

# Industry 4.0 can optimize any size business

Georg Frey of Lignum Consulting presented Industry 4.0 basics at Wood Pro Expo.

**I**s Industry 4.0 the right thing for a smaller woodworking operation? Georg Frey of Lignum Consulting spoke about how industry 4.0 can optimize any size plant at the recent Wood Pro Expo in Charlotte.

Frey discussed everything from workforce development to integration of technology, including the seven building blocks that enable an organization to establish a smart factory: product, technology, strategy, data integration, organization, logistics and people.

“It is important for companies to get out of the habit of running a small shop like a traditional cabinet shop whereby the thought process is ‘give Joe a sketch and he’ll work it out,’” said Frey.

Frey asked attendees if they are ready for the connected factory. And if their organizational model is defined and can be used to drive integrated processes.

One of the key principals of Industry 4.0 is connectivity of manufacturing technologies. The goal is the fusion of production,

logistics and information technologies.

Connected processes along the value chain include links between suppliers and sales, inbound logistics, production, outbound logistics, installation and services.

Frey said that Industry 4.0 applications in furniture manufacturing include creating execution systems with real-time manufacturing information, material provision logistic train system, RFID and barcode part identification, material flow synchronization, and machine availability and maintenance.

The goal, Frey said, is to manufacture more customized, more flexible, faster and more reliable. And to continuously enhance the entire process chain.

The connected factory is useful for both large and small companies, but there are some differences between a large production environment and small businesses that need to be considered. Larger companies can better use product configurators for product and process data, specialists for needed positions and economies of



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scale to best use processes and equipment.

Frey asked attendees to rate their own company strength in product, technology, strategy, data integration, organization, logistics and people.

Frey said that Industry 4.0 is here to stay for industry and smaller businesses.

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