

The logo features a green silhouette of North America on the left. To its right, the words "North American" are in blue, "Oil & Gas" is in green, and "PIPELINES" is in large, bold blue letters. The background is a collage of construction and pipeline-related images, including a film strip running diagonally across the top right.

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CARRIERS OF THE FUTURE

New Terramac Machines Match Changing Needs

By Matt Fueston

Rubber track carriers aren't exactly new, but Mike Crimaldi's vision for his new line of rubber track carriers is a bit more futuristic.

Some sources say that the first patent for a rubber track was issued to an engineer in France in 1913. Today's typical rubber track carriers are anywhere from 8 to 10 ft wide and from 10 to 20 ft long. Their profile, regardless of brand, is also pretty true to type. An offset cab up front, a dumper behind on the bed and big rubber tracks underneath.

Crimaldi sees a different and constantly changing profile for a new breed of rubber track carriers. He envisions a rubber track utility vehicle that can transform into pretty much whatever its owner wants it to be. If you want a dumper, it can be a dumper. But it can also be a mulcher, a mat-carrier, a mobile epoxy coating machine, a hydroseeder, a mobile crane, a welding unit on tracks, a personnel carrier, a water tank carrier or an off-road service vehicle.

With his new company, Terramac, launching a line of North American made rubber track carriers, it appears that his vision has become a reality. Terramac has begun to manufacture customizable carriers designed to take advantage of flaws in imported models. Pipeline contractors are one of the key markets he and his team have targeted, due to the special conditions under which they must work.

"Contractors like the multi-terrain capabilities of rubber track carriers. They also appreciate the fact that rubber tracks don't tear up the ground or

road surface like steel track carriers, and they don't leave ruts in delicate soil conditions like wheeled vehicles," explains Crimaldi. "Pipeline contractors started out using them to haul mats, but now they use them for just about everything you can imagine."

Rubber track carriers still haul mats for other vehicles to drive on, but contractors are also using them for a wide range of applications since they have a relatively minimal impact on the right-of-way. In fact, depending on the size of the unit and its load, rubber track carriers may exert as little as 3 psi of pressure on the surface.

The Problem

"The problem is that rubber track carriers are in such short supply that most manufacturers can get away with using the old Henry Ford sales tactic. He is supposed to have said you could have a Model T in any color you wanted, as long as that color was black. Well, the rubber track carrier manufacturers basically say that you can have one of their carriers fitted out to carry whatever you want, as long as that's a dumper unit," Crimaldi says. "If you want to put anything different on it, you or your dealer has to take that dumper off and mount something else in its place. You may not want the dumper that came with

it, but you paid for it. It's yours whether you need it or not."

What Crimaldi and Terramac offer is a level of customization that is almost unheard of. They decided early on to ship their new carrier without the omnipresent dumper. Instead, the carrier is set up to accept whatever type of equipment the customer wants to mount on it. In fact, Terramac will work directly with the original equipment manufacturer of the unit to be mounted to ensure that the bolt pattern of the carrier's bed will match up perfectly.

Terramac will also allow a customer to accessorize the carrier directly from its factory.

"We've had customers that want to use a certain kind of winch on the front or rear of their rubber track carrier," Crimaldi says. "The problem has been that they've had to literally cut off the carrier's bumper to be able to mount the winch. When they order a Terramac, they just tell us what accessories they plan to mount, and we configure that particular unit to properly receive that particular winch, for example, when it's delivered from the factory. Or if you need a specific hydraulic pump, you're not stuck with the one that would come standard with the dumper. You just spec it out to us when you order your Terramac, and you get exactly what you need."

The new Terramac carriers from Rig Source Inc. offer contractors endless opportunities for customizing the unit to their needs. The rugged machine can be outfitted to suit any job duty.



Customization as a Business Principal

Terramac's focus on customization is easier to understand when placed against the backdrop of the company's history.

