Schlüsselbauer Technology GmbH & Co KG, 4673 Gaspoltshofen, Österreich

Baltic States: High Quality Concrete Components for Civil Engineering

While the concrete component industry for civil engineering in Central Europe is stagnating or has already declined, the Baltic States have recently upgraded machines or invested in new and modern production plants for their concrete components. Compared with other European countries, the quality of the infrastructural engineering products implemented in Latvia and Lithuania will soon put them into a leading position. The recently delivered Schlüsselbauer production plants will be used for the production of manholes, manhole cones, adjustment rings, covers and cover plates. The different regional and customer specifications have been achieved with nominal dimensions from 700 mm which is the standard manhole dimension for Lithuania for example – up to 2.500 mm. A common factor shared between all of the manufacturers and their chosen machinery is the challenge for better product quality and a variable utilization of the production technique.

The enormous economical growth in the civil engineering sector in the Baltic States has clearly been shown in a recent European survey. The sales of concrete pipes and manhole products rose by 83.4 % between the years 2003 and 2006 [1]. The stability of this remarkable growth within the construction industry in the Baltic States will further be strengthened through projects such as the planned infrastructure development in Latvia's metropolis Riga. An estimated 6 billion Euro is expected to be invested alone in Riga, the capital city of this country with a population of 2.3 Million, within the next 10 years [2].

Recently multiple installations of two different machine types from the company Schlüsselbauer have taken place in the Baltic States. Many manufacturers of manholes, manhole bases and manhole cones have chosen the machine type Magic. This machine, which combines very high flexibi-



The civil engineering industry in the Baltic States has experienced a huge leap regarding the quality of its concrete elements within the last 10 years.

Technology for people www.sbm.at



SCHLUSSELBAUER Normanhole components and special parts









Transport of a manhole out of the Magic production plant at the concrete works Marijampolés Gelzbetonis.



Modern manhole components for use in civil engineering in Lithuania -This photo shows manhole cones and manhole rings at the company Kauno Gelzbetonis.

lity with regards to the products being produced together with the flexibility of the every day production on the plant, has been in worldwide use for many years. The mould quick change system on this machine makes it possible for the operator to change very quickly to the production of different product dimensions or product types. The range goes up to a product diameter of 2.700 mm and a product weight of 3.000 kg. The product spectrum also ranges from simple manholes which are pre-holed for the later use of step rungs to large format cones with centric or eccentric entrances. Of course, if desired, the steps or step rungs can be directly vibrated in. The transport of the products to the curing area as well as the product handling is carried out by the Magic machine operator by use of an electric cart. At the moment in the Baltic States the single production system has been adopted, however the Magic

Program is also ideal for the production of up to six products - depending on the component dimensions - per work cycle. In addition to the already mentioned manhole components the Magic is also the ideal solution for pipes, link elements, roadside channel components and palisades. Depending on the products that are to be produced a progressive and automatic production is possible on this production

The Ringmaster production plant from Schlüsselbauer is another popular machine type that has been adopted by the Baltic States. This comparatively compact machine (erected without a foundation) is used for the production of concrete components with an outer diameter of maximum 1.100 mm. Typically it is used for the production of adjustment rings, covers and cover plates. In Lithuania the required product range

includes even and interlocking grade rings in different building heights, manhole rings DN700, building height 250 mm with rebated joints as well as cover plates.

Furthermore, circular and angular products up to a building height of 300 mm and a product weight of 250 kg can be produced quickly and with minimum use of personnel on this machine. The Ringmaster can also be used both as a Stand Alone Version and as part of a fully automatic production concept. According to customer requirements different automation variations are also possible. One Ringmaster installation in Lithuania is, for example, equipped with an automatic stacking system which carefully removes the finished product from the machine straight after production and places it in the programmed curing position. This has the advantage that the handling and curing of these products are carried

Return on Investment! (PERFECT C)



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The industrial production system for manhole bases:

Individual | Monolithic In one pour Available within 24 hours!



out within a small, economical space without any extra work for the machine operator. A one man economical production is possible on all Ringmaster installations for production with or without pallets.

