Industrial business parks; the very name screams glamour, glitz, and prestige. Well, not really. In fact, although these types of warehouses have always been the workhorse of commercial real estate in the Chicagoland market, they have been somewhat underappreciated for years. From Bolingbrook to Elgin and now out to the I-39 corridor, these parks have been spreading out concentrically from their Chicago hub. The concept of these buildings in the majority of people’s minds are that of the, “big, plain, square boxes” that dot the interstate and former cornfields of towns branching out from the city. However, the plain, square warehouse of yesterday has given way to a more attractive, flexible, and dynamic structure that is smarter and more cost-effective than ever before.

Over the years the industrial park building industry has seen the adoption of super-flat concrete floors, climate controlled operations in low-tech applications, as well as wireless and automated handling methods within the structure itself, further improving their bottom line due to efficiencies and reduction of waste. More sophisticated GPS systems for trucking and rail for handling goods entering and leaving these facilities garner rave reviews in tech magazines and newspapers. Lost amongst the headlines are the ways that precast concrete structures have been evolving right along with these industrial buildings. The simple fact is that the tremendous advancements in design, construction, and materials selection within the arena of precast concrete building systems are quite striking.

Architects are increasingly designing precast structures that take advantage of the strength and economy of prestressed concrete components while they maximize the aesthetic variability through a judicious use of stone, brick, and other types of surface treatments. The combination of economical conventionally-painted panels for the majority of the building and highlighted areas consisting of inlaid thin brick panels near building entrances are a good example of design and budget working together successfully. Cost-optimization is further enhanced by the availability of precast production lines capable of varying panel widths and heights. Trucking advancements have occurred in the form of tilt-trailers for larger panel sizes and specially modified trailers that will soon allow for panels to be shipped on edge in a manner that will allow for more direct routes, improving construction operations.

Precast concrete technology in the areas of materials and system integration has also advanced at blinding speeds over the last decade. Special concrete mixes utilizing “greener” components that offer higher strengths, better finishes, and lighter weights are using more recycled products. Vacuum-saturation techniques for select aggregates are used to provide higher fire-rated panels without sacrificing strength. Selection of bio-based foams when needed to achieve LEED status and reduce our nation’s dependency on foreign oil is another shining example of precast concrete wall panel system’s innovations. Dukane Precast, with our three manufacturing facilities in the Chicago area, is proud to have led the way in many of these precast building advancements as we strive to better serve this thriving industrial business market. We look forward to the excitement that lies ahead.