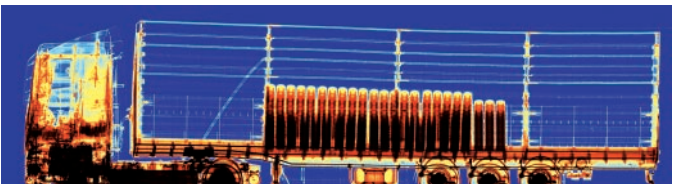




Success Story — Rapiscan Systems

The world's leading provider of security screening solutions has specified the Mack® TerraPro™ chassis as a key component in its American line of high-energy X-ray cargo and vehicle scanners.

The Rapiscan Systems Eagle® Mobile M4508, manufactured at the company's U.S. cargo facility in Apex, North Carolina, scans trucks, cargo containers and automobiles to verify the contents and identify the presence of contraband, such as weapons, explosives and narcotics. The unit is self-contained with all of the equipment required to perform inspections at seaports, border crossings and roadside rest stops.



It is used by the U.S. Department of Homeland Security along the border with Mexico and by the Port of Long Beach, among others. It is also used by the U.S. military in Iraq.

Security systems like those made by Rapiscan have become vitally important to governments and shippers since the September 11 terrorist attacks.

“Previous cargo scanning focused on preventing tariff evasion,” said Khoren Keusseyan, vice president and general manager of Rapiscan Systems. “After 9/11 the focus was on security, with screeners looking for weapons or anything else that shouldn't be in the cargo. Scanning provides a means of verifying the contents of the container without having to perform manual inspections.”

The Eagle Mobile features a 4.5 million electron volt X-ray imaging sub-system with a detector array mounted in an L-shaped boom. The system displays high-quality X-ray images of vehicles and their contents on high-resolution monitors in the onboard inspector's office.



“The unit has the required penetration power to see through 12 in. of steel,” Kuesseyan said. “It also generates high-resolution images that help operators identify potential threats quickly and accurately.”

In modifying TerraPro for this service, Rapiscan starts with a chassis featuring a Mack 365-HP MP7 engine, Allison® 6-speed 4500DS automatic transmission, 18,000-lb.-capacity front and 46,000-lb.-capacity rear axle. It then mounts a 6,000 lb. linear accelerator and a boom of approximately the same weight. Bodybuilders add a 20,000-lb.-capacity steerable pusher axle for weight distribution.

Stored for transport, the boom extends to form a rectangular tunnel surrounding the object to be scanned. Operators then adjust the air suspension system to keep the truck from tipping. But it's the precision low-speed mechanism that makes high-resolution scanning possible. The Eagle Mobile performs a scan by driving past an object, a single unoccupied vehicle or a row of vehicles — something its competitors can't do.

“The truck has to move at a very measured pace, about 20 ft. per minute,” said Bill Wiese, fleet salesman at TEC Fontana in Fontana, California. “A diesel engine usually doesn't provide an

even movement at that speed so we disengage the rear axle from the engine and install a transfer case. The truck engine runs a generator to power an electric motor when the scanner is operating.”

Kuesseyan said Rapiscan chose the Mack chassis because of its weight, size and quality. “It is a robust, reliable truck. Mack is a good brand name.”

But the real test is service, and on that Mack has delivered.

“We're getting support from the highest levels of the Mack organization,” Kuesseyan said. “We offer an uptime availability rate of 97 percent and Mack understands that. Whatever is important to us is important to Mack. You can't put a dollar value on that.”



Rapiscan Systems is a leading supplier of security inspection solutions utilizing X-ray and gamma-ray imaging and advanced threat identification techniques such as neutron and diffraction analysis. Since 1993, Rapiscan Systems has installed more than 70,000 products in more than 100 countries. Its portfolio includes baggage and parcel inspection systems, metal detectors, automated explosive detection systems, air cargo screening solutions and container inspection systems. Headquartered in Hawthorne, California, Rapiscan Systems is a wholly-owned subsidiary of OSI Systems.

