

Doka Xpress

The Formwork Magazine | October | 2013

Solutions For Achieving Success



Virginia

At more than 250 feet tall, the twin span segmental structure on US Route 460 is Virginia's tallest bridge.

Oregon

New 1,700 foot long cable-stay bridge through City of Portland.

Vancouver

Labor savings of 50 percent with Doka Climbing solution.

Editorial



Dear Customers and Colleagues,

The American Society of Civil Engineer's 2013 Infrastructure report card validates that there is still much work to do. Case in point is our nation's 607,380 bridges. More than 200 million trips are taken daily across deficient bridges in our nation's largest metropolitan regions. In total, one in nine of the bridges is rated as structurally deficient. Although solid waste, drinking water, wastewater, roads and bridges all saw incremental improvements, the cumulative grade of D+ showcases that efficient and creative solutions are needed. In fact, the estimated investment needed by 2020 is \$3.6 trillion.

At Doka, we are doing our part to meet the needs of both infrastructure and commercial owners with fast and safe solutions for challenging projects. From the tallest bridge in Virginia (US-460 Connector), the Willamette River Bridge in Portland, and the high-profile underwater Midtown Tunnel in Norfolk, Virginia, owners and contractors alike are turning to our team of in-house engineers and field experts to design creative formwork solutions. We continue to develop new products that meet the needs of today's construction sites to ensure safe and efficient solutions become the standard. From our traveler product for tunnels to our large-area formwork Top 50 for wall systems on projects of all shapes and sizes, our products are designed to ensure maximum productivity in the field.

We look forward to helping you meet the needs of our new economy.

Andrew Mair

Chief Executive Officer
Doka USA, Ltd. /
Doka Canada, Ltee

Index

High-Performing Solutions for Underwater Tunnel Construction	03
Dam Formwork at the Kentucky Lock Project	10
Preassembly and Efficiency form Virginia's Tallest Bridge	06
Following the Curve	12
Super Climber Cuts Crew Size in Half	16
In Brief	20

Doka News

CONEXPO - CON/AGG 2014 ▶

The newest equipment, technology, and product breakthroughs in construction will be unveiled at CONEXPO - CON/AGG 2014 in Las Vegas. We invite you to visit Doka at Booth 3200, March 4-8. IF IT'S NEW, IT'S HERE, so mark your calendar and save the date.



◀ Public Safety Answering Center II, Bronx, NY

Doka SKE100 plus constructs the City of New York's newest 500,000 sf 911 emergency call center. PSAC II is a stand-alone facility which is anticipated to receive and dispatch over 12 million calls a year throughout the city's emergency services.



Canada preps for TORONTO 2015 Pan Am Games ▶

Construction starts on state-of-the-art indoor velodrome in Milton, ON for TORONTO 2015 Games.





High-Performing Solutions for Underwater Tunnel Construction

To relieve the chronic congestion in and around the existing two-lane Midtown Tunnel in downtown Norfolk, Virginia, rehabilitation is planned along with building a new two-lane immersed tunnel alongside it. The Second Midtown Tunnel is being constructed featuring Doka's Heavy-duty supporting system SL-1.

Together with the existing tunnel, the Second Midtown Tunnel will double traffic capacity and improve travel times. The contractor chose Doka for their experience on a similar project in 2005 on the 1.9-mile-long, South Korean, Busan-Geoje Fixed Link — one of the deepest immersed tunnels in the world at 197'.

A 'deep-diving mission' to get the traffic flowing again

The 0.7-mile-long Second Midtown tunnel will consist of 11 separate segments, each measuring approximately 350' long by 54' wide by 29' high. Each

segment weighs nearly 13 tons and will be precast in a dry dock in Baltimore, Maryland. The finished segments will be transported by barge and escorted approximately 200 miles on the Chesapeake Bay to the immersion site in Norfolk. Here, the tunnel segments will be fixed together underwater and sealed with rubber seals. This special system and the use of watertight concrete make the Second Midtown Tunnel only the second such tunnel in the U.S. not requiring an external steel skin.

