Market Food & Beverage

Application

Industrial Flooring

Heavy-Duty Flooring

Focus

Project: Demerara Distillers New Bottling Facility

Owner: Demerara Distillers Limited Contractor: Harris Paints Guyana Ltd.

Year: 2008

Demerara Distillers Limited (DDL) located in Guyana, South America makes what is often labeled as "the world's best rum." DDL's experience in sugar and rum production dates back 300 years when more than 200 distilleries covered the county of Demerara. Throughout the years, the smaller distilleries consolidated into one single distillery, Demerara Distillers Limited. In addition to rums, spirits, juices, soft drinks and Diamond Mineral Water, DDL distributes Pepsi® beverages and Red Square. In 2009, DDL opened its state-of-the-art bottling plant that houses a multi-column still and is the first bio-methanization plant in the English-speaking Caribbean. This world-class facility was built with only the best products and machinery from around the world.

It Begins with the Floor

In 2008, Harris Paints Guyana Ltd. of the Harris Group of Companies, having done work for DDL in the past, was contacted and participated in the bidding process to install the floor of the new 96,000 sq. ft. bottling facility. After extensive consultation between Kevin Welch, the senior technical consultant at Harris and Sika Industrial Flooring, systems were designed for both the bottling plant and storage facility. It was concluded that Sika's products would meet DDL's strict cleanliness



requirements and even more stringent International Organization of Standards (ISO) regulations, as the company is often inspected and must maintain constant readiness and compliance.

The presentation to the DDL Board included a complete installation plan using two proven Sika Industrial Flooring Systems, and a comprehensive maintenance and cleaning program recommendation. Mr. Mahendra Kanhai, the production manager and project leader for DDL, felt the plan proved to be very innovative and practical and as a result Harris Paints was selected as the Contractor and Consultant.

Sikafloor PurCem products are designed to withstand the most demanding environments. DDL's facility environmental conditions include heavy impact, abrasion, aggressive chemicals/acids and thermal shock from steam and hot water. Sika's PurCem technology has a 30+ year proven performance record in distilleries, breweries, dairies, laboratories and chemical process plants.



DDL's bottling plant floor was first prepared using a planetary grinder to ensure smoothness and removal of swirls in the concrete that would impact the overall flooring systems finish. Harris' crew of six people applied the PurCem 20N urethane cement mortar in designated areas requiring the most durable finish, including the main bottling area. This product offers characteristics such as slip resistance, abrasion resistance and excellent chemical resistance. The floor was topped with Sikafloor PurCem 31N, a three-component, solvent-free, high-build cementitious urethane coating with a matte finish.

Sika's System Approach to Industrial Flooring

In the storage facility, Sikafloor 107, a two-component high solids, low modulus, low viscosity epoxy resin system was used as the primer. Sikafloor 107 is moisture tolerant and forms a tough flexible film. This was then top coated with Sikafloor 315 Abrasion Resistant Aliphatic Polyurethane capable of withstanding heavy motorized traffic.

All products met a specific request by Kanhai: low odor and low VOC so other trades can work simultaneously in an effort to keep the entire project on time.

Bottling Facility Opens

Welch expressed his pleasure with the quality of the Sika products and the technical support he received throughout the bidding phase and installation process. The two week flooring project was completed in late 2008 and the new bottling plant opened in fall of 2009. According to Kanhai, "the floor and the Sika products are performing just as expected."



Sika Products:

Sikafloor PurCem 20N Urethane Slurry - A resin rich, easy to apply, heavy duty, solid color, three-component, cementitious urethane slurry designed to provide excellent resistance to thermal stress, abrasion, impact and chemical attack.

Sikafloor PurCem 31N Urethane Coating - A three component, solvent-free, high-build, colored, matte finish coating based on the unique Sikafloor PurCem cementitious urethane technology.

Sikafloor 107 - A two-component high solids, low modulus, low viscosity epoxy primer. This epoxy primer is specially formulated to form a tough flexible film. This resilient primer has stress relieving and moisture tolerant properties.

Sikafloor 315 Low VOC Abrasion Resistant Aliphatic Polyurethane - A three and four-component high solids, abrasion resistant, aliphatic polyurethane coating. Sikafloor 315 provides excellent adhesion and wear resistant properties to epoxy primed concrete substrates. The aliphatic non-yellowing nature of the coating makes it ideal for areas that are exposed to the sun and UV light sources.

Sika... One Name, One Source, Worldwide,







Sika Industrial Flooring

201 Polito Avenue Lyndhurst NJ 07071 Tel: 800 933 7452 opt. #2

Fax: 800 294 6408

www.sikafloorusa.com

flooring.orders@sika-corp.com

Sika Canada Inc.

www.sika.ca

601 Delmar Avenue
Pointe Claire QC H9R 4A9
Tel: 514 697 2610
Fax: 514 694 2792

Sika Mexicana S.A. de C.V.

Carretera Libre Celaya Km. 8.5 Fracc. Industrial Balvanera Corregidora Queretaro C.P. 76920

Tel: 52 442 2385800 Fax: 52 442 2250537