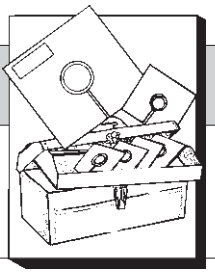
STATE-OF-THE-ART CONTRACTOR



Electronic Price Books

by Morris D. Carey, Jr.

Do you occasionally make bids wondering whether or not you will make a profit? You don't have to. The alternative is to make consistent estimates, and do job-cost analysis. Once your estimates are "job-costed," you can rely upon them to eliminate this problem forever.

Webster's defines the work "estimate" as "to judge or determine roughly (the size, cost, requirements, etc.); calculate approximately." Since the fatality rate of small businesses in America is in the mid-90th percentile, with small construction companies being at the upper end of that scale, we need to very closely study the problems resulting from the "roughly" and "approximately" portions of Webster's definition...lest we become a statistic.

You may have heard the following: "Buy a preprogrammed estimating program and you'll be the best on your block." Unfortunately, this is not true! In general, what an estimating program does do is give you a compact place to store your list of work items and prices. This is referred to as the "database" or "price book." The program then puts those items onto the screen or a paper print-out for reference at bid time. It provides a method for entering the bid into the computer, and sends the finished bid to a printer upon request.

Without a proper price book, however, the computer will be useless. Many estimating systems come with a price book (database), but I have not seen one yet that can be used as anything more than a guide to help you make your own. Don't expect a computer programmer in Tennessee to know what your particular estimating problems are in Florida. As a matter of fact, a California-born estimating database may not work well for a California contractor.

So, the key to estimating is the price book. If you can create one which is consistent, and which represents what you sell, practically any of the estimating systems now on the market will do much to improve your current hand-estimating procedure.

All estimating programs can be broken down into five parts: (1) the price book or database, (2) the take-off or bidding section, (3) the report section, (4) the utilities section, and (5) the user/computer interface. A basic understanding of each of these sections will give you the ammunition you need to make an informed buying decision, and will help get you the software that's right for you and your business. This column will concentrate on the basic price book, with a follow-up next month on more advanced alternatives.

One big difference between a handwritten price book and the one you will create with the computer is the use of reference numbers. Reference numbers are used by preprogrammed estimating software to find where an item of work resides in the computer's storage banks (regardless of what you have named the item). In the most simple of estimating systems you can expect to find a place to put an item description, a unit of measure, and a price. For example:

Item #	Description	Price/UM
697	WALL FRAMING LABOR	$7.65/LF
698	PLUMB AND ALIGN WALL	$ .90/LF
699	INSTALL CEIL JOIST	$2.35/SF

Note that I use plan units of measure rather than labor hours to develop consistency in my price book. I can't begin to stress the importance of using a unit of measure that is not determined by "estimator evaluation" at take-off time. Such evaluation neutralizes the consistency required in the estimate process. And remember: Consistency is the key to accurate job costing later.

Many price books contained within preprogrammed estimating software packages go far beyond the simplicity shown here. In our example we created only one price in the price book—the selling price—for a given item of work. More sophisticated programs will allow you to enter all the information included above plus the actual cost, waste, and difficulty factors, sales tax, labor burden, contingency, overhead, and profit. Even more advanced programs provide all of the above features twice for each item of work.

What about plan units of measure and opposed to order units of measure? Concrete for footings is normally shown in the plan by the linear foot (LF), but concrete is purchased by the cubic yard (CY). Wouldn't it be nice to have the computer make this conversion for us automatically? Then, print a bill of materials for us the moment the estimate is completed? This is exactly what systems with more advance price book features will do.

Estimating programs eliminate the repetitious task of extending the price each time by letting the computer do it for us. But, if you go back and take a second look at the example created for this article, you will see some repetition we didn't eliminate. Every time we make an estimate we have to enter a quantity for both WALL FRAMING LABOR and PLUMB & ALIGN WALL.

In this case, we could have combined the two items and the two prices and then we would have only had to enter the quantity once. We could have called the items FRAME & LINE WALL. Unfortunately, many items in our database that usually have similar take-off quantities at bid time cannot be combined at the price book level.

If you have already looked at several estimating programs, somewhere along the line you've probably heard the work "assembly" mentioned. This is a feature available in the price book section of some estimating programs that can prove to be extremely useful at estimate time. Generally speaking, the assembly routine allows you to selectively group items from the price book into a single package for use at bid time. Let's say for example that your price book (database) includes the following items, and that the job you are about to estimate has two bifold doors:

From the price book:

SUPPLY BIFOLD DOOR..... (millwork section)

INSTALL BIFOLD DOOR..... (carpentry section)

SUPPLY BIFOLD DOOR PULL... (hardware section)

INSTALL BIFOLD DOOR PULL.. (carpentry section)

STAIN BIFOLD DOOR..... (painting section)

In this example we would have to enter a quantity of two for each of the above items. In a fancier system we could create an assembly called S/I BIFOLD DOOR-STAINED, that includes the five items above from our price book, and at estimate time, enter a quantity of "two," one time instead of five times. This saves time and also helps us not miss an item as we go through the price book during the take off. Some programs allow assemblies to be contained within assemblies. Imagine the possibilities.

Not everyone needs a fancy-shmancy estimating system. Some operations would be wasting valuable time and money doing it with unnecessary bells and whistles. When considering price books, remember: "Your use of a computer should be to fulfill a need—not create a paper trail."

Many price books will include more features than you need, but the good ones will let you run the program without using all those features. Be sure to check the system you are considering to ensure that you are not required to fill in all the blanks to get the system to operate. And, *never, never,* consider purchasing an estimating system that includes a price book that cannot be altered. Also, *never, never,* assume that the database included with the estimating system will work for your. They're a good guideline for helping you set up your own price book, but estimating is as individual as the company doing the estimate.

The Remodeling Estimator, by NCE uses a basic type of price book, which is the right thing for some companies. Master Builder, California Contractor, CMS, and Timberline offer more advanced price books in their estimating programs. Remember, the more features available in a piece of software, the more versatility it has, but the longer it takes to learn. Complex systems take a high degree of comprehension to master.

Next month I will critique two advanced estimating price books as examples of what you can look for at the fancy end. At the time, I will also discuss more price-book features that can make a system even more versatile. ■

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