



***An industry that is becoming more sophisticated, better educated, and a true force in commercial and residential construction and renovation.”***

By **W.B. King**

**A**sculpting should be designed with intricacy and detail, said the famous Michelangelo, but also with “such sturdiness and strength that one may roll it down a hill without damage.”

Centuries later this wisdom of the ages rings true. And while it is not common for consumers to test the strength of ornamental concrete, manufacturers are continually expanding upon time-tested applications such as form oils and molds, the use of vibrators, and how best to paint and finish.

The end products—angles, fountains, jockeys—adorn both residential and commercial properties around the world. The process from conception to fruition, however, is a long road.

### **Etching the Market**

“The industry is growing, but has had a recent slump due to the economy,” says Del R. Preuss, executive director of the Bemidji, MN—based Ornamental Concrete Producers Association [OCPA]. “Many new items are being sculptured and this keeps the market purchasing more concrete,” he adds.

In 1990, OCPA held its first meeting which comprised approximately 50 companies. Today, the association has over 500 members. “Our association is made up of producers, suppliers and retailers,” says Preuss. When asked what prompted the formation of OCPA,

Preuss, executive director since 1993, responded: We had no central place to go for molds or suppliers.

The streets of America are home to any number of ornamental concrete sculptures, the majority of which, says Preuss, have been in existence



**A sample precast concrete ornamental lion to grace your home or city park.**

for roughly forty to fifty years, and are copyrighted. “Most new items sculpted are also copyrighted,” he continues. “A few are custom made for a single person and price varies based upon the size of the mold.” Stepping stone molds, for example, cost approximately \$30, while large fountain molds run roughly \$10,000.

A vast range in products and pricing demonstrates an all encompassing and growing market. “There has been a monumental shift in the Ornamental

Concrete industry over the last ten to fifteen years. Garden gnomes and bird baths were once the mainstay of an industry that is now producing highly detailed, architectural concrete,” says Linda Klieneberg, spokesperson for the Wyoming, RI—based Vibco, Inc., which produces vibrators for ornamental concrete manufactures.

“It’s about more than the humble garden gnome being replaced by the decorative cornice of a renovated Grande Dame hotel,” Klieneberg continues. “It’s about an industry that is becoming more sophisticated, better educated, and a true force in commercial and residential construction and renovation.”

Owner of the Lufkin, Texas—based Texas Traditional Molds, Donny Kirtley agrees explaining that this year alone his company has introduced roughly 150 new molds. “Customers are looking for new designs with lots of details,” he says. And while that last few years were tough on sales due to the recession, this spring, traditionally the peak season, Kirtley realized substantial increases.

### **Molding the Future**

The art of molding dates back thousands of years to ancient China and Egypt. Over the years, various materials have been used for molds including animal fat, metals, plastic and wax.

Today several common applications are cast aluminum forms, latex [rubber], and others such as fiberglass. While each has its merits, latex molds, due to contraction, are deemed a

short-lived alternative. Fiberglass, for example, is sturdy and dependable but the details of complex shapes tend to blur. Although cast aluminum is the most expensive option, it's preferable because it produces quality end-products.

Texas Traditional Molds has employed the same process since its inception 22 years ago, explains Kirtley. "We use latex rubber for the liner [of the mold] and fiberglass for the backing [of the mold]," he explains, adding, "this combination allows for the most detail."

When considering the most appropriate application, Preuss says to focus on the detail of the finished product because quality varies from producer to producer. "Some people are satisfied with the general outline, while others want all the features like hair on a dog or cat to show. There is no standard for the pouring of ornamental concrete," he continues. "Some people are satisfied with purchasing items from another country because it's cheap." Preuss says it is important to research where the product originated because concrete poured in southern countries tends not to stand up in the freezing areas of the U.S.

And while standard mold forms drive the market, Klieneberg says recent indicators point to a changing market. "The majority of molds are standard, roughly 70 percent," she continues. "But we have seen an uptick in the number of producers that are creating very detailed, custom molds. There seems to be a growing trend toward these premium products."

### **Good Vibrations**

The key to any success venture is efficiency. For manufactures and producers of ornamental concrete products this issue has posed a great deal of problems historically. According to Kleineberg, a tremendous amount

of muda—Japanese for waste—results from the need to hand-finish products that were not made right the first time. "Literally thousands of man-hours could be saved annually if ornamental producers were able to eliminate the causes of the imperfections," she says.

