

SYNERCY STEEL LIGHT CAUGE STEEL PANELIZATION

**Client:** Synergy Steel **Project:** Various Location: USA

<u>Synergy Steel's</u> story is a transformational one. It is a tale of a company with lumber construction beginnings that has progressed to become an industry leader in framing automation, steel, and leading edge construction technology. Despite the challenges of 2020 and the interruptions to normal operations, the transition from traditional building methods to highly innovative construction has driven impressive growth.

## Transitioning to offsite and fast-build construction with steel

Synergy Steel Co-Founder and President Michael lagnemma remembers well the day he suggested his family-based business should move from wood framing to steel panelization.

Just over 10 years after the business was established in 2004, Michael began taking an interest in what he believed was "a better way of doing things". He had been watching developments around steel framing in New Zealand, Australia and Canada and saw an opportunity to introduce this concept to the US.

He told his brother, Brian (who is also his business partner) that they should look to offsite manufacturing as well as providing turnkey labor. Brian agreed, and the Synergy Steel success story got underway.

Michael's early investigations involving New Zealand revealed that Howick was well positioned to provide the innovative steel roll-forming technology required – resulting in a range of machines being supplied over the years.

### Stealing an advantage

Today Synergy Steel is known for its focus on light gauge steel, framing automation and fast-build construction technology. Its client base includes residential and commercial construction firms within a growing number of states across the US. The company also has its own construction development operation.

Cold formed steel panelization and the adoption of smart design technology is at the core of Synergy Steel's business operations – it is a mix that has attracted plenty of interest and is the catalyst for on-going success. Essentially, Synergy Steel offers clients full turnkey, fast-build construction solutions by combining 3D Building Information Modeling (BIM) technology with the newest cold formed steel framing and panelization techniques. The lagnemma brothers say the benefits of this smart design technology approach cannot be underestimated – accordingly,



they have dedicated one arm of the business, SynTech Design, entirely to virtual design.

The company was relaunched in 2018 with three subsidiaries: Synergy Manufacturing, Synergy Construction and SynTech Design (the company's all-important virtual design platform).

### **Calculated growth**

The lagnemma brothers speak of "very calculated growth" leading to a backlog of work now stretching to 24 months and involving roughly 5,000 units.

Despite the global pandemic, new factories are planned for 2021, as is further investment in technology and machinery.

Growth is particularly strong at the firm's SynTech Design arm, where a growing number of staff focus on converting two dimensional drawings into 3D virtual modeling.

Brian lagnemma highlights this design and technology side of operations as unequivocally the most important aspect of the business. "It's what truly separates us. We blend our lean concepts with BIM technology, factory management and on-site installation."

Brian explains that BIM technology means that structures effectively get built twice. "We build virtually before we construct." With 3D modelling, a detailed picture is created



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providing precision which defines specific material requirements, as well as identifying potential issues associated with each job. Synergy Steel even developed its own, meritorious virtual design platform to help with this - another aspect of its success story.

New projects, new hires, new factories, new clients... they are all part of the remarkable growth story being enjoyed by Synergy Steel. Recent project acquisitions are adding to demands, and among others include:

- Tremont Station, with requirements for the creation of a spacious townhome development in Charlotte, NC
- Grove Manor, for the development of a growing community featuring ranch-style homes in Waxhaw, NC
- · University Apartments in Rock Hill, SC
- LaFrance Square in Atlanta, GA
- And Edison Park, in Nashville, TN, where the firm will be building feature townhomes and stacked flats.

## New SynTech design facility for Lancaster County

During the last months of 2020 SynTech Design confirmed plans to establish operations in Lancaster County where Synergy Steel currently has a manufacturing facility. This \$450,000 investment has seen the creation of 20 new jobs to date.

Amongst those celebrating this decision to bring engineering and software development functions to Lancaster is the county council's chairman Steve Harper, who says Synergy Steel has "hit the ground running" since first establishing operations in Lancaster in 2018.

#### The advantages of construction the Synergy Steel way

Offsite manufacturing and panelization (a prefabrication technique), are core operations now. Load bearing walls, flooring systems and roof assemblies are all panelized offsite at Synergy Steel premises, then delivered ready for installation.

The team has found the controlled environment of the factory provides many advantages. With a lean manufacturing approach, they minimize waste and reduce staff down time. Greater efficiencies, design flexibility, lower labor costs, and improvements in sustainability are all part of the picture. A clean environment also equates to improved staff safety. Overall, the firm's transition to modern building approaches has enabled exceptional growth and improved profit margins, and that is despite the challenge of Covid-induced headwinds.

Howick is thrilled to play a part in this growth. The four new machines joining the Synergy Steel workforce now include three more Howick <u>FRAMA™ 5600</u> systems and a <u>FRAMA™ 7600</u> for now a total of seven roll forming machines.

Howick's Tom Reed was at Synergy Steel's headquarters recently and noted the company's aptitude for moving modular construction forward.

"I met with them to discuss their plans for the future and was blown away by the amount of projects and steel fabrication of panels and trusses they are doing. What's more, they are increasing the diversity of their offerings.

"I have watched their progress closely over the last two years and I am extremely impressed with their foresight and energy. Great job Synergy Steel."

### Find out more

Scan the QR Code to find out more about the FRAMA™ 5600 Scan the QR Code to find out more about the FRAMA™ 7600



If you would like more information on building with steel and making the transition to offsite manufacturing, talk to us today.

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