## structurally sound

## FIRST ON THE BLOCK



## **THE CITY OF BIG SHOULDERS** is in the midst of some seriously heavy lifting.

The 1.2 million-sq.-ft 150 N. Riverside office tower project, under construction in Chicago's West Loop, is the first in the U.S. to use A913 70-ksi high-strength steel. It's also using A913 65-ksi W36×925 hot-rolled wide-flange sections, which are the largest rolled sections currently available in the world. These sections are more than 43 in. deep with 4.5 in.-thick flanges and 3-in. webs. The 60-ft-long variety is roughly the size of a humpback whale, weighing approximately 27.75 tons. And some of the building's columns are doubling up on these behemoths, joining two of them in tandem to create mega-columns at the ends of the building.

The steel is being fabricated at Zalk Josephs Fabricators in Stoughton, Wis. (an AISC Member/Certified fabricator). The project gave the company the opportunity to put some recently installed conveyor tables to the test, as it used them transport the massive pieces between the cutting, drilling, coping and fitting stations. (Installing this new equipment has expanded Zalk Josephs' capabilities, increased automation and improved efficiency at the facility, thus preparing it for future jobs of this size and scope.)

In addition to the mega-sections, thick steel plates are being used to help resist the loads passing through the concrete core of the building. Some additional steel elements are attached to the thru-plates in order to create a "shoe" or a place for the lifting jacks to push against during the erection of these massive composite truss elements.