

## Polaris Faces Flooring Challenge

**Polaris' Roseau, MN facility houses both its high-tech product testing lab and manufacturing operations for ATVs, snowmobiles and Ranger UTVs**



**Polaris** manufactures heavy-duty vehicles that require heavy-duty testing

Roseau, MN is the birthplace of Polaris, and the sport of snowmobiling. Polaris' [Roseau](#) [1] facility houses both its high-tech product testing lab and manufacturing operations for its ATVs, snowmobiles and Ranger UTVs. The state-of-the-art testing lab in Roseau is a series of glass-walled rooms where engineers can re-create real-life stresses on engines to study their effects on components. While Polaris parts have proven to stand up to virtually any adverse condition, the lab's flooring, ironically, has repeatedly failed the stress test.

In early 2002, when Polaris completed renovation of the Roseau facility, new flooring was laid down in the testing labs that quickly showed its shortcomings. After only six months, the floors were badly stained and another coating was applied, this time a thin gray epoxy.

Unfortunately, the new coating delivered the same poor results. Like the first coat, it stained easily, was difficult to clean, and began peeling up almost immediately—much to the frustration of Deland Broten, Project Coordinator for Polaris.

“Polaris manufactures heavy-duty vehicles that require heavy-duty testing. The lab flooring takes the brunt of this punishment,” explains Broten. “Our floors are subjected to high traffic, as well as to emissions, chemicals, and the occasional dropped part. We were disappointed that the earlier floors were of such poor quality that their longevity was measured in months, and not years.”

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"The Sika flooring has proven to be durable, simple to clean, and stain-resistant," says Polaris project coordinator, **Deland Broten**.

Several different environments make up the Polaris testing lab, including offices for administration duties, "dyno rooms" to test engines, and a large monitor room at the center of it all. Because the walls are glass, Broten wanted a single flooring system throughout the entire lab to provide a cohesive, professional appearance.

Sika sales engineer, Bryan Godmare, recommended to Broten that Polaris install Quartzite™ 6000 Decorative Quartz Flooring Systems. The nominal 1/8 in. double broadcast floor system consists of 100 percent solid clear epoxy and multicolored, fine grain, ceramic-coated quartz aggregate that produces a soft, varied tweed pattern.

**Sika** [2] Quartzite systems blend ceramic-coated quartz grains with a clear polymer matrix, creating a wide range of finishes and textures.

"We felt that Quartzite would complement the lab's high-tech look while furnishing excellent durability, slip resistance and easy maintenance," notes Godmare. "We install Quartzite frequently in hospital operating rooms, and since the Polaris lab is essentially a surgical center for four-wheelers, it made perfect sense."

To minimize work disruption, installer Duluth Coating Solutions, Inc. (DCS) completed the entire job over the December holiday break. Quartzite now coats 12 rooms, ranging in size from 30 ft. X 20 ft. to 30 ft. X 50 ft, offering long-lasting protection and an artistic design under foot.

Once dry, a high shine Sika CRU-400 urethane topcoat was applied. It was chosen for its high degree of strength in resisting chemical spills, abrasions and damaging

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UV light.

Another plus for Polaris was that CRU-400 cures through chemical reaction, and therefore does not depend on atmospheric moisture. It is typically tack-free in less than seven hours. And while a clear coat was used in this installation, Sika CRU-400 can be easily colored by mixing the clear with 18 available color adds.

The laboratory setting presented unique challenges for DCS. For example, the glass walls meant shotblasting was not possible because of the potential for damage to the glass. Dust was also a critical factor, especially in the control room.

Another concern was the doors adjoining the many rooms; the flooring had to be identically level at each opening to maintain required sealing. DCS came up with a solution to all these problems by skillfully using Terrazzo grinders equipped with large vacuums.

[For more information, visit www.sikafloorusa.com.](http://www.sikafloorusa.com) [2]

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