Sources

- [1] http://epp.eurostat.ec.europa.eu
- [2] https://www.bfai.de

FURTHER INFORMATION

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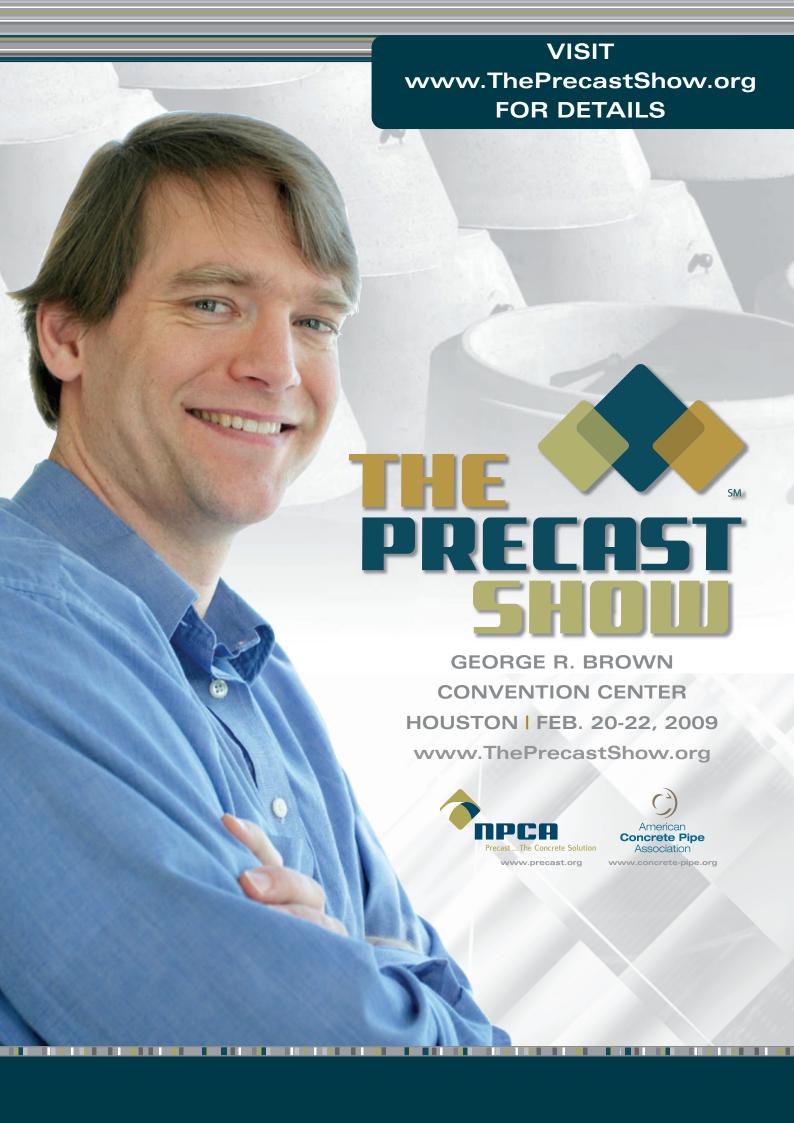
Production of manhole rings with different dimensions at the concrete works Kauno Gelzbetonis and Vilniaus Gelzbetoninis Konstrukcijs Gamykla Nr. 3.



Adjustment ring with rebated joint DN 700 from the Ringmaster production at the company JSC Gelgaudiskio Gelzbetonis



Production and handling of covers by use of the Ringmaster automatic stacking system.



THE INDUSTRY'S BIG, NEW EVENT IS SET TO LAUNCH IN HOUSTON

The name says it all. The Precast Show, set to debut in Houston Feb. 20-22, 2009, is all about precast concrete and everything it takes to produce the world's most versatile building material, train employees and run a successful business.

The Precast Show is an equipment and services trade show designed by precasters and suppliers, and it puts the focus squarely on manufacturing, safety, technical training and especially the precast producers. The Precast Show was designed from scratch by the experts – the exhibitors and precasters who will be doing business on the trade show floor.



REGISTER NOW!

