

The ESI Newsletter

Elastomer Specialties, Inc.
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Application Spotlight: Rick Bennett Inc. Completes Waterproofing Project at Miami Seaquarium

ESI-Certified contractor Rick Bennett, Inc. recently completed the renovation and waterproofing of the Whale Stadium at the Miami Seaquarium.

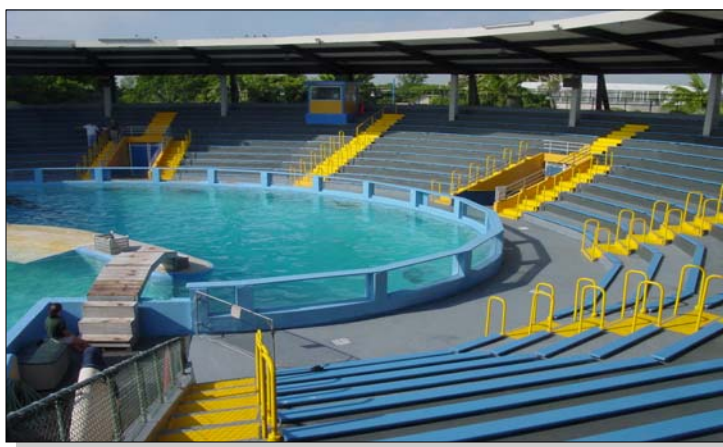
The Whale Stadium was in need of a "facelift" due to 40 years of corrosion on concrete and steel surfaces in a coastal environment. The Whale Stadium project included concrete removal and restoration, water-blasting, priming and application of polyurea. The project also included the preparation and coating of the structural steel roof supports.

The products specified on the job included PoxyPrime H₂O GatorHyde LP, and PolySpar HP. The stairways and walking areas were top coated in safety yellow and safety red PolySpar HP. Rick Bennett, Inc. installed new handrails on the stairways and coated them with PolySpar HP in safety yellow. The concrete was primed with PoxyPrime H₂O and top coated

with GatorHyde LP (Dark Gray) and the lower mezzanine area was top coated with PolySpar HP in a matching dark gray. All walking areas, bleacher seats and stairs received a heavy coat of aggregate to help eliminate slipping hazards.

The killer whale tank also received a coat of PolySpar HP about four feet down from the top to replace the coating that had to be removed while replacing the acrylic plastic viewing windows.

In addition to this project, ESI had previously provided the Miami Seaquarium with a custom formulation for coating their mammal holding tanks.



Whale Stadium At Miami Seaquarium in Miami, Florida

The Miami Seaquarium purchased a Condor low-pressure pump to allow their own maintenance personnel to apply ESI materials on small applications such as walkways and mezzanines.

Congratulations

Rick Bennett, Inc. on
a job well done!!!!

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ESI To Expand Booth for World of Concrete 2003

ESI plans to expand the sales booth (Booth # 10603) at the World of Concrete 2003 in Las Vegas, NV. The dates for this years WOC is February 4-9, 2003.

Several improvements are to be made at this years upcoming

show. For starters, the booth size will be doubled to a 20' x 20'. Additionally, ESI's marketing department has chosen an "end cap" position on the floor which will allow the booth to have three open sides. According to Neil Moon, ESI's Sales and Market-

ing Director "this booth design will allow for maximum customer contact and thru-put".

We invite all of our customers and vendors to attend the WOC 2003 and visit our booth in February.

See you there!!

ESI Opens Division in Australia

In April, 2002 ESI opened a branch of its Polymers Division in Sydney, Australia.

ESI-Australia is managed by Michael Grosman with the help of Kirsten Furniss. Mr. Grosman is responsible for all aspects of the ESI Dealership in Australia. ESI-Australia is actively seeking quality contractors in Australia to become ESI-Certified contractors.

One advantage that ESI is providing in Australia, according to Mr. Grosman, is "most ESI materials and equipment are stocked in Hornsby and are available on short notice".

