LABOR UNIT UPDATES BY COMPUTER

Keeping a computer current with latest price and labor unit data can be costly, but Estimation’s computer estimating system has developed improved methods for this vital task.

When Bonitz insulation of Greenville, South Carolina was started in 1957, the first automatic general purpose digital computer was just over a decade old. It filled a whole room, and accomplished what the most basic calculator currently does.

Today, Bonitz Insulation is now Bonitz Contracting, with insulation being just a small part of what they do. And adding numbers is just one task Bonitz’s computerized Drywall Estimating program from Estimation, Inc. is capable of. Bonitz, with its main office in Columbia, SC and other offices in Charleston, SC; Myrtle Beach, SC; Charlotte, NC, and Augusta, GA, contracts commercial drywall, metal studs, access floors, demountable wall systems, USG Ultrawall, acoustical ceilings, single ply roofing and has a carpet and exterior panel division.

The formulas needed to calculate takeoff quantities and areas are in the program. Now all Chief Estimator Morice Smith and estimator Jerel Wolfe have to do is pick up the dimensions with the system’s probes, press the key on the contractor’s keyboard labeled with the item they are taking off, and the system does the rest.

It took Morice only about a month of working part-time on the database in between estimates to have it running smoothly. He could have had it done faster, he said, if he could have devoted all of his time to customizing the system. Some alterations he made were changing the linear feet measurements to square feet, as Bonitz does most of their work by the square foot. Morice also added labor figures and material pricing based on Bonitz’s history; changed the terminology for the materials and built in the assemblies.

Because each person and each area of the country is going to have its own way of estimating interior work, Morice fully expected to fine tune the system.

“Each person is going to have to spend some time getting the computer ready for what they do and getting unit prices into it,” he said.

Moricce figured that the system cut his estimating time by about 40 per-
cent, while it has also generated information never available to him when he estimated manually, like the bill of materials.

“With the bill of materials, we’re ready to order the job as soon as we’re done with the bid. The computer doesn’t just cut the time before the bid, it cuts a lot of the time out after the bid on getting ready to start the project. If someone’s ready, we’re ready to order the materials right then. Everything’s summarized, all the studs by length are given to us. We know how many pieces of what size sheet rock and it’s all ready to order as soon as we get the job.

“The way we used to do it, we just knew how many square feet of sheet rock and we didn’t really know what lengths; we had to go back through the estimate and get the lengths and the types that we needed,” Morice said.

Bonitz Contracting

Bonitz has had the computerized estimating system, run on an IBM PC and an IBM clone in the Greenville office, for almost two years. When Morice arrived at Bonitz five years ago, the accounting department was already computerized. He took the job as chief estimator on the request that the estimating would be computerized.

“A computer was necessary to be able to estimate more jobs faster and alleviate mathematical mistakes instead of tying up people in the office pushing pencils, doing manual extensions and manually measuring items. We were estimating as much as we could
It was either hire more people or computerize. It was less expensive to invest in the computer than to hire more people,” Morice explained.

Because he worked with computers while with his former employer, Morice was convinced of the benefits computerization could bring a company. However, he acknowledged that “computerphobia” is understandable among those who have been estimating manually all their lives.

He recalled that after returning from Estimation’s four-day training session in Florida, Bonitz’s management requested that he do manual estimates to compare with the computerized estimates on the small jobs he was bidding. Soon, though, Morice began estimating larger jobs where he didn’t have the time to estimate both ways, so he phased out estimating manually. By then, management needed no further proof that the computer produced estimates faster and more accurately than manual efforts.

He advises novices to computerized estimating to “take the time and move into it slowly. You don’t have to do the whole job on the computer. You can do one wall on the computer and do the rest of it manually, or you can do everything but one wall and do it manually.”

Jerel observed Morice work on the computer for about eight months before Morice began training him. According to Jerel, that observation period enabled him to feel fairly comfortable with the system when he first sat down for hands-on training.

“One step at a time” is how Morice described his approach to training Jerel. At first, he instructed Jerel to takeoff one or two wall types at a time on the computer, takeoff the rest of the job manually, and add the two numbers together. Next job, Jerel would takeoff three wall types on the computer, then four; increasing the amount of work he did on the computer each time.

“He gradually got into it and understood each phase of it instead of jumping in and doing a complete job on it. Now Jerel feels very confident with it which he wouldn’t if he had had it all thrown at him at one time. This may be the case with some of the people who are scared of it. They think every phase of the job has to be done on the computer.

“That’s not the case. We still do some small details by hand and then add them in a category in the database we set up called Manual Estimates. If, in going back over the plans I find a detail that I missed, I add it in Manual Estimates,” said Morice.

Jerel attributed this slow and easy approach to the computer to his success with it today. The system has cut his estimating time by 30-50 percent.

Convert the percentage of time cut from Morice and Jerel’s estimating into days, and the time savings becomes even more evident. Recently, Bonitz was awarded the interior contract on the Michelin North American World Headquarters in Greenville. The job took about five days to estimate. Without the computer, it would have taken twice that to produce a bid, according to Morice.

Generally, large office buildings, which previously took four or five days to do now take two days. The first day is spent setting up the assembly in the
computer; the second day on doing the takeoff.

Besides the time savings, another benefit the computer has given Bonitz is freedom from having to be selective about the jobs they can realistically bid on.

“Three years ago, if two large jobs came out at one time, it was difficult to bid both of them. Today, that’s not a problem,” said Morice. “We haven’t turned any work down since we’ve had the computer. In the area that we quote work, everything that has come out, we’ve bid on.”

Increased confidence in their bid is another advantage of estimating on the computer.

“I feel more confident when the number comes out at the end that I haven’t made mistakes. When I get the final number, that’s it—I believe it. Before, I would always have to go back and check the plans for anything I left out, check my math extensions, make sure I had the right product at the right price. Now, all that is in the computer. I just check that one time, and that is when I’m entering it in the system. Once it’s in there, it’s not going to change unless I change it,” Morice reported.

It is hard to believe, but such accurate estimates can sometimes make for some anxious moments. Last February, Morice had manually completed some budget numbers for a local project he was bidding on. When the final plans came out, he estimated the job on the computer and was considerably under budget. That weekend, he came into the office and did the takeoff again, coming up with the same number. Despite the conflicting numbers, he submitted the sum generated on the computer.

On bid day, Morice listened as his bid was announced first. He listened warily for the second bid to be announced. When it was, it was more than twice his bid.

“Of course, I was so scared that I could hardly write his number down,” Morice confided.

The third bid was still considerably higher than Morice’s, but he remained sure that his bid was correct—and he was right. Bonitz was awarded the job, and nearing the date of completion, the project is on schedule and within the estimate for all categories.

Knowing that Bonitz uses a computer also makes clients more confident with its bids, Morice believed.

“We have clients come to the office and they see that we’ve estimated on the computer. I think the computer adds a bit of prestige,” he said.

Moric is always discovering and exploring new facets of the computer, and would enjoy annual meetings with noncompetitive users to exchange tips and techniques.

“I find out different ways of doing things everyday and change the way I do it. I try different procedures and different assemblies. I look for the easiest way—whether to add the studs in as I am taking them off, or just go back at the end and add my studs for the corners and also pick up corner beads. I try it different ways each time. I still constantly experiment to find which way is the best,” he said.

“The sky’s the limit as far as what you can do with the computer,” Jerel concluded.