PPE071 Portable Tyre Shredder

A rise in terrorist threats against military bases and other government facilities has resulted in an increased demand for adequate physical security products that are reliable, durable, and efficient. The PPE071 Portable Tyre Shredding System prevents unauthorised vehicles from entering restricted locations. Any targeted vehicle that attempts to cross the system will quickly be brought to a standstill with 3 to 4 7.62cm gashes inflicted per tyre.

The DC system is intended for temporary or short-term deployments, be it on a base or at a checkpoint, when an electronic system with remote controls is required. This gives the operator freedom to move up to 60.96 meters away from the system, but still have control over approaching traffic. Both a manual and a permanent variant are available.

Contains:

1 - Control box , 7 - 50.8 Cm modules, 1 - Wireless remote control, 1 - Portable power supply, 1 - DC neoprene power cable, 1 - AC neoprene power cable, 1 - Pendant control, 2 - MIL-SPEC cases (63.5cm x 50.8cm x 30.48cm)

The DC Portable Tyre Shredder system has a standard length of 3.66 meters and can be extended to a maximum of 7.62 meters, per control box. The underside of each module contains approximately 20 traction spikes that retain the modules position on dirt or asphalt surfaces. If deployed on concrete surfaces, anchor plates are required under each module. The basic system is stored and transported using two MIL-SPEC cases (additional lengths require more transportation cases), enabling it to be easily placed in a truck or SUV and relocated to another deployment site. A 250 pound torque motor is used to raise or lower the blades in less than one second. It can be powered either using the rechargeable portable power supply or the AC neoprene power cable.

The DC system also offers two different methods of activation, the wireless remote or the pendant control, which allows for more than one operator.

Electronic Specifications

• Power requirement: 120 Volts 3 Amps per system, 240 Volts 2 Amps per system
• 12 Volt DC battery back-up, standard for each system, is capable of over 6,000 operations on a full charge.
• Battery housing has flanges to provide capability to mount to a wall or pole.

• Control cable wire - 7 strand 18 gauge with an outside diameter total of 1.3 cm.
• Power cable wire - 3 strand 12 gauge with an outside diameter total of 1.08 cm.
• System can be run off of either AC or DC power.
• MIL SPEC plugs are used to connect wires to the system.

Module Specifications

• Individual modules are 50.8 cm long, 29.53 cm wide, and 3.18 cm high.
• Each module contains fi ve individual retractable stainless steel blades.
• Each module contains four 1.91 cm mounting holes.
• Each module has two 1.91 cm locking connections to connect to the next module.
• Each module is able to withstand over 52 tons of direct pressure when placed on a flat surface.
• Modules are powder coated per customers request; black color is standard when no request is made.
• Module casting material is comprised of 356 T51 Aluminum, weighing 17 pounds.
• The underside of each module has 5 tunnels to allow dirt and water to wash out from underneath.
• Connecting .625 cm ball screws are stainless steel.

Blade Specifications

• Blade height is 6.99 cm; width is 9.84 cm.
• Mounted to the module using two 2.86 cm mounting plates and four screws to lock the blades in.
• When retracted, the blades sit recessed in the module to allow vehicles to pass over unharmed.
• When active, the blades are spaced 10.16 cm apart.
• While activated, vehicles will not be able to pass over the system in either direction without severe tyre damage.
• Blades are fi eld serviceable and replaceable.
• Each blade has 4 separate angles for insertion into tyres; two outside angles 77 are degrees, and the two inside
angles are 48.5 degrees.
• Comprised of 17-4PH Stainless Steel, CB7Cul, ASTM A747.
• Solution annealed and aged (H925 condition) to a hardness of RC38 Min.
• Measurement of connecting ears to shaft require a distance of 2.28 - 2.33 cm.
• Finish of blades are 125 RMS.
• Blades are power coated per customers request; black color is standard when no request is made.
• Center shafts connecting the blades are comprised of stainless steel.