

ACCESS <<<<<<<

By Patricia Cox

Master Budget Project: Direct Materials Budget, Part 3

This month we continue our work on developing the Direct Materials Budget report. So far we have completed queries to help gather the data for Required Production, Direct Materials Needed by Part, and Desired Ending Inventory by Part. The remaining data we need for the report includes Total Needs by Part, Less Beginning Inventory by Part, Direct Materials to be Purchased by Part, Cost per Unit of Direct Materials by Part, and Cost of Direct Materials to be Purchased by Part. This month we will complete queries for the Total Needs by Part and Less Beginning Inventory by Part. In March we will complete the final three. In April we will use the data in the table to create the Direct Materials Budget report.

This work is an excellent example of where many steps are needed to create a longer more complex or detailed report. Feel free to work ahead on the

next sections. Remember to run each query to append the data before you start the next section, however, as one query can be dependent on the previous data.

Total Needs by Part

Create a query using the Direct Materials Budget table as a data source. Drag all the fields into the QBE grid. Click the Totals button to add the Total line to the grid. Edit the Category field so that it reads:

Category: "Total Needs"

Change the Budget Item field's Total line to Where and add "Total" to the Criteria line. Insert a column to the right of Budget Item. In the Field for the new column, add:

BudgetItem: "Total Needs"

For the 2012-1 to 2013-4 fields, change the Total line to Sum. Change the query into an Append query using

the Direct Materials Budget table. Append the columns of the query to the corresponding fields in the table—except for Budget Item. Append BudgetItem (without the space) rather than the original Budget Items field to the Budget Item field. (For the Budget Item (with the space) field, make the Append To row blank.) Doing this assigns a new label to this section of data. Save the query as "Append Total Needs to Direct Materials Budget" and run it to append the data to the table. See Figure 1 to check your work.

Less Beginning Inventory by Part

Since the previous period's ending inventory value becomes the next period's beginning inventory value, we will use the Part table to get the value for the first quarter to create data for Beginning Inventory.

Figure 1. Append Total Needs to Direct Materials Budget Query

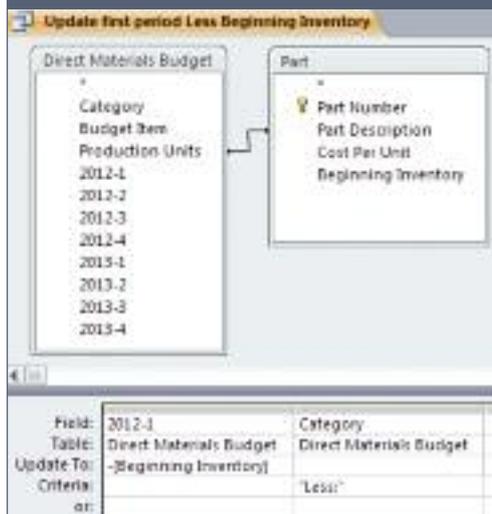
Field:	Category: "Total Needs"	Budget Item	BudgetItem: "Total Needs"	Production Units	2012-1	2012-2	2012-3
Table:	Direct Materials Budget	Direct Materials Budget	Direct Materials Budget	Direct Materials Budget	Direct Materials Budget	Direct Materials Budget	Direct Materials Budget
Total:	Group By	Where	Group By	Group By	Sum	Sum	Sum
Sort:							
Append To:	Category		Budget Item	Production Units	2012-1	2012-2	2012-3
Criteria:		Total					
or:							

Figure 2. Append Less Beginning Inventory to Direct Materials Budget Query

Field:	Category	CatNew: "Less"	Budget Item: "Beginning Inventory"	Production Units	Expr1: [2012-1]*-1	Expr2: [2012-2]*-1	Expr3: [2012-3]*-1
Table:	Direct Materials Budget			Direct Materials Budget			
Sort:							
Append To:	Category	Budget Item	Production Units	2012-2	2012-3	2012-4	
Criteria:	"Desired Ending Inventory"						
or:							

Using the 2012-1 Ending inventory value to append the 2012-2 beginning inventory.

Figure 3. Update first period Less Beginning Inventory Query



them to the following quarter's Beginning Inventory. We also want to multiply the values by -1 because we will subtract them later to determine what we need to purchase. For example, for the second quarter, the Field line should read:

Expr1:[2012-1]*-1

The Append To line should be set to 2012-2 (see Figure 2). Save the query as "Append Less Beginning Inventory to Direct Materials Budget" and run it.

and close these queries, Access will reorganize them. When you open the queries again, they will look different. Fields that aren't appended will be moved to the end of the query. This is because Access optimizes the SQL (Structured Query Language) when you close and save a query and then uses the SQL to build the Design view for you when you reopen it later.

Best Practice

Albert Einstein is credited with saying, "Everything should be made as simple as possible, but not one bit simpler." We're trying to create the simplest solution possible when working through these problems, but sometimes more than one step is needed to accomplish an objective. For example, we needed to create two queries this month to complete the Less: Beginning Inventory section. When searching for a solution, be careful not to assume you can or should get it done in one step. **SF**

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Before we do that, however, we will use the other calculated ending inventory values to update the following period and append the records to the Direct Materials Budget table. Then we will use a second query to update the values for the first quarter.

First Query

Create a query using the Direct Materials Budget table as a source. Bring all of the fields down into the QBE. Change the query into an Append query. To the right of the Category field, insert a column. The field line should be:

CatNew: "Less:"

Then set the Budget Item field so that it reads:

Budget Item: "Beginning Inventory"

For each period of data, we want to use the Desired Beginning Inventory values already in the table and append

Second Query

The next query updates the first Beginning Inventory value from the Part table. Create a query using both the Direct Materials Budget and Part tables. Link the tables using the Production Units (in the Direct Materials Budget table) and Part Description (in the Part table) fields. Change the query to an Update query. Add the 2012-1 field to the QBE and set the Update To line to -[Beginning Inventory]. Add the Category field and set the Criteria to "Less:" (see Figure 3). Save the query as "Update first period Less Beginning Inventory." Run the query to update the values in the 2012-1 field for the lines appended in the first query.

You should now have data for the next two sections of the Direct Materials Budget in the table. Once you save, run,