

Crash-Rated **Cable & Chain Beam Barriers**



Choose from manual or hydraulic operation, vertically rising or horizontally swinging, fixed or transportable versions.



Delta cable and chain beam barriers are designed and used for both traffic control and high security applications. These proven Delta barricade systems are deployed at government facilities, embassies, corporate headquarters, parking structures, nuclear power plants, and automotive sales lots. The Delta cable and chain crash beam series of rising barrier gates includes models that will immobilize a vehicle weighing up to 15,000 pounds traveling at 40mph (66,7kN at 65kph).



Heavy-duty design yields superior traffic regulation.

Delta's cable and chain beam barriers include the crash-rated DSC7035, TT212, TT212E, TT212EC, TT218, BB10MS hydraulic and manual models plus the transportable IP500. All incorporate a heavy duty, multi-stranded cable or chain within the boom profile, which is held securely at both ends when fully lowered, offering a formidable traffic control barrier. Impact from a moving vehicle is transmitted to the boom-supporting pillars. These barriers come in rising or swing boom versions.



IP500, U.S. Embassy, Marine Guardpost, Kabul, Afghanistan, 2002.

Choose from the TT barrier series or the BB10MS Hydraulic version or the portable IP500.

- ▲ **The TT212 Cable Reinforced Crash Beam Barrier Gate** is crash rated and crash tested. It is a counterbalanced, hinged semaphore type gate consisting of a crash beam, support and pivot assembly, steel foundation implants, cast-in-place concrete buttresses, and locking and anchoring mechanisms.

The TT212 Cable Crash Beam Barrier has been tested and successfully passed full-scale crash tests by a U.S. government test facility. The barrier has been certified per U.S. Navy TM-56-86-05 to have a performance evaluation of 1/L3.0. It will stop a non-armored or non-tracked vehicle weighing 6,000 pounds at 40 mph (26,7 kN at 64 kph) and 10,000 pounds at 27 mph (44,4 kN at 43 kph). The crash beam incorporates a high strength wire rope that is firmly attached to both buttresses when the crash beam is in the down position. In a collision, the energy of the impact is transmitted through the crash beam to the buttress and the foundation.

The basic Series TT212 is manually operated, but is available in an automatic hydraulic configuration for remote or unattended operation (model TT212H). The TT212H crash beam is raised and lowered by a precision hydraulic power unit with an adjustable operating speed.

The lifting and lowering of the hydraulic cable crash beam can be controlled remotely by a wide range of options including but not limited to key switches, master and slave control panels, radio controls, velocity sensors, key pads, card readers and automatic sensors.

- ▲ **The TT212E Enhanced Cable Crash Barrier** is similar in design to the TT212 and is also available in both hydraulic and manual versions. The TT212E was designed specifically for nuclear power plants. Crash rated, the TT212E provides clear opening ranges from 10.5 to 24 feet (3,200 mm to 7,315 mm). It will stop a non-armored or non-tracked vehicle weighing 15,000 pounds at 30 mph (66,7 kN at 48 kph). This barricade meets NUREG Specification.



- ▲ **The TT212EC Enhanced Chain Crash Barrier** has the highest crash rating of Delta's beam barricades. It has been certified by the U.S. Department of State to stop a 15,000 pound (66,7 kN) vehicle in less than 20 feet (6,096 mm). It is DOS rated at K4/L2. Actual penetration is 5 feet (1,524 mm). Both hydraulic and manual versions are available.
- ▲ **The TT218 Swing Boom Version** is a manually operated swing cable crash beam derived from the TT212 model and earning the same crash ratings. U.S. Navy assessment: TM-56-86-05, 1/L3. It will stop a non-armored or non-tracked vehicle weighing 6,000 pounds at 40 mph (26,7 kN at 64 kph) and 10,000 pounds at 27 mph (44,4 kN at 43 kph).

- ▲ **The BB10MS Hydraulic Cable Beam Barrier** features an integral hydraulic pumping unit with bolt in place cabinet along with a cast in place latch and cable post. It will stop a non-armored or non-tracked vehicle weighing 6,000 pounds at 40 mph (26,7 kN at 64 kph) and 10,000 pounds at 27 mph (44,4 kN at 43 kph). Its length range is from 10 to 16 feet (3,048 mm to 4,876.8 mm).
- ▲ **The IP500 Transportable Drop Arm Barrier** deploys or redeployes for full manual or automatic operation within two hours. It will stop and destroy a 15,000 pound (6,800 kg) truck traveling at 30 mph (48 kph) in less than 20 feet (6 m). Crash-tested and certified by the U.S. Department of State, pods are easily filled with concrete. A forklift quickly picks them up.

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 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 cable and chain beam barriers work well with others.



Delta's cable and chain beam barriers are designed to integrate easily into existing security systems. When CarMax, the Auto Superstore® and the nation's leading specialty retailer of used cars, needed a low maintenance system that would deter theft from their lots and assimilate easily into its present security system, it chose Delta Scientific's DSC7035 K4 engineered steel beam barrier. (See the top photo on the front cover.)

The DSC7035 will stop a 15,000 pound (66.7 kN) vehicle traveling at 30 mph (48 kph).

The high-strength wire rope of the TT212 will stop a non-armored or non-tracked vehicle weighing 6,000 pounds at 40 mph (26,7 kN at 64 kph).



*IP500 at FBI
National Headquarters,
Washington, D.C.*



Our crash ratings speak for themselves...

Our cable and chain beam barriers are tough. But don't take our word for it — check out our certified test results:

	TESTING AUTHORITY	RATING	VEHICLE WEIGHT*	SPEED	KINETIC ENERGY (FT LBS)
DSC7035	Delta	K4 Engineered	15,000lbs (66,7kN)	30mph (48kph)	450E3
TT212EC	U.S. Dept. of State	K4/L2	15,000lbs (66,7kN)	30mph (48kph)	450E3
TT212E	Delta	K4/L2 Equivalent	15,000lbs (66,7kN)	30mph (48kph)	450E3
TT212	U.S. Navy TM-56-86-05	1/L3	6,000lbs (26,7kN)	40mph (64kph)	319E3
TT218	U.S. Navy TM-56-86-05	1/L3	6,000lbs (26,7kN)	40mph (64kph)	319E3
BB10MS	Delta	1/L3 Equivalent	6,000lbs (26,7kN)	40mph (64kph)	319E3
IP500	U.S. Dept. of State	K4/L2	15,000lbs (66,7kN)	30mph (48kph)	450E3

*Non-armored and non-tracked



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.

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