The solution: vibrators. "The greatest impact that new vibration technologies have is to provide more control and flexibility to the ornamental concrete producer," she continues. "Having the right vibration solution frees a producer to refine existing products, innovate new products, increase overall product quality, reduce the constraints of labor and dry time, and ultimately to reduce waste."

To this end, Vibro offers a number of solutions to ornamental concrete producers including its newest offering VIBRA-BEAM™. Mounted to a standard sawhorse, the portable vibrator enables functionality of a vibrating table but with more flexibility.

For those new to the market, and especially to the use of vibrators, there is a learning curve. And while the use of vibrators is becoming more widespread, Kleineberg says producers should be careful when selecting



**For 22 years Texas Traditional Molds have used latex rubber for the liner of their molds and fiberglass for the backing of the molds. This process allows for a detailed and durable finish product.**

a vibrator. "Too often the decision is based on price, rather than on performance. Producers should view vibration as an integral part of the process and consider that purchasing the right vibrator can lead directly to reduced labor hours and a better quality, more desirable product," she says, adding, "The most important factors in selecting a vibrator is choosing the frequency and force of vibration."

With approximately 90 percent of its ornamental concrete business deemed "off-the-shelf," Vibco's engineers work with clients to develop solutions, and often base new product development

**Continued on page 48**

on that direct feedback. “We know that we are providing the products that our customers want and need, rather than what we think they might want or need,” says Kleineberg.

Depending on application, a broad price range exists. Vibco’s concrete vibrators, for example, start at approximately \$250 for an individual clamp-on vibrator, and can go up to about \$5,000 for a fully customized system.

“I would strongly encourage anyone interested in purchasing a vibrator to speak with an application expert to make sure that they get the right solution for their particular needs,” says Kleineberg.

### Pigments and Esthetics

After the product is completed, however, there still remains the decision on how to finish the piece. And since every consumer has respective tastes, options run the gamut. When it comes to painting and finishing, Preuss says there are no best practices.

“There are numerous ways of finishing or not finishing a product. Some people like the look of natural concrete and simply apply a sealer to it. Others want detail and have the concrete painted that way,” he continues. “Others like an antique look and finish it accordingly in a color that is acceptable. Some want concrete in colors, so a dye is added to the concrete when it’s poured to keep that color consistent throughout the finished product.”

A leader applicator is Smith Paints Product that produces an environmentally, water-based protective coating specifically developed for concrete applications. Aside from adding dye to the mix, and among popular applications is a heavy viscosity pigmented, high hiding coatings paint applied with airbrush, production gun and traditional hand brush methods. Another option are Stains which are pigmented and high hiding coatings but have a lower

viscosity than paint and can be applied with an airbrush, production gun as well as traditional brush methods.

Kirtley said that in recent years he has seen a trend toward dry brushing and acid-staining. When asked the reason, he responded: you get a great finished product and it is a lot less time consuming. However, Preuss points out that “finishing adds cost to any product.”

### The Audience

Despite a questionable economy, the market for this subcategory is vibrant. This is due, in part, to more people paying attention to designs and details. Ornamental concrete productions are not limited to huge manufacturing plants, in some cases, a peak over the neighbors fence might prove interesting. “It can be a hobby for some people and grow into a large business if that person desires,” says Preuss. “It’s limited by how large they want to grow the business.”

When asked which market segment is bigger—retail or commercial—Preuss responded: “I think that is pretty much across the board buying. More commercial items are being made to fit into buildings and also for restoration work,” he noted.

According to Kleineberg, the future of the ornamental concrete industry is encouraging but will depend largely on how committed

producers are to maximizing production while eliminating *muda*. Among her reasoning for its continued success is the ability to command premium pricing for increasingly detailed and sophisticated molds and finished products; and the ability to expand the ornamental concrete market via the use of innovative colors, styles, and textures.

“The competitive environment is putting pressure on ornamental concrete producers to eliminate waste and maximize production,” she says.

### About the Author

*W.B. King is an award-winning journalist with over ten years experience writing for national and international business, technology, lifestyle, and healthcare publications. He has ghostwritten two feature length corporate history books, and operates [www.enewsletterinsights.com](http://www.enewsletterinsights.com), an all encompassing business writing service specializing in e-newsletters. He lives outside New York City with his wife Rita, and their dog, Riley. He can be reached at: [brad@enewsletterinsights.com](mailto:brad@enewsletterinsights.com).*

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