

Illinois' Boecker Road Maintenance offers treatment products to help restore and preserve existing asphalt



Slowing Aging Before It Starts

By Toby Linzmeier

Sealcoating, cracksealing and patching are well-known ways to help preserve existing pavement and avoid costly hot mix overlays. If it's hard to convince a potential client the value of those maintenance options, imagine trying to convince a customer to treat a fairly new, relatively undamaged pavement with a product designed to lengthen pavement life. But that's just what Boecker Road Maintenance, Naperville, IL, does.

Boecker Road Maintenance began when Pete Boecker, owner of DuPage Asphalt (established in 1964), wanted to find a product to help "preserve" existing asphalt pavement. After dis-

covering Golden Bear Oil Specialties' (formerly Witco Corp.) Reclamite preservative seal and CRF restorative seal, Boecker went straight for the municipal market. Today they sell the products from Chicago to Iowa.

"I was once one of their customers," says Joe Novak, product service manager of Boecker Road Maintenance. "I was the former superintendent of public works for the village of Lisle. When Mr. Boecker told me he had this product that would prolong the life of asphalt pavement, I was interested."

Novak says that Lisle was looking for a product designed to preserve roadways — "You don't see much coal tar emulsion on roadways here," he says — so Lisle decided to try the

surface treatment products offered by Boecker. Following a successful test in 1986, the processes became a regular part of Lisle's maintenance program. After retiring from public work in 1993, Novak joined Boecker to help sell their services and products.

Product history

"Reclamite and CRF are unique products in that they are manufactured from a Napathinic crude oil, which gives them penetrating and preserving qualities," Novak says.

Reclamite and CRF reportedly increase the penetration value of asphalt in the top portion of the pavement while at the same time sealing the pavement against air and water to slow oxidation. Reclamite

penetrates the asphalt anywhere from 3/8 in. to more than 1 in., depending on the pavement pore structure.

"The naphthenic crude gives these products an unusual ability to preserve the life of asphalt pavement by giving back to the pavement what it's had burned off by ultraviolet sun and traffic," Novak says.

The Reclamite treatment includes the two major components of asphalt—*asphaltenes* and *maltenes*.

"Reclamite will restore the plasticity and reduce weathering, thus extending pavement life by actually delaying the aging process on newer pavements (new to five years old)," Novak says. "It seals porous openings as it minimizes normal cracking with repeated applications every three to four years as needed. The pavement can have an added life span of four to six years."

CRF is a restorative seal for cracking or spalling pavement. This product carries more *asphaltenes* to help restore aging asphalt pavements.

Golden Bear Oil Specialties, the distributor of the two products, differentiates the two by saying that Reclamite is primarily designed as a preventative maintenance product, a pure maltene rejuvenator, while CRF contains *asphaltenes* to repair and restore severely weathered pavements that have cracked and ravelled "beyond a condition that can be properly addressed by Reclamite treatment."

A number of municipalities experimented with the products in the mid-1980s, including Cattaraugus County, NY; Baker City, OR; and Abilene, TX — most being pleased with the success of the product, even after comparison check-ups years from the date of application.

When to treat asphalt

"Some of our customers treat new asphalt the next construction season," says Novak. "We have found that some of the newer mixes of asphalt readily accept our product."

"If you do not treat the pavement and you get into that 6 to 8 year bracket and it's experienced heavy traffic and it's 'closed it up,' we find that



Sand trucks (above) are used to put down a layer of sand or limestone screenings. With the CRF the screenings are broomed (below) to evenly distribute the product over the surface and fill cracks and voids.





Chorex-treated gravel road.

it's very hard to treat," Novak says. "The asphalt won't accept the treatment as readily. You want to get it on as soon as possible because you want to get that product into the asphalt to be part of its rejuvenation process."

Application

The product line Boecker uses requires dry pavement with no rain expected for 24 hours after application.

"The temperature should be in the area of 45°F and holding," Novak says.

The materials originated in the

Southwest U.S., so it's no surprise that the product has been experimented with in heat extremes.

"It's been put down in Arizona at 110°F, with success," Novak says.

Keeping an eye on the weather is one of the challenges for Boecker. "Weather forecasting is getting to be a big part of the business," he says. The company watches the radar closely and keeps crews updated using radios. Variance in weather can limit the season for using these products.

"We're lucky if

we get seven months of work, and then our people do other things within the two companies," Novak says.

Part of the low cost of the product is due to the simplicity of application.

"We receive the product from the manufacturer in an uncut version, raw. We mix two parts product to one part water, using Etnyre distributors to put the material down," Novak says.

"We have one material distributor, two sand trucks and also two service/traffic control vehicles," Novak says. The sand trucks are used to put down a layer of sand or limestone screenings—two to three pounds of screenings per square yard—after the Reclamite or CRE, to preserve friction on the surface. With the CRE, the screenings are broomed to evenly distribute the product over the surface and fill cracks and voids.

With both products, the treated road can be reopened to traffic quickly, in less than an hour in some cases.

Existing pavement marking will "regain full luster in two to five weeks" so that restriping is unnecessary, cutting down on yet another cost. ■

Keeping Dust Down

Boecker Road Maintenance also offers the service of applying a dust-control product called Coherex. Making up about 20% of the company's business, this segment is in demand to "keep dust where it belongs" when construction is going on in a residential area or to keep dust down in quarries, for example.

"Many communities require construction sites to have a dust free environment," Joe Novak says. "We work closely with cities and towns."

"Coherex stabilizes, so it's not just a once over lightly treatment," Novak says.

Sprayed from a distributor truck and allowed to penetrate into the gravel or dirt, the material requires a couple of applications to really stabilize the soil.

"Once that is accomplished, it keeps the dirt or gravel roadway in a dust-free condition."