Preassembly work on the Doka tunnel formwork traveler was completed at the beginning of 2013, and the

The Facts

Location: Norfolk, Virginia

Products: Heavy-duty supporting system SL-1, large-area formwork Top 50, and custom steel construction for the outside formwork

Contractors: SKW consortium of Skanska, Kiewit & Weeks Marine

Overall project cost: \$2.4 billion USD

Start date and scheduled end date: 2012 – September 2016

The Challenge

To relieve the chronic congestion in and around the existing two-lane Midtown Tunnel.

The Solution

Heavy-duty supporting system - SL-1 - provides a strong, torsion-proof frame for the tunnel formwork. Large-area formwork Top 50, and a custom steel construction for the outside formwork were also used.



The Professional

"The project is running smoothly and the formwork is performing as designed. SKW is in the process of adjusting the formwork operations and procedures to optimize the entire casting process. To date, cycle times have shown a 25 percent improvement and are expected to increase after the next few castings."

Bill Publicover, Senior Account Manager, Doka North America



▲ Tunnel segments each weighing nearly 13 tons are precast in a dry dock near Baltimore, Maryland.



▲ The modular design of the heavy-duty SL-1 components support the heavy loads of each tunnel segment with minimal deflection.

first trial pours were completed in June. The first production pour of Element 1 / Segment 1 (E1 / S1) took place on July 9. The 12-hour, 650-cubic-yard pour went smoothly and was problem-free. After three days, the formwork was stripped and rolled ahead on rail into position for the next pour.

Because of the high concrete temperatures that occur during the curing process, as well as high ambient temperatures of the hot and humid summer months (96-degrees-F), SKW decided to add liquid nitrogen to the concrete mix to lower the concrete temperature. Their intent was to delay the cure time to control the concrete shrinkage and minimize the possibility of cracking in the watertight ITT elements. In addition, SKW installed a system of heating and cooling hoses throughout the invert, walls and roof of each segment. A glycol coolant solution is being pumped through the hoses during the curing process to help control the concrete temperatures.

Work at the tunnel site under the Elizabeth River, which started in February 2013, is expected to conti-

The modular design of Doka's SL-1 tunnel formwork solution ensures swift, economical construction progress regardless of the shape and load. ▶

nue until April 2014. The riverbed around the tunnel will be dredged into shape so that the segments can be lowered into place at a depth of almost 200 feet. The project is slated for completion in September 2016.

Flexible, high-performing formwork solution

Designed for high loads, the Heavy-duty supporting system SL-1 provides a strong, torsion-proof frame for the tunnel formwork. This modularly designed system ensures swift, economical construction progress regardless of the shape and load. The extra-stable formwork allows only minimal deflection, and can easily be re-adjusted in any direction using fine adjustment screws. The fully rentable tunnel formwork traveler achieves short setup times with the preassembly of the formwork and the Heavy-duty SL-1 components, as well as short repositioning times due to the all-hydraulic rail guidance. With the aid of winches and hand levers, it is possible for the heavy equipment being used for the Second Midtown Tunnel to be repositioned by muscle power alone. The formwork traveler can be safely moved even on steep longitudinal and transverse gradients. The integrated working platforms and ladderways provide extra safety during the forming operations.

Large surfaces, great result

The Heavy-duty supporting system SL-1 is fully compatible with large-area formwork Top 50. This flexible system accommodates any architectural requirement and saves crane time because of its large gang forms. The element joints are designed to ensure a perfect form joint pattern. On the Second Midtown Tunnel, the high-load components allow the use of a hydrostatic design for the center wall of the tunnel segments. This makes rapid pouring possible, with no need to worry about the rate of placing concrete.

"The challenge facing us on the Second Midtown Tunnel is to achieve tight tolerances and ultra-high precision. This means that we have to communicate



and work together very closely with our customer," said Andreas Zitzenbacher of Doka's Business Development Competence Center. Regular face-to-face meetings as well as telephone and video conferences are held to ensure that the project is carried out in the most effective manner.

