Much has been said about added value concrete since RMC 2000 brought the topic to the forefront a number of years ago. Today there are so many choices on the menu that ready-mixed concrete producers need to develop and execute a strategy to focus and excel at a handful while offering any and all when it is profitable and meets the producers’ overall strategic goals. This article, the first in a series, will discuss some of the many options available today in value-added concrete. Future articles will focus on specific types, strategies and tactics that can enhance a ready mixed concrete producer’s offering and value proposition.

Where do we start to discuss these specialty concretes that add value to owners, specifiers and contractors? Let’s start by looking at a representative listing of a few of the options:

- Concrete with fibers
- Quick-setting mixes
- Decorative concrete
- Waterproof concrete
- Flowable fill
- Self-Consolidating Concrete (SCC)
- Easy-finishing mixes
- “Green” concrete
- Pervious concrete
- High-strength concrete
- Corrosion-resistant concrete

All of these types of concrete are applicable to various markets and market segments served by the ready mixed concrete industry. Based on your firm’s focus, there should be a handful that work best in your market, geography, climate and competitive situation.

Fibers are arguably the most penetrated added-value concrete being sold today. Having said that, the economic case for all types of fibers would be that they have barely scratched the surface relative to their overall market potential. Synthetic fibers for plastic shrinkage crack prevention are widely used in the United States at varying penetration rates based on geography. Steel fibers have proven economically viable at much greater acceptance rates in Europe than in the United States. Synthetic macro fibers have exploded on the scene in recent years, as have steel and synthetic-blended products. Newer market entrants like alkali-resistant glass or wood-based fiber products have also made great strides recently. The point is there is a lot of room to grow in this already developed added-value market.

Quick-setting mixes in the not-so-distant past were all about dealing with set time and cold weather concerns. While they still add value in that application, they can be used in another way. Today’s ready mixed concrete salesman should know how to sell the economics of pulling forms quickly and saving contractors money by speeding up the project. A number of portions of the United States are already doing this, but sadly it is a practice which does not have traction in a number of markets or companies. This should be one of the things a producer discusses with a contrac-
tor after he has won a project to establish value for both the contractor and himself.

Decorative concrete is one of the fastest-growing value-added concrete types today, both in sheer cubic yards of growth and in year-over-year percent growth. That is not a small statement to make. With retailers like Wal-Mart, Kroger, Chili’s and the like using integral colored concrete, along with textures, stains, grinding and stamps available today to replicate almost any other finish, the market for color in concrete will continue to grow. The key for us to remember as an industry is that we are replacing other materials and that what we are replacing determines the value.

Waterproof concrete is nothing new. Floating bridges were built in the 1980s in Seattle and are performing well today despite their existence being invisible to many people throughout the United States. Like giant concrete barges, they were built in dry-docks like ships, floated into position and cabled to the ocean floor. While the bridge space has recognized this capability, it is only recently that more fragmented market segments have started to recognize the value of waterproof concrete. While this may remain a niche market, there are a number of areas where growth will occur.

Flowable fill has been around a long time. It is a great product for ready-mixed concrete producers since it can allow use of out-of-spec aggregate and generally has a rapid unload time at the site. The admixtures that produce high air contents provide a large number of values, not the least of which being the ability to carry large loads to the site without “sloshing” out of the back of the truck. Despite its long list of advantages, flowable fill has only captured a small percentage of the compacted soil marketplace. Just the use of flowable fill when it has rained and an excavation cannot be compacted conventionally provides some significant opportunities for our industry. This is a market which should continue to grow.

Self-consolidating concrete is a frequent topic of discussion inside the concrete industry today. It offers the potential to revolutionize the labor-cost structure of concrete placement. Despite that, it does not have anything close to the level of traction evidenced by its use in Scandinavia or Japan. America continues to be a slow adopter of new technologies in the construction industry. Hopefully, we will learn that these other countries don’t use these technologies haphazardly. They obviously make a profit from them or they would not continue to grow. SCC has great potential, which is only limited by our ability to drive change in the marketplace.

Easy-finishing mixes have been around a while but still have room to grow. “Slicker,” more “buttery” mixes using mid-range water reducers have shown to finish faster and be perceived by finishers in testing. Market acceptance should continue in this space, albeit at slower-than-desired rates. This is a great opportunity for ready mixed producers who have not already “branded” a mix to create their own branded mix in local or larger markets. Branding as a practice in our industry has strong potential but has yet to stick in a large number of markets. Creating a brand takes time. The sooner we start, the sooner it will happen.
Sustainable construction, or green building, is not a trend or a fad – it is here to stay. Embrace it. Capitalize on it. Lead! (or was that LEED). The number of projects utilizing LEED building standards is growing EXPONENTIALLY! Either we as an industry will demonstrate how we have the greenest building material in the world or we will be displaced in the future. I truly believe we are the greenest building material, but what I believe doesn't matter. It is the perception of owners, specifiers, contractors, the USGBC and others that will determine the future. As a side note, a lot of people in our industry call it “LEEDS” instead of the correct term, “LEED.” Drop the “S” and improve our industry’s credibility. Consider attending a USGBC meeting in your area. You might be surprised at the people you see there. A change this significant in our industry may not occur again in my lifetime or yours. Capitalize on it!

Pervious concrete is one of the most requested topics of the National Account Team at NRMCA. Stormwater is a big green issue today. Pervious concrete provides one solution to the problem. It will continue to grow.

High-strength concrete has been used in columns in high-rise construction as well as in FHWA experimental bridge beams for some time now. It has a number of other niche markets where it can add value. But like the other technologies noted here, it does not sell itself. The value has to be communicated to the owner, specifier or contractor.

Corrosion-resistant concrete has a fairly mature market in parking decks in cold-weather climates as well as bridges in saltwater environments. Corrosion inhibitors, silica fume, fly ash, slag, concrete cover, low water to cementitious materials and superplasticizers all can play a role in this type of concrete. Numerous other warm-weather climate airborne salt areas are still being built with normal concrete. There is room to grow this type of concrete.

There are a number of other types of value-added concrete out there. This is by no means a comprehensive list. White concrete, smog-absorbing concrete and others could be added to the list. The decision as to what a ready-mixed producer should focus on is based on the availability of local materials to make the mixes and, more importantly, the markets in which they operate. If cheap soil is abundant and compaction costs are low in a market, flowable fill might not be an area you want to focus on. Conversely, if you are in a warm-weather coastal market and people keep repairing corrosion on the balconies of the condos and apartments after just a few years from construction, there might be an economic case for high-quality, corrosion-resistant concrete mixes. The point is that every producer should regularly evaluate his market, his added-value product offering and his sales team’s ability to effectively deliver the message associated with an added-value offering. Doing so successfully adds value to the bottom line of both your customer and your own business. Isn’t that what we are here to do?