. It is because of the security requirements on RMS.

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