Proven Formwork Solution

The Heavy-duty supporting system SL-1 has already performed convincingly under difficult geography for Switzerland's 35-mile-long Gotthard Base Tunnel — the longest railway tunnel in the world. Its short cycle times, and ease of formwork setup and removal, were key factors for the client. This Heavy-duty supporting system was also fielded on the large-scale upgrade and extension of the M4 metro line in the Hungarian capital Budapest.

The Professional

SKW is working as a team to effectively deliver this complex project.

Justin Taylor, Superintendent, SKW



The Facts

Location: Breaks, Virginia

Products: 35,500 square feet of Doka large-area formwork Top 50, Staxo100 shoring

General Contractor: Bizzack Construction, LLC

Concrete Contractor: CJ Mahan Construction Company

Overall project cost: \$113 Million

Start date and scheduled end of date: Spring 2011 – August 2014

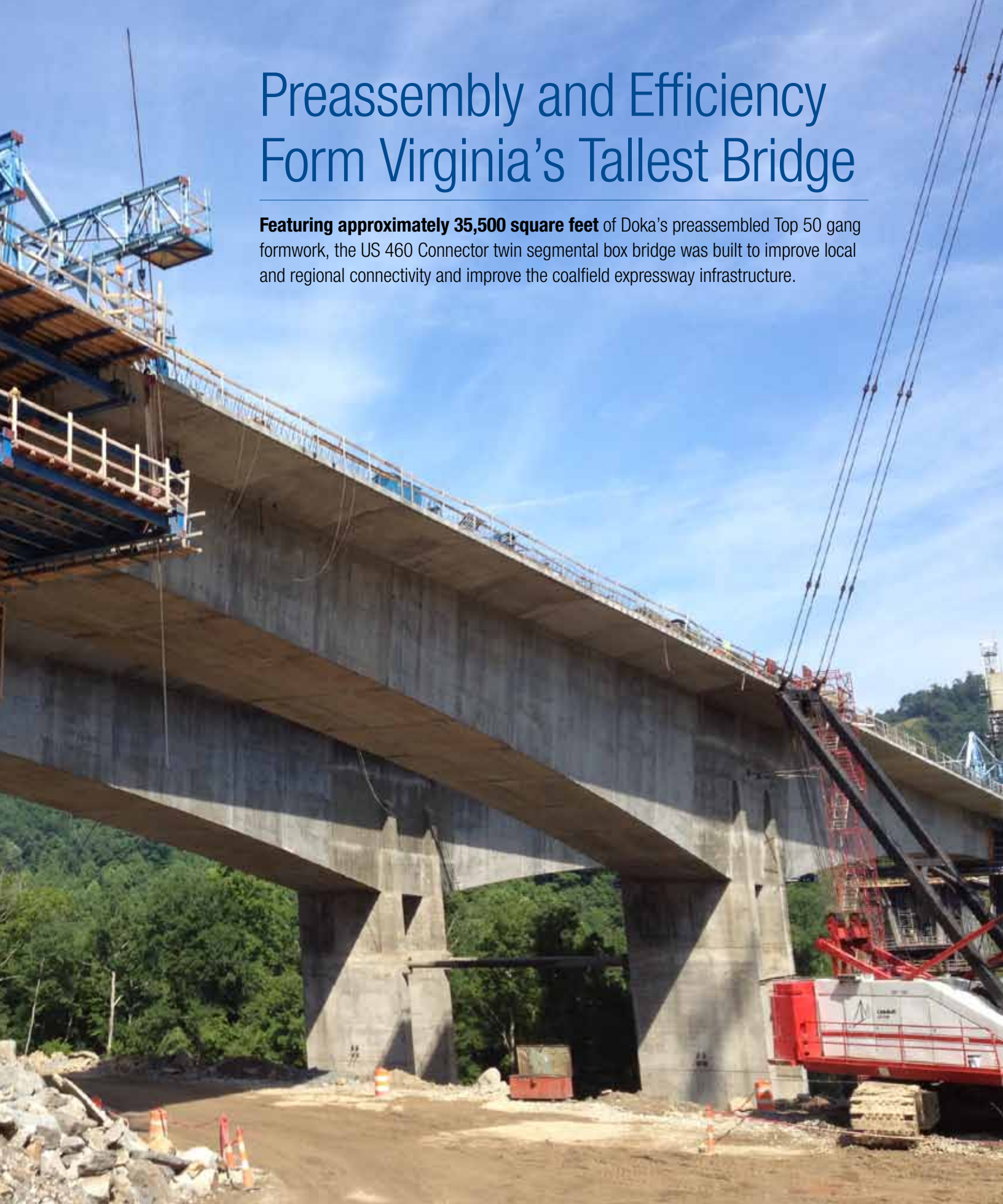


▲ Caption goes here

Large -Area formwork Top 50 is a modular gang form system constructed from standard parts that can be assembled in any configuration for a wide range of applications. Shape, size, tie pattern, and plywood can be adapted to suit your jobsite requirements.

Preassembly and Efficiency Form Virginia's Tallest Bridge

Featuring approximately **35,500 square feet** of Doka's preassembled Top 50 gang formwork, the US 460 Connector twin segmental box bridge was built to improve local and regional connectivity and improve the coalfield expressway infrastructure.





▲ Form travelers by VSL support Doka's versatile Top 50 formwork for variable depth cast-in-place segments.

Located in Breaks, Virginia, the new connector is the tallest bridge in the state. The owner wanted an innovative solution for the project. As such, Doka was hired by CJ Mahan Construction Company to meet the challenge.

Design

The project design called for six pier tables to support the eastbound and westbound lanes. At a length of 50'-0" long, 43'-4" wide and 30'-4" tall each, the pier tables were designed with three horizontal construction joints. The first lift consisted of an initial base slab with 8'-0" tall walls and the second lift required elevated support and a drive deck, with inverted wall pours required for lift three. Doka designed the formwork for the first lift with an overhead gantry-style system to hang the formwork, allowing the base and slab walls to be placed in the same pour. The second lift was formed and supported conventionally, while the third lift drive deck was supported by Doka's load bearing towers Staxo 100.

