One Minute Poll

Reveals Mix of Old School/Cutting Edge

Participants in a recent One Minute Poll confirmed that the vast majority of component manufacturers combine both hi-tech and old school automation to accommodate their production needs. Take a look at the results and some of our favorite responses.

A. We're on the cutting edge of automation: **21%**
B. We combine high and low automation in order to meet the varying materials handling needs in our plant: **62%**
C. Automation…I'm not familiar with that term: **18%**

"We are on the cutting edge of automation and have been for the past three years. We developed a Just-in-Time cutting, assembly, packaging and delivery system before we knew the term 'automation' existed." –Gary Sartor, Stone Truss Company, Inc.

"I work with people whose favorite saying is 'we've been doing it this way for 25 years and it has worked just fine. If it ain't broke don't fix it.' They're the same people who play checkers waiting for material to be cut." –Harlee Thompson, Kenyon Noble Truss

"I believe we are on the cutting edge of automation in relation to the rest of the CMs in the industry, but nowhere close to what true 'automation' should be for this industry." –Ken Cloyd, California Truss Company

"I believe we are on the cutting edge, but more in terms of communication than materials handling, which could be viewed as 'automation.' In areas like paper flow (we are paperless), using the Internet heavily, NEXTEL phones, computerized saws and set-ups, we are very advanced." –Marshall McCarty, Automated Building Components

Perspectives: Advancement & Enhancement

by Carl Schoening, Truswal Systems Corporation

As in all things, change is inevitable. The building components industry has been about change since its beginnings; in fact it came into being in order to change the construction industry. That early challenge is one that is still being fought today, but hopefully less as each day passes. That challenge was (and continues to be) convincing builders and framing contractors that components provide a cost effective way to erect a structure with greater structural integrity and decreased cycle time. Of course, the builder/contractor argument is "we have been doing it our way for 30 years." But, as I said we have mostly overcome these unsupported arguments and have captured significant market share for our products. So, what is the next challenge?

Over the last fifty years we have seen great improvement in manufacturing. Automation has been the battle cry of suppliers to the component industry. Connector plates have changed, equipment has changed and certainly methods of manufacturing have changed. We have focused our attention on productivity, whether in layouts and truss design or production and shipping. Taking our product from raw material to finished product has become faster, easier and better than ever. Not all of the new has been good and not everything old was bad. The blending of old and new equipment seems to be an approach most manufacturers have taken. The result of combining old and new often leads to other startling new improvements or in some cases a rediscovery.

In my travels across the land visiting component manufacturers I hear many opinions, some ideas, and I get asked a lot of questions. One of the opinions I hear fre-

at a glance

- One concept fosters a progressive view of the future of component manufacturing: If it ain't broke don't fix it.
- This industry is nowhere as close as it should be to achieving a true state of "automation."
- Things that were previously a component manufacturing focus are being weighed against enhancements that will improve productivity or cycle time in all areas of plant operations: billing to design to manufacturing to shipping.

The blending of old and new equipment seems to be an approach most manufacturers have taken.

quently is that the time of the big multi-blade component saw has past. Buildings have increasingly complicated roof lines, causing more and different truss types that require more and more set-ups. (See following article by Steve Shrader on the emergence of linear saws in the industry.) Component manufacturers tell me that an average of four or fewer trusses will have the same configurations on any given structure and then change to another truss type or configuration. That means more set-ups. More and more manufacturers are moving toward inline saws or computerized pull saws. This is an illustration of blending old and new technology to meet the changing needs of component manufacturers. Basic pull saw technology combined with computerized set-up for angle and length offers a relatively inexpensive option in cutting technology. Output rates for these inexpensive saws are not dissimilar from the larger and much more expensive component saws and do not required any additional labor. Even inline saws are an elegant blending of single blade technology. They are a pull saw with servos and motors spinning and moving to precise angles and cutting to length. They too are a blend of old and new technology.

Other automation has centered on jig set-up. Lasers have become an almost integral part of component manufacturing. There are those of the opinion that replacing a set-up man with a laser "dumbs down" our industry, but no one discounts the speed and accuracy of laser set-ups. We also see mechanical auto jigging. This is more limited to specific types of manufacturing equipment and also requires some additional maintenance.

Gantry lines have become the tried and true production method that most component manufacturers gravitate toward when looking for improvement in productivity. However, there are some hydraulic press holdouts and they have automated other systems to improve speed. I believe the next big thing is out there and that in a short amount of time our industry will go through another production equipment revolution. Those things being said, most manufacturers are looking very closely at material handling. The fewer times the cut member is touched, the faster production is and the lower labor costs are. A whole industry has risen from the need to handle lumber more efficiently. Unfortunately, once again it comes at a price that not all manufacturers can afford. If return on investment is analyzed, improved material handling will pay for itself more quickly than adding another piece of equipment. In many cases, improving material handling requires rethinking several other areas of production to take full advantage of front end efficiency. It is not something to be taken lightly and has created a secondary industry: consulting.

Software is the industry's final big area that is in a constant state of evolution. Each year component manufacturers get a chance to test drive the latest and greatest from all suppliers. Whole house technology has taken the driver's seat in software development. This year component manufacturers will see some big developments. Not only will whole house software reach new heights, but enhancements to core programs will be a focus for many providers. Software providers are applying a new kind of litmus test. They are beginning to look at the intimate needs of component manufacturers. Things that were previously a programming focus are being weighed against enhancements that will improve productivity or cycle time. Automating software features will speed design, improve novice learning and offer greater employee deployment flexibility. These things will mean improved profits and greater capacity and will broaden the design staff labor pool.

I am a firm believer in change. Not just for the sake of change, but for true improvement and innovation in the industry. We are manufacturing better building components today than ever before, at a rate industry founders would think unbelievable. The next big thing is out there. Be ready to embrace the change and always look to the future. SBC

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