According to Mr. Grosman, this is a tremendous advantage in Australia due to the fact that "most suppliers of elastomeric spray systems in Australia are providing polyurethane hybrid systems and do not offer the knowledge and training services that ESI can provide utilizing pure polyurea systems".

One potential area of growth currently being pursued by Mr. Grosman is the application of GatorHyde on GM manufactured "Ute" pickups.

Mr. Grosman has been responsible for specifying several successful applications in Australia including



Michael Grosman - ESI Australia

Wastewater applications, Parking Garage Deck applications, and Refinery applications. In addition to these successful applications, ESI is currently busy specifying several large projects that will have significant impact on the polyurea industry.

Chuo Systems Planning Co. is ESI Dealer in Japan

ESI recently entered into a dealership agreement with Chuo Systems Planning Co. of Ishikawa, Japan.

"This dealership agreement represents our first dealer in the pacific rim and we could not be more excited" according to Tripp Ishmael, ESI Polymers Technical Director and Division Manager. "We have been actively seeking representation in the Japanese market and we could not be more pleased with our new partner".

In addition to sales of ESI materials and

equipment, Chuo Systems Planning has been through the ESI training course on the Condor Pump and Cartridge Spray applications. "Chuo Systems Planning is trained and ready to properly represent ESI materials and products" according to Ishmael.

Chuo is concentrating on sales in the Marine and Roofing markets in Japan. This market seems to be very accepting because of accessibility issues using the Condor pump.

Chuo System Planning has four locations in Japan to efficiently service our customer base.

"Chuo Systems Planning is trained and ready to properly represent ESI materials and products"

Tripp Ishmael-ESI

The locations are located in Ishikawa, Aomori, Kumamoto, and Matsuyama Japan. For address and telephone numbers, please go to our website www.elastomer.com. and click on contacts.

ESI Completes the San Mateo Bridge Project

In September of 2002, ESI shipped its last material load to MacTec Constructors representing the successful completion of the polyurea coating of the San Mateo Bridge.

MacTec utilized ESI materials, Glas-Craft high-pressure plural component equipment and a staff of 20-30 employees to complete this 3.2 million sq. ft. coating project for CalTrans. The coating system specified by CalTrans was an epoxy bug hole-filler and epoxy primer, a 60 mil coat of polyurea and a UV stable polyurea topcoat. The poly-



Spraying the girders on the San Mateo Bridge Project

urea coating had certain physical property characteristics that had to be met including tensile strength, elongation and water absorption properties.

"The San Mateo Bridge Project was a great learning process for everyone involved and opened the door for future large scale applications" according to Tripp Ishmael, ESI Polymers Director and Technical Director.

ESI would like to thank Mr. Bob Carlson and Mr. David Harris for their loyal support.

Remote Orbital Installations Completes Manhole Application in Merrillville, Indiana

Remote Orbital Installations (ROI), an ESI-Certified contractor recently completed coating 59 manholes in Merrillville, Indiana.

ESI polyurea was accepted by Merrillville engineers on these new construction manholes. ElastoGard ARC was specified as the topcoat over PolyBon primer. However, what makes this application unique is the patented robotic application equipment invented and built by Mr. Mike Kronz of ROI.

According to Mr. Kronz, "the invention of this unique spray apparatus has increased consistency and produc-

tivity of polyurea applications in manholes". With his invention, Mr. Kronz is able to complete six to eight manholes per day depending on conditions. ESI worked very closely with Mr. Kronz to develop a user-friendly system for his application equipment. The ROI application equipment utilizes Glas-Craft application equipment with a specially manufactured spray head that rotates and accurately dispenses an even amount of material to the concrete surface.

Mr. Kronz also uses Hydraloc Extreme to seal leaks in manholes prior to applying the polyurea coating. This



Mike Kronz of ROI installing Hydraloc Extreme

unique hydrophobic foaming grout was developed specifically for this application and can be topcoated within ten minutes of application..