With an overall bridge length of 1,733', the 250' tall twin segmental box bridge had varying depths from 31'-0" to 12'-6" and each span had 13 segments cast 16'-6" long. To construct the spans between each pier table, Doka designed and supplied adjustable formwork gangs that were used in conjunction with a form traveler system, designed and supplied by VSL.

Preassembly

All Top 50 gang formwork used to form the pier tables and the traveler forms on the balanced cantilever concrete bridge was preassembled by Doka at their pre-assembly facility in Channahon, Illinois. Nearly 20,036 square feet of preassembled Top 50 gang formwork was used to build six sets for Pier Table lifts 1, 2 and 3, and 15,340 square feet with custom stiffbacks and components were used to build four sets of traveler forms for the VSL form traveler.

Doka's experienced staff conducted an equipment audit on all custom equipment on site to guarantee accuracy for the customer. This prevented any setbacks for the contractor and allowed the traveler to be assembled efficiently, thus saving time on the job. Further, Doka worked with the customer to determine where the walkway platforms needed to be designed ensuring safe access for workers on the jobsite.

The US 460 Connector Bridge project helped stimulate the economy for the local community. Further, improvements to the coalfield expressway infrastructure system were accomplished with the help of Doka's formwork solutions.

Simultaneous construction of pier tables and pier segments are underway on a 250' tall bridge in the remote mountains of extreme southwest Virginia where population is roughly 50 people per square mile.



The Facts

Location: Grand Rivers, Kentucky

Products: Framed formwork Framax Xlife, D22 Dam Formwork, Supporting Construction Frames, Dokaflex and 10K Shoring Systems

General Contractor: Thalle Construction Company

Overall project cost: \$63 Million

Project Start Date and Scheduled End Date: 2010, 50 percent complete

The Challenge

Unique features were required on this project, along with the majority of concrete being classified as mass concrete. In addition, the monoliths had to be carefully sequenced in order to meet the client's needs.



▲ Construction of large mass concrete monoliths takes place for a new upstream lock addition on the Tennessee River.

