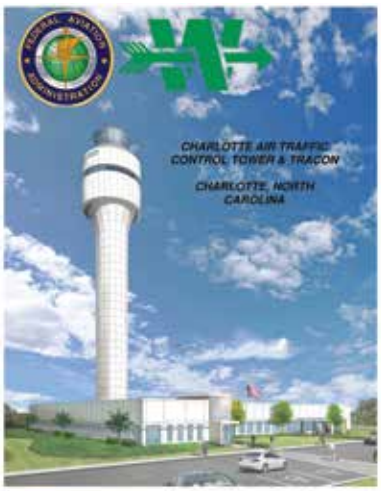
Gate Precast to supply panels for Charlotte control tower

Gate Precast's Oxford, N.C., plant is casting structural and architectural precast concrete for a new 370 ft (110 m) tall air traffic control tower at Charlotte Douglas International Airport in Charlotte, N.C. The tower, which will be the second-tallest control tower in the United States, will provide controllers with better views of air traffic once it is complete.

Ultimately, the Gate plant will produce 457 (70,000 ft^2 [6500 m^2]) load-bearing precast concrete pieces for the tower base and 162 (23,000 ft^2 [2100m^2]) lightweight architectural precast concrete pieces for the controllers' cab and the terminal radar approach control (TRACON) support building. Archer-Western Contractors of Charlotte is the general contractor, and AECOM of Atlanta, Ga., is the engineer/architect.

"Air traffic control tower construction is a highly specialized market, primarily due to its stringent tolerances," says Chris Galde, Gate's director of sales and marketing in Oxford. "There are very detailed connections from panel to panel, and the tolerances for the connections are very tight." The tower's structural components will be made of heavily reinforced 6000 psi (41 MPa) concrete within three sets of custom steel forms. The architectural precast concrete will be made of lightweight concrete with a density of 118 lb/ft^3 (1890 kg/m^3).



Gate Precast will supply both load-bearing and architectural precast concrete for Charlotte Douglas International Airport's new 370 ft (110 m) tall air traffic control tower. It will be one of the tallest free-standing, precast concrete structures ever to be erected by the contractor. Courtesy of Gate Precast.

"Casting the pieces is a time-consuming process due to the nature of the panels, their size and weight," Galde says. "The heaviest panel is about 67,000 lb [300 kN]." Gate expects to begin shipping the structural precast concrete to the site this January. "The tower base will be erected in a series of rings," he says. "Each ring will be comprised of eight pieces and will reach about 10 ft [3 m] tall. The rings will also be tied together with a splice sleeve." During erection, a subcontractor will grout mechanical connectors into the joints at each level. The TRACON building will be constructed simultaneously with the tower.

—Source: Gate Precast

Clark Pacific joins U.S. Resiliency Council

Clark Pacific in West Sacramento, Calif., has partnered with the U.S. Resiliency Council (USRC) as a sustaining silver member.

Its self-righting precast concrete hybrid moment frame system is deemed by leading California structural engineers to be one of the best-performing lateral resistance systems available today.

"Designing for resilience and survivability is one of the first and most important considerations for sustainable building," says Don Clark, Clark Pacific's co-owner and president. "We support the USRC in its collective effort to quantify and communicate the value of resilience to designers, builders, and owners, and ultimately create more resilient communities for us all."

Clark Pacific will work to help the USRC meet its core objectives of providing information to increase market demand for better-performing buildings; developing consensus about ratings by bringing together diverse stakeholders and technical experts; promoting integrity, stability, consistency, and transparency of rating systems; and educating and advocating for safe buildings and a better public understanding of building performance.

For their first collaborative education activity, the USRC and Clark Pacific partnered to host a webinar series, The Case for Resilient Design. The series was aimed at educating engineers, architects, and owners on the value of resilient-based design, how to easily and efficiently predict building performance, and the financial return and why resilience is good for business.

—Source: Clark Pacific

Spancrete partners with Shanghai builder, increases global impact

Spancrete has partnered with a builder in Shanghai, China, to produce modern precast concrete buildings in Shanghai. The company, Shanghai CITI_RAISE Construction Group, is building multilevel, multifamily homes with its new Spancrete precast concrete system.

