Nearly three decades ago, Gus Bergsma visited AISC’s offices and promised to show us the future of steel design. And to our surprise, he held up his end of the bargain.

He sat in our conference room and in less than an hour, developed the frame for a three-story office building. It was the first time any of us at AISC had seen RAM Steel. The product allowed structural engineers to substantially reduce design time and also gave them the freedom to experiment with variations to optimize the gravity load-resisting elements in a building frame.

Recently, we had another visitor to our office, and I immediately thought back to Gus’ demonstration from the early 1990s. Henry Lederman, chief strategy officer with Qnect, showed us their connection software. Much like the early days of RAM Steel, the software promises substantial cost savings, though in this case when used to optimize connection design. But the real advantage is the time it slashes from a project. What might take a fabricator and detailer weeks to develop can now be completed in hours (or for smaller projects, such as the one Gus showed us years earlier, seconds).

Qnect estimates a savings of $30 to $50 per ton, including optimizing connections, resulting in a 20% to 50% reduction in bolts. But more importantly, it speeds the process—including the time needed for rework when member sizes or loads change. And the software isn’t vaporware or some pipe dream. It’s already been successfully used on projects.

How fast does the program work? According to Henry, Qnect developed connections for a 1,600-ton office building in California in less than an hour (the example he showed us in our office was about a 300-ton project, which took less than a minute).

Speed is the next big thing in the steel industry. We’re already seeing impressive results with the SpeedCore system (visit www.aisc.org/speedcore and watch the truly amazing video). We’re also seeing a growth in robotics usage in fabrication shops (visit www.aisc.org/roboticwelding to see a video I shot on a visit last spring to Prospect Steel in Little Rock, Ark.). And we’re seeing many other innovative systems that promise faster, less expensive design and construction (check out our latest brochure at www.aisc.org/why-steel/innovative-systems).

All of these ideas will be on display at the 2019 NASCC: The Steel Conference (April 3-5 in St. Louis). We’ll be offering more than 150 technical sessions and more than 200 exhibitors showcasing the latest in steel design and construction. It’s your chance to see the future.