Dam Formwork at the Kentucky Lock Project

The Kentucky Lock is located in Grand Rivers, Kentucky on the Tennessee River. Based on feasibility studies completed in 1992, a recommendation was put forward for the construction of a new lock adjacent and landward of the existing lock in order to improve barge traffic. Overseen by the Nashville District US Army Corps of Engineers, construction began in 1998 for the sitework and bridge construction. In 2010, construction of the upstream monoliths for the lock was awarded to Thalle Construction Company, Inc.

Thalle Construction, being a long standing customer and owner of Doka's Framax Forming System, sought the experience of Doka to provide concepts and drawings for the multiple monolith concrete placements. The contractor and Doka's Atlanta, Georgia branch worked together to develop formwork systems that provided them with solutions tailored to the jobsite requirements. The solutions that were agreed upon included one-sided climbing formwork in the form of Doka's D-22 Dam Formwork and Doka's Supporting Construction Frames, as well as Dokaflex and 10K Shoring Systems to support the large 15'-thick culvert slabs. In addition, a large quantity of Framax wall formwork was used in combination with wood forms built by Thalle Construction.

One of the major obstacles encountered by the project team was that a majority of the concrete placements were classified as mass concrete. Mass concrete placement is defined as "any volume of concrete large enough to require that measures be taken to cope with generation of heat from hydration of the cement and attendant volume change, minimize cracking." In this instance, Thalle was placing low slump concrete at an average height of 4 to 5 feet in depth which required formwork to accommodate this type of concrete. Doka addressed this issue by providing its D22 dam formwork system. Doka's D22 is designed for forming heights up to 4.0m in height (approximately 12 feet) and is tieless. This system, both in its starter block and climbing system form, allowed Thalle to place con-

The Solution

The solution was to use a combination of one-sided climbing formwork in the form of Doka's D-22 Dam Formwork and Doka's Supporting Construction Frames, Dokaflex and 10K Shoring Systems to support the large 15' thick culvert slabs. In addition, a large quantity of Framax wall formwork was used in combination with wood forms built by Thalle Construction.

"Based on the assistance provided on previous projects and the good working relationship shared between both companies, Doka was invited to team up with Thalle Construction to provide formwork equipment and relevant engineering support for the Kentucky Lock and Dam project. This has been and continues to be a challenging project for both parties. The D22 Dam formwork system has proven to be a versatile solution on this project on this project in the construction of the concrete monoliths."

PK Nardhani, Thalle Construction Co., Inc.



crete for two successive lifts before having to raise the system for its next monolith placement, thus making it cost effective during the overall course of the project.

Some unique structural features had to be accommodated as part of the forming systems design. Multiple embeds and anchor bolts protruded past the face of the finished concrete and caused interference with the face of the formwork. This involved real-time conversations between Doka's design team and the contractor in order to ensure that these parameters were met to the client's satisfaction prior to placement of concrete. It often included using a combination of Doka formwork and formwork built on site to accommodate the varying situations.

The project had to be carefully sequenced since formwork for one side-by-side monolith could not be removed until the other monolith was complete. All monoliths required individual drawings for each lift that

were required to be submitted and approved prior to commencing construction. Working together, Thalle Construction and Doka have been able to adapt to the changing environment of this project.

Because of the nature and location of some of the concrete placements, Doka had to be creative in its form design in order to respond to the contractor's needs on this project. Some areas of this project restricted the contractor from using a new form system, and as a result, a more traditional system had to be incorporated into the design in order to surpass some of the obstacles the contractor was encountering on a regular basis.

The project is currently valued at approximately \$63 million and is approximately 50 percent complete.

▲ Thalle Construction is working with the US Army Corps of Engineers on a large, long-term project that will double the capacity of the locks that allow barge and boat traffic around the Kentucky Dam.