Originally, Crimaldi was a drilling contractor, working in the geotechnical, environmental and mineral exploration drilling industries. When he decided to get out of the contracting business in 2004, his first step was to sell off his fleet. As he began that process, he started getting requests that the rigs be customized to meet the new owners' specific requirements. Since a robust refurbishing and customizing shop had always been a part of his fleet management program, Crimaldi had the resources to meet those demands.

"At first, I just wanted to do whatever it took to move those rigs," he says. "If they wanted a new paint job to match their company colors or a special tool package added, we gave it to them."

The process of selling off his old fleet slowly but surely morphed into a new business — that of buying and selling new and used drill rigs of one kind or another. As his new company Rig Source Inc. grew, he kept the practice of customizing to meet customer requirements as a key business principal.

In time, Rig Source customers with used mineral exploration drill rigs came to him looking for remounts.

"The drill would be fine, but the truck would be shot, so they needed something versatile and dependable to remount the drill on," he says. "Some people we knew in the industry told us we should look for some of the Japanese rubber track carriers that were floating around out there. We finally found some used ones for sale, and they were perfect for the size of these mineral exploration or geothermal rigs we were trying to refurbish."

"The problem was that rubber track carriers had very limited availability and a high cost, so for a long time all we bought were used ones," Crimaldi continues. "As availability increased, Rig Source became a dealer for new rubber track carriers imported from Japan. But these still had some serious problems, including very long lead times for new units, so we eventually decided that the solution was to design and manufacture our own rubber track carriers."



Birth of the Terramac

Rig Source's background as a dealer and service provider for multiple makes and models of rubber track carriers gave them a unique insight into the problems that were common among the imported units they handled.

"It's not that the carriers from overseas were bad machines," Crimaldi says. "They were probably perfectly engineered for their home markets. But they didn't make any changes when they brought them to North America, and that's what we identified as their greatest defect and our greatest opportunity."

Rig Source mechanics and technicians had noticed the same issues over and over again as they serviced the imports. Components that required frequent maintenance were hard to access, and some components were impossible to service without literally removing them from the carrier's frame with a cutting torch. When the designs for the Terramac were drawn up, a tilt-up hood was added to ease a technician's access to key service areas. Components that were welded on the imported models are bolted on in the Terramac.

Another serious issue with the imported carriers was parts availability. Since the units were manufactured overseas, so were the components and parts that went into them. And those parts were even warehoused overseas, adding weeks or even months to order time. The new Terramac crew decided to source all its parts from North America. The U.S.-made Cummins diesel used to power the Terramac is one example of this sourcing strategy.

"Once we'd made all those changes," adds Crimaldi, "we just decided to go ahead and design it to be best-in-class for its size — horsepower, drive-line torque, carrying capacity and versatility, that kind of thing."

First Look

The first Terramac rubber track carriers came off the line in May. The first model, the RT9, will be joined by at least three models in the future to complete the full spectrum of popular sizes and carrying capacities.

The CE certified Terramac RT9 has an 18,000-lb (8,200-kg) carrying capacity and is equipped with a 230-hp Cummins diesel engine in both open and closed cab options. The unit has rollover protective structure (ROPS) and falling object protective structure (FOPS) components. Ground pressure when fully loaded is 4.9 psi. The RT9's easy front and rear bolt-on attachments accommodate a variety of needs in the pipeline, drilling and general construction industries. The Terramac RT9 is 17 ft, 7 in. long, 8 ft, 5 in. wide and 9 ft, 3 in. high with a 20-in. minimum ground clearance. The unit's travel speed is 4.7 to 7 mph, and it has a 10-ft turning radius.

Rig Source is acting as exclusive distributor of the Terramac RT9 and is accepting orders. The unit will also be available to rent. With Rig Source's extensive overseas business, Crimaldi says the Terramac will also be available for those customers.

Matt Fueston is a staff writer for Ellenbecker Communications, an international communications firm specializing in the drilling, mining and construction industries.