

# DSC2000—Breakthrough **High-speed,** **High-security Barricade** with Minimal Foundation!



## **Very shallow—**

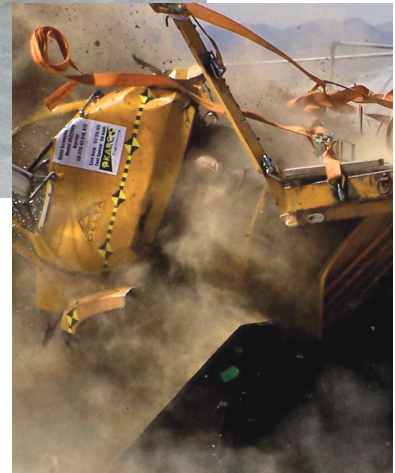
a foundation only 10 inches (25.4 cm) deep

## **Very fast—**

rises in less than 0.50 second

## **Very strong—**

absorbed 1,200,000 ft-lbs of energy!



The new DSC2000 high speed, high security, very shallow foundation barricade is Delta's fastest, smallest and shallowest foundation barricade, created especially for high speed actuation and ease of installation. **K12 crash-certified** by the U.S. Dept. of State (SD-SDT-02.01 Revision A dated March 2003) with no penetration, it stops a 15,000 pound (66.7 kN) vehicle traveling 50 mph (80 kph) dead in its tracks. When danger is imminent, the barricade **rises in less than one-half second (0.500 seconds)!**

Unlike other barricade systems requiring massive foundations that intrude into utilities and force rerouting and relocation of other buried elements, the Delta DSC2000 is set in a **foundation only ten inches (25 cm) deep**. And it still continues to operate after a 1.2 million foot pound impact, **exceeding U.S. Department of State and U.S. Department of Defense standards.**





# The DSC2000 barricade is designed to go places

Because each module weighs only 1100 pounds (500 kg) and is easy to install, the DSC2000 barricade is perfect for remote locations and developing country installations. It fits in a small shipping package or air cargo container for convenient air transport. Modules can even be carried in the back of a pick-up truck.

For ease of shipping, the complete barricade system, including the hydraulic power unit, control circuits and controls, all fit on two 4 ft. x 6 ft. pallets that can easily be handled by a lightweight yard fork lift or pallet jack.

The barricade modules can be manhandled into place and installed without the use of power equipment. This barricade can be set up, sited and cast in place without removing the top plate.



Multiple modules can be deployed in configurations to guard wide roadways to narrow driveways. Designed for heavy use, the DSC2000 produces more than 100,000 cycles per month with axle loading greater than 22,000 pounds.

With its extremely shallow foundation and aesthetic design, the DSC2000 is a major breakthrough in high duty, anti-terrorist barricades. It obviates the concerns of interference with buried pipes, power lines and fiber optic communication lines. The DSC2000 is perfect for high water table locations and areas with corrosive soils. The ten-inch shallow foundation also reduces installation complexity, time, materials and corresponding costs.



# It’s hard to believe this barricade’s foundation is only 10 inches

Delta’s fastest, smallest and shallowest foundation barricade was created especially for high speed applications and ease of installation. It is K12 crash certified with no penetration, meaning it will stop a 15,000 pound (66.7 kN) vehicle traveling 50 mph (80 kph) dead in its tracks.

Representatives from the U.S. Department of State, Army Corps of Engineers and Bureau of Reclamation who witnessed the July 2005 crash tests for the DSC2000 were very impressed. And these guys are tough to impress.

Set in a foundation only ten inches (25 cm) deep versus the standard 18 inches on most shallow foundation barriers, the Delta DSC2000 survived and operated after a crash test with a 1.5 million foot pound impact, exceeding Department of State and Department of Defense test standards.



FULL SCALE CRASH TEST RESULTS								
System Designation	System Configuration	Attack Vehicle Weight	Impact Velocity	Load Penetration	Deployment Time	Certifying Test Laboratory	Certifying Organization	Certified Rating Specification
DSC2000	Three Module Array	15,000 lbs (66.7 kN)	50 mph (80.4 kph)	None	0.382 seconds	KARCO Engineering, Adelanto CA	U.S. Dept. of State	K12*
							U.S. Dept. of Defense	K12*
DSC2000-1	Single Module	5,550 lbs (24.4 kN)	60 mph (96.5 kph)	None	0.382 seconds	KARCO Engineering, Adelanto CA	Delta Scientific Corporation	P16**



SYSTEM CAPABILITIES					
System Designation	System Configuration	Attack Vehicle Weight	Impact Velocity	Deployment Time	Certification
DSC2000	Three Module Array	20,000 lbs (88.9 kN)	52.5 mph (84.5 kph)	0.382 seconds	Attacking vehicle will be stopped and destroyed***
		32,000 lbs (142 kN)	41.3 mph (66.4 kph)		
DSC2000-1	Single Module	8,000 lbs (35.5 kN)	64.5 mph (108 kph)	0.382 seconds	Attacking vehicle will be stopped and destroyed***
		12,000 lbs (53.3 kN)	52 mph (83.7 kph)		

\* U.S. Department of State (SD-SDT-02.01 Revision A dated March 2003)  
\*\* Rating System –ASTM Unified National Barrier Testing Specification (Proposed)  
\*\*\* Certification by Delta Scientific Corporation based on dynamic nonlinear analysis

# Why are Delta crash gates the *de facto* solution?

It’s a fact that over 17,000 systems worldwide are protected by Delta systems. These include U.S. embassies, nuclear plants, banks, manufacturing facilities, military bases, courthouses, private companies, major airports, car and rental lots, logistics centers, palaces, private residences and many more. For over many years, Delta systems have been protecting some of the most important people and facilities in the world.

Since 1974, Delta has been producing products and systems that promote safety and security for people and property. Our staff is knowledgeable and experienced.

Delta has been the leader in using Finite Element Analysis to study vehicle collisions with fixed and moveable barriers. With our database of full-scale test results, we have superb computer models that enable us to test new designs at our desktops. We’re able to analyze unique situations and design products that will meet your special needs.



# Our crash ratings speak for themselves

K12 certification simply means a barricade is proven to stop a 15,000 pound (66.7 kN) vehicle traveling 50 mph (80 kph) with zero penetration.

Check out these DSC2000 crash test photos.



Most models are available in four types of operation: Hydraulic, Pneumatic, Electro-Mechanical and Manual. Delta Hydraulic systems are the most advanced and reliable in the industry. There are more Delta Hydraulic barriers in the world than any other system. Our Pneumatic systems are built with the same reliable and low maintenance technology as our hydraulic units, on a more earth-friendly platform. With more force, less amperage and lower maintenance cost than electro-mechanical, and no messy hydraulic oil, Pneumatic is tough to beat.

Through rigorous testing and development, Delta has assembled one of the most advanced Electro-Mechanical systems on the market. Simple, effective and efficient, our electric systems are built to the same high quality Delta customers have come to expect. If none of these options accommodate your site, we offer our ever faithful Manual system. They are suited for areas with no available power or low frequency of use. Requiring only 40 lbs. of force to operate, counter-balanced Manual versions are a good fit for any location.



Delta Scientific Corporation is the leading worldwide manufacturer of vehicle access control equipment with over 260,000 square feet of production facilities in Palmdale, CA. Delta's three product lines consist of high-security vehicle barricade systems, parking control equipment and guard booths.

**Contact us today.**

## PRINCIPLE OFFICES

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