The Facts

Jobsite: Portland-Milwaukie Light Rail Bridge

Location: Portland, Oregon

Square footage: 1,720-foot (525 meter) bridge

General contractor: Kiewit Infrastructure Group

Start date and scheduled end date of work: June 2011 – fall 2015

Products Used: Steel Girder, Doka large-area formwork Top 50, MF240 Climbing system

The Challenge

To design and supply a formwork solution that would accommodate the diamond shaped pylons constantly changing geometry



The Solution

A combination of American and European technology was found to be the best solution. Doka's Steel Girder form was used to construct the lower "V" shape of the pylon in 30' lifts and Top 50 was used in conjunction with the Doka MF240 climbing platform system to safely construct the changing geometry of the upper lifts.

Following the Curve

The Portland-Milwaukie Light Rail Bridge, located in Portland, Oregon, is part of a light rail project that will extend 7.3 miles and connect the campus of Portland State University to north Clackamas County, south of the city.







▲ The Portland-Milwaukie Light Rail Bridge will be distinctive in the United States, carrying light rail trains, buses, cyclists and pedestrians and, in the future, streetcars.

The area in the immediate vicinity of the rail line is expected to add one million new residents by 2030, and the new infrastructure is a critical component in managing that urban growth. The 1,720-foot bridge spans the Willamette River and will serve light rail trains, pedestrians and cyclists. It is being built by the Kiewit Infrastructure Group.

The structure is a four-pier cable-stayed bridge, with two piers on land and two in the water at the towers. Cables are attached to four diamond-shaped pylons, each standing 180' tall. The pylons reduce in size with each lift, being 16' wide at their footings and 9'-2" at their tops, so formwork solutions utilized on the project had to be adaptable with each lift. Kiewit worked with Doka to engineer these solutions; in all, Doka provided

1,880 square feet of Steel Girder formwork and 1,420 square feet of Top 50 formwork.

For the lower lifts, Doka provided Steel Girder combined with custom fabricated steel panels. Custom steel "V" panels were fabricated and used in combination with standard Girder for the tapering 30' tall front face of the pylon. On the second lift, Doka's MF240 climbing platforms were introduced for support and to provide access to the Girder formwork on this next 30' tall lift. These same MF240 platforms were then reused on the subsequent Top 50 upper lifts.

For the upper lifts, Top 50 formwork was used because of the changing geometry of the pylons at each lift. Doka provided drawings that detailed where and when



▲ Doka's Steel Girder formwork used in conjunction with MF240 climbing platforms to construct the second 30' tall lift of each pylon.

to cut the gangs to accommodate the constantly changing shape. The amount of rebar used in the concrete resulted in a decision to use tieless Top 50 formwork as this reduced the amount of labor required to patch tie holes and prevented any interference between the ties and rebar. Using a C15 Vertical Waler as a strong-back enabled the pours to be completely tieless.

The pylons also required a slight angle change at elevation 141'-6". Various formwork options were explored using MF240, with the final solution being full platforms that could be cut back each lift as the geometry changed. Doka's MF240 climbing formwork was used as an access platform. This crane-lifted formwork permits controlled, regular working cycles on all tall structures. It is extremely easy to set up, and

can be tailored to meet a wide range of different requirements. This highly flexible option provided optimum adaptation with only a few individual components for the project. The bridge is projected to open in the of fall 2015.

The Professional



"From 30-foot tall lifts with steel and custom formwork on the lower levels to tieless Top 50 with constantly varying shapes on the upper levels, Doka faced many challenges on this project. We were able to combine a European technology for the upper lifts with American methodology for the lower lifts. In this way, Doka was able to offer a complete package that could not be surpassed."

Chris Lewis
Engineering Manager,
Doka

The Facts

Jobsite: Vancouver, B.C., Canada

Location: 1021 West Hastings Street, Vancouver, B.C., Canada

Square footage: 2,905 square feet of Top 50 for core walls

General contractor: Ledcor Group

Concrete Contractor: R-Four Contracting, Ltd.

Start date and scheduled end date of work: April 2013 – February 2014.

Products Used: Doka large-area formwork Top 50, SCP Super Climber, Framax Xlife

The Challenge

With a tight construction site, the customer needed a solution to optimize the available space.



The Solution

Doka's preassembled Super Climber and Top 50 formwork saved space on the construction site and also allowed for quicker assembly once it was received on site, with minimal impact on the overall schedule. The efficiency of this process also allowed R-Four to reduce crew size and obtain a savings in labor cost.