Exciting speakers, plentiful meal functions, fun receptions and parties, adventurous tours, networking with peers, and the bayou city of Houston await you at The Precast Show. Register online at www.ThePrecastShow.org. For questions and other registration information, call The Precast Show at (866) 808-1028.

The "Early Bird" registration

GO GREEN! REGISTER ONLINE

deadline is Jan. 9, 2009, so

reaister today!

Save time, save paper and get the latest details about The Precast Show when you register online at: www.ThePrecastShow.org.
Online registration will open Oct. 15, 2008. For questions and other registration information, call The Precast Show at (866) 808-1028.

Our "Early Bird" registration will save you money, so register before Jan. 9, 2009, and take advantage of discount pricing.

FIVE REASONS YOU NEED TO BE THERE

EQUIPMENT & MORE

The only trade show built just for the precast concrete industry, The Precast Show will include the industry's most important suppliers featuring the equipment and services vital to today's complex plant operations. Keep up to date and plan for the future by getting up close and personal with the latest technology.

TECHNICAL TRAINING

The debut of The Precast Show includes the launch of Precast University, which offers a clear career path for precasters who want to continue learning and advancing in their jobs.

NETWORKING

Precasters say that one of the top reasons they plan to attend The Precast Show is for the opportunity to network with other producers and meet personally with suppliers who can answer their questions, help solve problems and suggest new ways to boost the bottom line.

SPECIAL EVENTS

Awards programs, plant tours and partner events are just the start of the special events planned for Houston. Don't miss the biggest event in the industry – the Salute to Excellence, featuring a special performance by Grammy Award-winning recording artist LeAnn Rimes.

EVERYONE WILL BE THERE

If you're in the precast concrete industry, you need to attend The Precast Show! It's the one event each year where the entire industry meets to see the latest equipment, get technical training from the experts and celebrate the most creative and innovative companies in the industry.

IMPORTANT DATES

TRADE SHOW: FEB. 20-22, 2009

SALUTE TO EXCELLENCE, FEATURING

LEANN RIMES: FEB. 21, 2009

EARLY BIRD DISCOUNT ENDS: JAN. 9, 2009

SPECIAL EVENTS AND ACTIVITIES

ACPA Plant Tours (Feb. 17)

NPCA Educational Foundation Scholarship Golf Tournament (Feb. 18)

NPCA Plant Tours (Feb. 19)

ACPA Machine Clinics (Feb. 19)

Houston: The Bayou City Tour (Feb. 19)

Pinnacle Awards Luncheon (Feb. 20)

Old Town Spring Partner Tour (Feb. 20)

Salute to Excellence, Featuring LeAnn Rimes (Feb. 21)

Bayou Bend: Collection and Gardens Tour (Feb. 22)

EDUCATIONAL COURSES

ACPA Production Short Course School, featuring Q-Cast, Production, Safety, Quality (Feb. 18-20)

PRECAST UNIVERSITY

(Multi-day commitment)

PQS Level I – Production and Quality School Level I (Feb. 19-22)

PQS Spanish – Production and Quality School in Spanish (Feb 19-22)

PQS II QA/QC – Production and Quality School Level II QA-QC (Feb. 20-22)

PQS III Leadership – Production and Quality School Level III Production Leadership (Feb. 20-22)

PRODUCTION AND SAFETY TRACK

Precast 101: Basic Concrete

Confined Space Program Essentials

What's Wrong With This Picture?

Respiratory Protection Needs

Lifting Precast Concrete Products

Reinforcement

Educating the New Employee on Precast Safety

ADVANCED TECHNICAL TRACK

Flowable Concrete on Steroids

Mix Design Seminar

Accelerated Strength Gain

Preventive Maintenance for Today's Cranes and Mixers

Concrete Testing

QUALITY

Precast 102: Finished Product Handling

Precast 103: Concrete Repair

Precast 104: Quality Control

Concrete Consolidation

MANAGEMENT AND LEADERSHIP

Effective Internal Audits

Leadership Tips: Lessons for Creating a Successful Business How to Design a World-class Presentation in 15 Minutes

Create Compelling PowerPoint Presentations

Managing Time Wisely

FINANCE

Construction Contracts: How to Protect Your Company

OSHA Inspections and Your Bottom Line

Using NPCA Industry Benchmarks to Plan for Profits

Keys to Financial Success

Insurance: Is Your Business Really Protected?

