

## Advanced Search Capability

**Search Title & Cost Records**

	(	Relation	Field	Operator	Value	)
<input checked="" type="checkbox"/>		AND	Section	Contains	A1	<input type="checkbox"/>
<input type="checkbox"/>		AND	TDesc	Contains	work	<input type="checkbox"/>
<input type="checkbox"/>		OR	TDesc2	Contains	work	<input checked="" type="checkbox"/>
*	<input type="checkbox"/>					<input type="checkbox"/>

Title Table  
 Cost Item Table

Show All Delete Records

When EuroJOC's simple search engine won't quite do what you need, the advanced search engine provides access to all the horsepower of the SQL database language. SQL is the computer language programmers use to select and display data stored in databases. Advanced Search builds

search criteria phrase by phrase in a grid based manner. Still not quite what you need? The code inspector allows you to hand modify the SQL code. Are you worried about causing problems? Searching does not modify the underlying data. Advanced Search only locates and displays records. We use these same tools when we are building unit price books for clients. We developed this feature for our in-house use but quickly found it so powerful that we knew our customers would appreciate it.

We are giving you all the tools needed to work with the UPB data. Once the records are located, they can be modified if the edit password is provided.

**Search Title & Cost Records**

	(	Relation	Field	Operator	Value	)
<input type="checkbox"/>		AND	TDesc	Contains	work	<input type="checkbox"/>
<input type="checkbox"/>		OR	TDesc2	Contains	work	<input checked="" type="checkbox"/>
*	<input type="checkbox"/>					<input type="checkbox"/>

```
SELECT * FROM [MDESC] WHERE ([Section] LIKE "A1" AND [TDesc] LIKE "work" OR [TDesc2] LIKE "work")
```

Title Table  
 Cost Item Table

Show All Delete Records

We have worked very hard to provide all the power of SQL and reduce the complexity.

Title Table  
 Cost Item Table

The two radio buttons determine whether the title or the cost database table is searched. The fields displayed in the field dropdown box change depending on the database selected. When the code inspector is open the selected table changes in the code. Since many fields do not exist in both tables search criteria rows may become invalid when the radio button changes.

**Field**

- Section
- TDesc
- !PerUPB
- Desc
- Desc2
- UM
- #CTotal

Each line in the grid constructs a phrase within the search criteria. An unlimited number of phrases can be used. The relation column has three grid drop down choices; And, Or and Not. These conjunctive words create the inter-relationship between the grid row phrases. The Field column contains all of the database fields of the table selected by the radio buttons. Fields with the '#' symbol are numeric. Fields with the '!' symbol are Boolean (yes/no). Other fields contain string data, except for the picture field. The symbols help the user choose the proper operator to use with the field.

**Operator**

- Contains
- Contains
- Contains
- Equals
- Less Than
- Greater Than
- Not Equals

There are six operator choices; Contains, Equals, Less Than, Greater Than, Not Equals, and IS NULL. Contains is used to find partial string matches and can only be used with string fields. The Equals operator can be used with all field types except picture. The Less Than, Greater Than

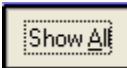
and Not Equals operators can be used with string and numeric field types. The IS NULL operator is used to check for null cells. A cell that has never been used may be null or blank. The Values column contains a user created search value and should correspond with the field type and operator selections. The parenthesis columns allow the creation of grouping between different rows of search conditions or phrases. For example the parenthesis could be used to create a condition like; WHERE [Item] > '0200' and ([Item] <> '0400' or [Item] <> '0600'). Without the addition of parenthesis, an entirely different result would occur.



The Binocular button executes the search and displays the results on the first tab. The table selected determines the grid modified. The data in the remaining grid remains as before. Because of the advanced nature of this feature, error messages caused by the user created code are not suppressed and may indicate what problem has occurred.



The delete button clears the all of the row/phrases shown in the search grid. Individual rows can be deleted using the standard grid method of clicking in the left-most column on the desired row, and pressing the delete button on the computer's keyboard.



The 'Show All' button selects all of the title and cost records shown in the grids on the 'Title & Cost Records' tab.



The delete records button is enabled only when the proper password is entered on the 'Unit Price Book Details' tab. The feature can be used to delete multiple rows of title or cost item data. An entire division of the unit price book can be removed in this manner. This button is the only feature within the advanced search function that changes the database and should be used carefully when active.



The SQL code window is displayed when the Code Inspector Button is clicked. The raw code is displayed in a text box. The user can make any necessary changes and then run the code with the binocular button. The grid is disabled while the code window is open. Typically the user would build the SQL code within the grid, inspect or modify the code in this window and then run the code. Using the code inspector, the user has the flexibility to change a phrase using any appropriate SQL code. An example of use might be to add parenthesis beyond what the grid allows or to use the SQL Between operator. Removing the '\*' symbol from a like phrase can create starts with or ends with conditions.

```
SELECT * FROM [Cost] WHERE ([Section] LIKE '*A1*' AND [TDesc] LIKE '*work*' OR [TDesc2] LIKE '*work*')
```

#### Advanced Search Examples:

Searching the Cost Table for the English description "heating";  
SELECT \* FROM [Cost] WHERE [Desc] LIKE '\*heating\*'

Searching the Title Table for the English description "heating";  
SELECT \* FROM [MDESC] WHERE [TDesc] LIKE '\*heating\*'

Finding all cost items with unit prices between \$12 and \$13;  
SELECT \* FROM [Cost] WHERE [CTotal] > 11.99 AND [CTotal] < 13.01

Find section 01 cost items with item code 1001;  
SELECT \* FROM [Cost] WHERE [Section] LIKE '\*01\*' AND [Item] = '1001'

### Title Field Descriptions

Section	Division, Chapter, Section Major Code
Item	Title Item Code – May be blank
TDesc	Primary Language Title Description
TDesc2	Secondary Language Title Description
#Lvl *	Level of Title – Not used in some UPB's
Above	Section/Item code of related title above. ? used a separator
!Below	True when Title below exists, false when cost items are next step
!Per_UPB	Not Used
!Print	Not Used
ModGrps	Modifier / Surcharge related groups
!IsMod	Current title record represents modifier / Surcharge item group
Picture *	Picture Data

### Cost Item Field Descriptions

Section	Division, Chapter, Section Major Code
Item	Item Code
Above	Section/Item code of related title above. ? used a separator
!Per_UPB	Not Used
Desc	Primary Language Cost Item Description
Desc2	Secondary Language Cost Item Description
UM	Unit of Measure
#CTotal	Install Total Unit Cost
#DTotal *	Demolition Total Unit Cost
#Labor *	Labor Component of Install Unit Cost
#Materl *	Material Component of Install Unit Cost
#Equip *	Equipment Component of Install Cost
#Sub *	Subcontractor Component of Install Unit Cost
#Wt *	Unit Weight
#Vol *	Unit Volume
Crew *	Crew Code
#Output *	Crew Output Per Hour
#Manhrs *	Manhours Per Unit
Picture *	Picture Binary Data
!Print	Not Used
#Bskt	Not Used
#DP *	Demo as Percentage of Install

\* depending on the unit price book supplied these data fields may not be populated.

### Need more help?

The SQL language is commonly used. Many programmers and database users know how to use SQL. The SQL language is taught in courses provided by Universities, Colleges and Computer Programming Schools. There are many books available on the subject. We suggest the following book published by Sams; "Teach Yourself SQL in 10 minutes – Quick Steps for Fast Results" by Ben Forta. ISBN 0-672-31664-1 \$12.99 USA. The book is a reference guide filled with examples. Corvet Systems has no financial relationship with the author or publisher.