Super Climber Cuts Crew Size in Half

The Professional



"Our own system would have required 8 men and with the Doka system we are only using 4 men total to move the entire core. We mounted the placing boom on top of the core to reduce lifts and manpower, which has worked well to date."

Rick Spence, Owner
R-Four Contracting, Ltd.

Built on the last available site in the harbor district of Vancouver's traditional business core, the MNP Tower will offer new opportunities for businesses to lease commercial real estate in the heart of the city's financial district.

Located at 1021 West Hastings, the tower not only enjoys views of the North Shore mountains, but is situated in the immediate vicinity of the iconic Canada Place (built for the 1986 World's Fair Expo) and the Vancouver Convention Center (built for the 2010 Winter Games).

The tower will stand 37 stories above street level, and its tight urban site allowed for only a minimal construction zone. It was important, therefore, that concrete contractor R-Four Contracting Ltd. find ways to optimize its limited space. R-Four chose Doka to provide 2,905 square feet of Top 50 large-area form-



▲ R-Four Contracting is utilizing the Super Climber on this project to improve their construction process. The Super Climber not only cycles quickly, but can also support and climb the industries largest placing boom at the push of a button.

work for the tower's core walls, as well as the Super Climber for the core system. Both the Super Climber and Top 50 were prebuilt off site and then shipped to the jobsite. This preassembly saved space on the construction site and also allowed for quicker assembly once the formwork was received on site, so it had minimal impact on the overall schedule. The efficiency of this process also allowed R-Four to reduce crew size and obtain a savings in labor cost.

The Super Climber allowed the core to be cycled independent of the site tower crane and incorporated a concrete placing boom. This translated into space savings and scheduling efficiency and also aided in



▲ Framax Xlife column forms are designed for high pour pressure rates up to 1,880 psf.



the pouring process. As the SCP runs extremely quiet, cycling of the core could begin early in the morning without noise disturbance to the surrounding neighborhood.

The use of Top 50 formwork resulted in a fair-faced concrete finish. The fact that no further finish work needed to be done after the formwork was removed reduced R-Four's labor costs and provided a high quality finished product to the client. Doka products also adhered to the high safety standards which R-Four enforces on the jobsite.

"Doka's Super Climber has allowed us to achieve the same productivity and schedule as planned while reducing our typical core crew size by half. This has greatly reduced our overall labor costs," says Steve Pickrell, R-Four Site Superintendent.

The project is scheduled for completion in February 2014.

◀ The versatile design of Framax Xlife universal panels can form column cross sections up to 42" x 42", in 2" increments.



▲ Super Climber SCP in place for its first use in Vancouver, Canada.

The Doka logo is displayed in a bold, blue, lowercase sans-serif font.

The Formwork Experts.

Capability in energy

Solutions for achieving success

 [youtube.com/DokaNorthAmerica](https://www.youtube.com/DokaNorthAmerica)  [facebook.com/DokaNorthAmerica](https://www.facebook.com/DokaNorthAmerica)  twitter.com/Doka_USA

USA | T 877 365 2872 | usa@doka.com

Canada | T 866 923 6629 | canada@doka.com | www.doka.com



In Brief

News, Dates, Media, Awards

See us at the 25th Annual American Segmental Bridge Institute (ASBI) Convention Oct. 28-29 in Portland, Oregon.



Harlem Shake at 432 Park Ave. <http://bit.ly/1d8DL43>



Doka's new Davie, Florida facility opens in October. The target of this new facility is to improve service and support the growth of concrete contractors in the State of Florida. In order to meet our customers' needs, standard Doka equipment is being stocked for ready to use availability. Should you have a need, please contact 1-888-618-4700.

