

KAKELA MAKAI WATER STORAGE TANK

The Kakela Makai water storage tank on the beautiful island of Kauai, Hawaii, serves as an enduring testament for the color and gloss retention of Tnemec Company's Series 700 HydroFlon, a thermoset solution fluoropolymer finish. With nearly 20 years of exterior weathering in tropical sunlight, hot weather, humidity and frequent rains, the protective coating system continues to perform beyond expectation.

After the site visit to evaluate the tank in February 2011, the gloss appeared intact with no noticeable change, and remarkably, the color measured less than 2.0 units of change from samples of the original manufactured batch. To the naked eye, this color change is essentially unnoticeable and falls within most standard requirements for manufacturing of fresh coating material. Photos taken when the tank was originally completed, during a site visit in 2007 and the site visit in 2011 are virtually indistinguishable.

Prior to coating application in late 2000, the tank's exterior was prepared in accordance with SSPC-SP6/NACE No. 3 Commercial Blast Cleaning. A prime coat of Series 66 Hi-Build Epoxoline, a polyamide epoxy, was applied, followed by an intermediate coat of Series 1075 Endura-Shield II, an acrylic polyurethane. HydroFlon was then applied as the coating system's topcoat. In addition to its outstanding resistance to UV light degradation, abrasion and chalking, HydroFlon is ideal for use in coastal environments and areas where extremely long-term maintenance cycles are desired.

"We knew HydroFlon would offer a new benchmark for color and gloss retention among air-dried coating products, and this project certainly proves the point," according to Mike Bauer, former Senior Vice President of Tnemec. Bauer viewed the coating's success when he attended the tank site visit in 2007. Tnemec has offered to closely monitor this tank as it continues to demonstrate the outstanding, industry-leading performance achieved by HydroFlon.

In 2019, after nearly 20 years in the tropical climate, another site visit confirmed only a slight color change and the owner confirmed that they couldn't be happier with HydroFlon's performance.

FEATURED PRODUCTS

- Series 66 Hi-Build Epoxoline
- Series 700 HydroFlon
- Series 1075 Endura-Shield II



PROJECT INFORMATION

Project Location
Kauai, Hawaii

Project Completion Date
January 2001

Owner
County of Kauai DWS

Engineer
Akinaka & Associates - Honolulu, Hawaii

Field Applicator
Honolulu Industrial Coatings - Lihue, Kauai, Hawaii

Fabricator
M&M Tanks, Inc. - Honolulu, Hawaii

After almost 20 years of exterior weathering in tropical sunlight, hot weather, humidity and frequent rains, the gloss and color of the Series 700 HydroFlon topcoat applied to the Kakela water storage tank in Kauai, Hawaii, remain intact with no noticeable change. Photos shown were taken in 2011.