The precast system includes a Spancrete GT-120 slip former system, which produces hollow-core slabs. Through this partnership, Shanghai CITI_RAISE Construction Group now produces its own precast concrete building components.

Spancrete's technical team custom designed and helped Shanghai CITI_RAISE Construction Group gain approval for the first Spancrete hollow-core residential building in the area.

The precast concrete market in Shanghai was nonexistent until recently because hollow-core was not accepted. In response to Spancrete's effort to help Shanghai CITI_RAISE Construction Group bring precast concrete buildings to the region, the city accepted Spancrete hollow-core and added it to the local code.

Spancrete has partnered with Shanghai CITI_RAISE Construction Group in Shanghai, China, to produce precast concrete multilevel, multifamily homes. Courtesy of Spancrete.

Spancrete senior engineer Terry Chung says, "Shanghai CITI_RAISE Construction Group wanted our expertise in designing and building a modern precast building. Not only did we sell them precast production equipment, but we provided extensive design, operational, and technical support."

Spancrete has been a longtime provider of precast concrete solutions to the China market, with nine machines currently producing, but this is its first Shanghai precasting facility. —Source: Spancrete

Compiled by K. Michelle Burgess (mburgess@pci.org)

Supplier Associates

Dustcontrol Inc.
6720 Amsterdam Way
Wilmington, NC 28405-3777
(910) 395-1808
Primary contact: Scott Dickinson
Email: sdickinson@dustcontrolusa.com

GMA Garnet (USA) Corp.
1800 Hughes Landing Blvd.
The Woodlands, TX 77380-1682
(832) 243-9300
Primary contact: Pete Mitchell
Email: petem@gmaamericas.com

Green Kleen Products Inc.
751 Seventh St.
Glenwood City, WI 54013-8551
(952) 544-0530
Primary contact: Sarah McCarthy
Email: sarah@greenkleenproducts.com

Hunter Douglas Facades Inc. d/b/a NBK North America
40 Tioga Way, Suite 250
Marblehead, MA 01945
(781) 639-2662
Primary contact: Bud Streff
Email: budstreff@nbkusa.com

iQ Power Tools
4635 Wade Ave.
Perris, CA 92571-7494
(888) 274-7744
Primary contact: Sarah Hurtado
Email: sarah.hurtado@iqpowertools.com

ITW
155 Harlem Ave.
Glenview, IL 60025-4075
(847) 724-7500
Primary contact: Tom Southall
Email: tsouthall@itw.com

Midwest Industrial Supply Inc.
1101 Third St. SE
Canton, OH 44707-3230
(330) 456-3121
Primary contact: Lynn Cielec
Email: lynn.cielec@midwestind.com

Nederman LLC
4404 Chesapeake Drive
Charlotte, NC 28216-3413
(855) 765-3066
Primary contact: Robert Williamson
Email: rob.williamson@nederman.com

Preferred Solutions Inc.
7819 Broadview Road
Cleveland, OH 44131-6146
(800) 522-4522
Primary contact: John A. Stahl
Email: john.stahl@stayflex.com

Pullman Ermator
10702 N. 46th St.
Tampa, FL 33617-3480
(855) 736-2869
Primary contact: Christopher Van Veen
Email: cvanveen@ermatorusa.com

Sandler Occupational Medicine Associates
125 Baylis Road
Melville, NY 11747-3844
(631) 756-2204
Primary contact: Nicole Weihs
Email: nweihs@somaonline.com

STS Systems NA
6100 W. Donges Bay Road
Mequon, WI 53092-4435
(262) 236-0045
Primary contact: Brian Chartier
Email: brian.chartier@stssystems.com

Tennant Co.
701 Lilac Drive North
Golden Valley, MN 55422-4611
(763) 540-1294
Primary contact: William Ruhr
Email: bill.ruhr@tennantco.com

Vac-U-Max
69 William St.
Belleville, NJ 07109-3040
(973) 759-4600
Primary contact: David Kennedy
Email: davidkennedy@vac-u-max.net

Supporting Organization

Frey-Fil Corp.
83 West Building, 83 West Ave.
Paltok, Quezon City
1105 Metro Manila
Philippines
+63 (2) 373 9345
Primary contact: Imelda I. Marinas
Email: freyfil@freyfil.com.ph