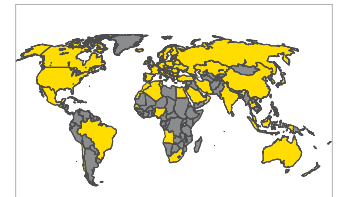
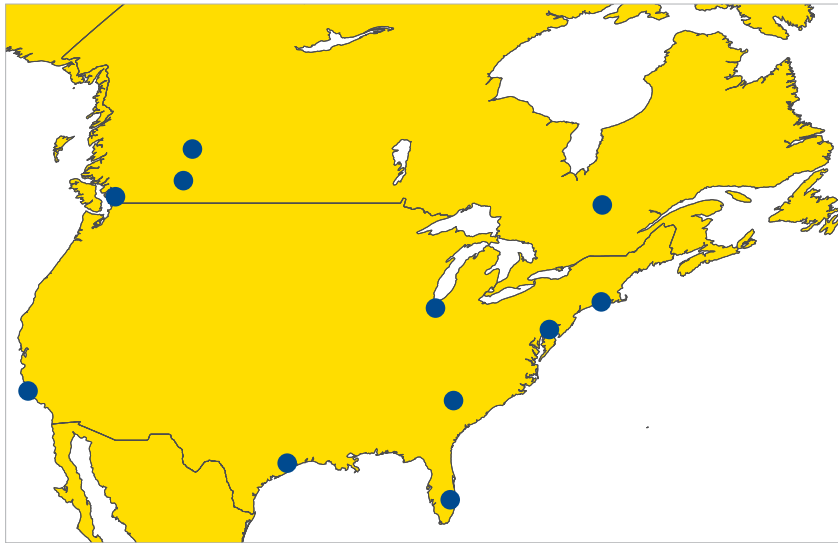


USA Headquarters

Doka USA Ltd.
214 Gates Road
Little Ferry, NJ 07643
T (201) 329-7839
T (877) DOKA-USA
F (201) 641-6254
usa@doka.com
www.dokausa.com

Canada Headquarters

Doka Canada Ltd./Ltee
5404 - 36th Street S.E.
Calgary, Alberta T2C 1P1
Canada
T (403) 243-6629
F (403) 243-6787
canada@doka.com
www.doka.ca



▲ Doka offices worldwide.

The Doka sales network with more than 160 sales and logistics centers in more than 70 countries.

 www.twitter.com/doka_com

 www.facebook.com/DokaNorthAmerica

 www.youtube.com/DokaNorthAmerica

Imprint: "Doka Xpress" is a publication of Doka USA, Ltd.

Publisher: Doka USA, 214 Gates Road, Little Ferry, NJ 07643. **Editorial:** Diana Sanicki, Marketing, Doka USA, Ltd. **Layout Design:** Geri Bearden Design.

In some cases the site photos show the situation during formwork assembly and are therefore not always complete from the point of view of safety.

New York (Northeast Area)

Doka USA, Ltd.
208 Gates Road
Little Ferry, NJ 07643
Tel. (877) DOKA-USA

Chicago (Midwest Area)

Doka USA, Ltd.
22901 West Winchester Drive
Channahon, IL 60410
Tel. (815) 521-3700

Atlanta (Southeast Area)

Doka USA, Ltd.
105A Boulderbrook Circle
Lawrenceville, GA 30045
Tel. (888) 618-4700

Baltimore (Mid-Atlantic Area)

Doka USA, Ltd.
3665 Benson Avenue
Baltimore, MD 21227
Tel. (410) 368-8390

Los Angeles (Far West Area)

Doka USA, Ltd.
6901 Central Avenue
Riverside, CA 92504
Tel. (951) 509-0023

Houston (Southwest Area)

Doka USA, Ltd.
10822 Mahaffey Road
Tomball, TX 77375
Tel. (281) 516-2211

Winnipeg (Manitoba)

Doka Canada Ltd./Ltee
Tel. (204) 930-6307

Toronto (Eastern Canada)

Doka Canada Ltd./Ltee
12673 Coleraine Drive
Bolton, Ontario L73 3B5
Canada
Tel. (905) 951-0225

Edmonton (Northern Alberta)

Doka Canada Ltd./Ltee
Tel. (780) 974-3913

Vancouver (British Columbia)

Doka Canada Ltd./Ltee
Tel. (778) 991-9405