## *Pavement* Hall of Fame



Mounque "Monk" Barazone, Geotextile Apparatus Co. THE PAVEMENT HALL of Fame welcomes Mounque "Monk" Barazone, president and owner of Geotextile Apparatus Co. (GAC), because of his careerlong work improving the use, unloading and installation of geosynthetics including paving fabrics, grids, mats, and stabilization fabrics in the paving industry.

Barazone developed a tool for unloading trucks and containers, the patentpending GAC Roll Puller, and multi-patented installation machines, the Grizzly 600T and Grizzly Cub 300T, that have revolutionized the safe, efficient and proper use of paving fabrics - the end result of that being a greater and more effective use of fabrics and longer-lasting asphalt pavements. In addition, Barazone consults on fabric installation worldwide, in 29 countries at last count. A contributor to Pavement Maintenance & Reconstruction, Asphalt Contractor, and Geotextile Fabrics Report, he is also author of The Definitive Guide to Paving Synthetics and Installation and was instrumental in developing numerous fabric specifications with CalTrans - many of which have been adopted throughout the country. He is a regular presenter at National Pavement Expo as well as other conferences throughout the world.

"I try to absorb everything I can from everybody and from every situation and apply it to whatever I'm doing," Barazone says. "A lot of my success was trial and error, which is why the machine is undergoing constant improvements. I take what I know about geosynthetics and how they react and what I've learned about installation and problems I've faced or helped solve in the field and I apply that to the machine and try to make it perform better. This machine has been built jobsite by jobsite by jobsite."

That explains the six patents on nine features (with other patents pending).

Barazone got involved in paving fabric as almost a sideline of a corrugated steel sales job he had in 1980, which led to formation of a fabric sales and distribution company – backed by \$1500 on his Master Card and working out of his kitchen -- for pulp and paper producer Crown Zellerbach, which was making a foray into the fabric market. His warehouse accepted deliveries of fabric he needed to unload them, hence his first invention.

## **The Roll Puller**

Barazone unloaded trucks using a forklift he eventually modified with three poles to remove six rolls at a time from the back of the truck, but it was not able to go into the truck for the roll tiers further back, so fabric had to be unloaded unsafely by hand. So in 1980 he invented the GAC Roll Puller. Originally 12 inches long, the current pullers measure 16 inches, enabling them to grab deeper into the cardboard core to help prevent cores from tearing from higher weight when rolls are banded together.

A rope, strap, cable or chain is attached to one end of the roll puller and the other end is inserted into the roll core. By pulling the ring on the back end of the Roll Puller, notched teeth inside the core bite into the cardboard, gripping it. Multiple roll pullers can be used simultaneously, enabling a forklift, end loader or pickup truck to unload rolls. "The roll pullers not only improved the speed of unloading but made it much safer and reduced the number of laborers needed," Barazone says.

## **Fabric Installation Machine**

Barazone also realized there was a need for fabric installers. "Everyone was afraid of the material," he says. So his wife started a fabric installation business and Barazone designed and built the Model 750, a heavy-duty mechanical or hydraulic folding and telescoping unit that was the first patented machine to aid fabric installation. After six years of seeing the machine in use, he realized it didn't have to fold. "It all could be done with telescoping parts and that opened a lot of doors that enabled it to do a much better job. It went from kind of a clunky Cadillac to a sleek Corvette."

So in 1986 he introduced the Grizzly 600T, which eventually acquired the following patents:

- A heavy-duty, double-bar mainframe with dual telescoping arms on bearings to make mechanical or hydraulic telescoping fast and easy and install rolls from 6 feet to 20 feet. When nontelescoped, it was easy to transport.
- Four different mounting systems: Universal tractor mounts for end loaders removing the bucket, clamp on tractor bucket mounts, tractor mounts with additional pin in clamp on bucket mounts, an oil truck mounting system that eliminates the tractor
- "Crab-claw" swing arms which enable the machine to place geosynthetics with the roll and brush ends lining up on the fabric edges and place near or against objects such as curbs and guard rails and within 6 inches of walls and not hit signs and poles. Two swing arms permit loading rolls from either side without repositioning the tractor or oil truck and short-roll offcentering with the middle arm.

- Grizzly Cub telescoping single-bar frame and extension sleeve for 6 feet to 15 feet, 6 inches with no bearings. It incorporated all the patents.
- Sliding or clamp on third middle arm holds 1-foot to 8-foot rolls centered or off-centered, increasing versatility.
- Multi-bar telescoping PVC-tensioning system keeps fabric taught.
- Multi-bar PVC Grid Roller System keeping it taught and not impeded before brushing.
- Telescoping chevron angled brushes that sweep fabric from the center to the outside, eliminating most wrinkles. Brushes can be straightened for installing grids.
- Rotating spindle-braking roll holders with special machined discs and caliper brakes that control the roll's turning speed. They can be adjusted independently, making it possible to pull fabric on curves.

In addition, Barazone has a patentpending on 335°F, high-melt brushes made of modified plastics, can be cleaned at the end of the job, will last longer, and which feature 50 percent more bristles to reduce fabric wrinkles.

And to reduce costs and speed installation, Barazone developed an oil-truck mounting system that eliminates the tractor and operator and enables the geosynthetic to be installed as the oil is sprayed down in one operation.

In 1988 Barazone developed the Grizzly Cub 300T with a sleeve that allowed both telescoping arms to telescope inside each other and extends the Cub's mechanical arms to 15 feet, 6 inches with no bearings. The Cub installs material the same as the Grizzly 600T and included all the patents with fewer standard features which are options, designed as a less-costly alternative that installs fabric no wider than 15.5.

Barazone says 2018 was on pace to exceed a record 2017, but the CARR Fire wildfire in California destroyed GAC's 39-year-old manufacturing facility. So GAC is in the midst of rebuilding its manufacturing operation and this spring the Grizzly 600T will back in production.