SUSTAINABILITY

Recycled Concrete

LEED 101: Introduction to LEED

Implementing Sustainable Strategies

Challenges of Implementing Ultra High-Performance Concrete Products

High-Performance Green Building Design

INDUSTRY LEADERSHIP

Intro to Precast for Associate Members

What's in the Future for Your Precast Septic Tank Business?

Architecture and Precast Amazing Possibilities; Precast and Veneer Discovering New Possibilities

Intro to Precast Product Opportunities in Stormwater Management

HEADLINER ENTERTAINMENT

The Salute to Excellence, Featuring LeAnn Rimes

What's a Texas-sized event without some down home music? The Precast Show proudly presents a special performance from Grammy Award-winning recording artist and country music star LeAnn Rimes to close out our signature event, the Salute to Excellence.

A performer since the age of 5, LeAnn became a national recording star at age 13, when her recording of the song "Blue" stormed the country music airwaves. And the rest is history. She has won two Grammy Awards, including the first Best New Artist accolade ever won by a country artist. She has sold more than 37 million records, won an American Music Award, three Academy of Country Music honors and 12 Billboard Awards.

LeAnn followed up "Blue" with numerous hit singles, among them "One Way Ticket,"
"I Need You," "Nothin' 'Bout Love Makes
Sense," "Probably Wouldn't Be This Way,"
"Can't Fight The Moonlight" – a No. 1 song in
11 countries – and "How Do I Live," which
was the longest running single ever on the
Billboard Hot 100, spending a record-setting
69 weeks on the chart.

In an exclusive performance for attendees of The Precast Show, LeAnn and her red-hot band will show you why she is one of the most exciting artists on the country music scene today.





HOUSTON - IT'S BIG, IT'S MODERN, IT'S EXCITING - JUST LIKE OUR SHOW!

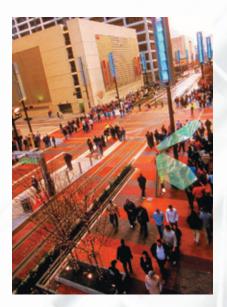
Everything's big in Texas – including Houston, the host city for the debut of The Precast Show. The fourth largest city in the United States with a population of 2.14 million in its metropolitan area, Houston not only has a lot of people, it has some serious square footage. The city sprawls across 634 square miles, large enough to contain the cities of New York, Washington, D.C., Boston, San Francisco, Seattle, Minneapolis and Miami. The 10-county Houston Metropolitan area spans 10,062 square miles, larger than the entire state of Massachusetts.

Ranking as a top city for business travelers and an international business hub, Houston is also one of the South's cultural arts centers. The Bayou City draws an estimated 34 million visitors annually with a modern mix of vibrant nightclubs, professional sports teams, cutting-edge performing arts, and highly acclaimed museums and theme parks. It is the home to the internationally famous NASA and the Johnson Space Center, where visitors can see the space shuttle, learn about the international space station, and sample both the history and future of space exploration.

Houston might be big, but it's not pretentious. It's a place of contrasts, where you'll find big-city amenities combined with small-town friendliness, exotic restaurants

contrasted with spicy Tex-Mex eateries, and a pulsing nightlife offset by some of the top theater venues in the country. It's also a gateway to the "third coast," sitting astride four major bayous just an hour north of the sand and surf of the Gulf of Mexico.

As the host city for The Precast Show, Houston has it all. Visit www.ThePrecastShow.org for a list of links to help you plan your visit.



To receive a conference book listing all the special events, educational courses and other activites connected with The Precast Show, send an e-mail to info@ThePrecastShow.org or call the concierge.

YOUR PRECAST SHOW CONCIERGE

We're all about service at The Precast Show.

If you have any questions about anything related to the show – educational courses, programs, pricing, special events, hotels,

Houston, or anything related to registration – just call our special Precast Show Concierge.

The Precast Show Concierge (866) 808-1028

Outside the United States (317) 571-9500

or visit www.ThePrecastShow.org for the latest show details