ROI application equipment will be displayed in the ESI booth at the W.O.C. 2003. For immediate information, contact Mike Kronz at 608-259-8570.

Patent-Pending GatorHyde Makes a "Splash"

In June 2002, ESI made GatorHyde commercially available. This long awaited product has had enormous success in a short period of time.

GatorHyde has been developed to be sprayed on pick-up beds through the Condor low-pressure pump, the Condor LPS Cartridge Spray Gun, or thru high-pressure plural component equipment.

"This product has had great success because of its ease of application, no bubbling in high humidity and temperature versatility", according to Tripp Ishmael, ESI Technical

Director and Polymer Division Director. According to Ishmael, "GatorHyde was field trialed for two years and virtually every bug was eliminated".

According to one applicator "we have been applying LineX[®] for years and have been looking for a low-pressure applied product that applies easily and displays a high-pressure finish".

ESI does not sell dealerships for GatorHyde, however, the applicator is required to train at ESI's facility for two days and purchase the dispensing equipment and materials from ESI.

"GatorHyde was field trialed for two years and virtually every bug was eliminated"

The success of GatorHyde is due to intimate and complete knowledge of the entire system which includes the dispensing equipment, spray materials, and preparation technique.

ESI Provides Pond Lining to Tulsa Zoo

The Tulsa Zoo and Living Museum is typical of most city-owned entities, it requires an almost magical balancing act of budgeting and spending to remain financially sound.

"Every successful company should give back to its community however it can", according to Tripp Ishmael. "It became known to us that the Koi pond at the Tulsa Zoo was leaking and had been leaking for over 30 years", Ishmael said, "We wanted to help however we could".



Finished picture of the Koi Pond at the Tulsa Zoo.

Mr. Orlin Emmons, President and CEO of Elastomer Specialties, Inc. donated the material, labor and equipment to completely refurbish this 1930's W.P.A. built pond. The pond was refurbished using all ESI-Polymers Division materials and personnel. The City of Tulsa donated the sand-blasting crew and equipment.

For a complete Job Description Profile, go to www.elastomer.com/polymers.

Thank you Tulsa Zoo and Enjoy!!!

10908 South 264th East Ave.
Broken Arrow, OK 74014

Phone: 918-486-4244
Fax: 918-486-3805
Email: info@elastomer.com
Web: www.elastomer.com



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Technical Corner

Question:

What is the truth about polyurea and its UV-color stability?

Answer:

Polyurea is made up of two basic types of chemical structure—aromatic and aliphatic.

Aromatic polyureas such as ESI's ElastoGard ARC is not color stable in sunlight or under metal halide lights. The reason is simple, the aromatic portion (which by definition means "contains benzene rings") breaks apart with exposure to UV and eventually gives off a yellow-colored chromophore. This degradation reaction continues to occur and results in a yellow-green hue. In some cases it may make the polyurea turn a darker color.

However, a more important concern is the UV aging ability of the coating! ElastoGard ARC is formulated with a UV absorber package that makes this product degrade minimally in UV Light. The surface of the product will change color and may chalk, however, the product maintains 95% of its physical properties after 3300 hours in an Atlas Weatherometer®.

Conversely, pure aliphatic polyureas, such as ESI's Polyspar HP or ElastoGard AL, are made using no aromatic products. Simply put, the aliphatic polyureas take advantage of a



ESI's GatorGard polyurea retains physical properties in UV applications.

straight chain backbone. Therefore, they have no benzene rings to break apart and are much more stable in UV light. Aliphatic polyureas can still change color, but are much less likely to do so.

Like aromatics, aliphatic polyurea requires a UV absorber package as well. Just because a polyurea is aliphatic, doesn't mean it can with-

stand the weather elements. It must be formulated with the correct UV package, and mixed properly to be color stable and maintain its physical properties.

Questions for Tripp?

Email Tripp with questions at:
tishmael@elastomer.com