

D-BOLT

NEW, PATENTED, Electronic Bolt for equipment protection

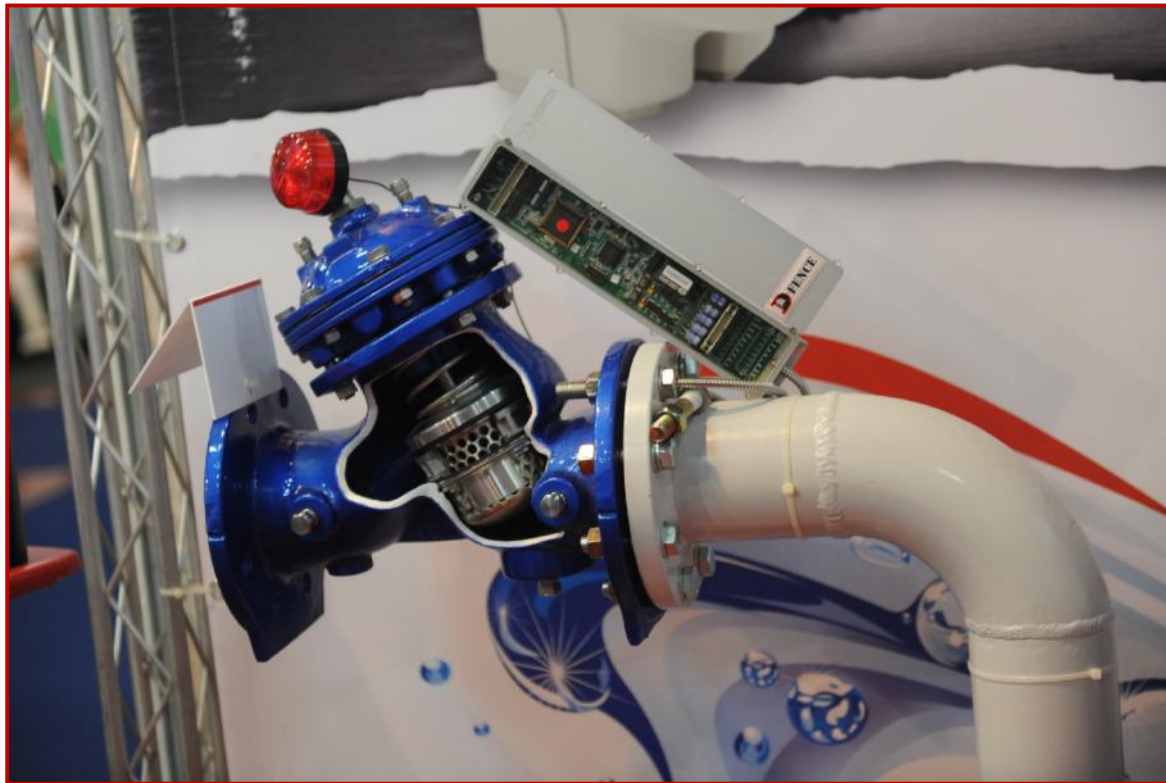
Patent Registration Number: 62/002,871

The D-Bolt Electronic Bolt System is a new and innovative security system to protect expensive and/or sensitive equipment against theft. D-Fence's Strain Gauge Sensors are imbedded into bolts and screws of different calibers and then connected to an electronic box containing a PC Board card connected to a Wireless transmitter, a GPRS transmitter, an SMS system or a GSM system and to contacts. Any attempt to open or loosen the bolt/screw generates a warning and sends its location.



Any attempt to open or loosen, bend or cut the bolt will generate an alarm and will transmit the exact location of the attempt to the chosen system, and since only 1 bolt is needed for each unit or equipment being protected, the system is highly cost-effective.

Since the system is based on D-Fence's known and field-tested Strain Gauge Technology, the rate of false alarms is close to zero, and only real attempts to tamper with the bolt will generate the alarm, providing the end-user with reliable protection 24 hours a day.

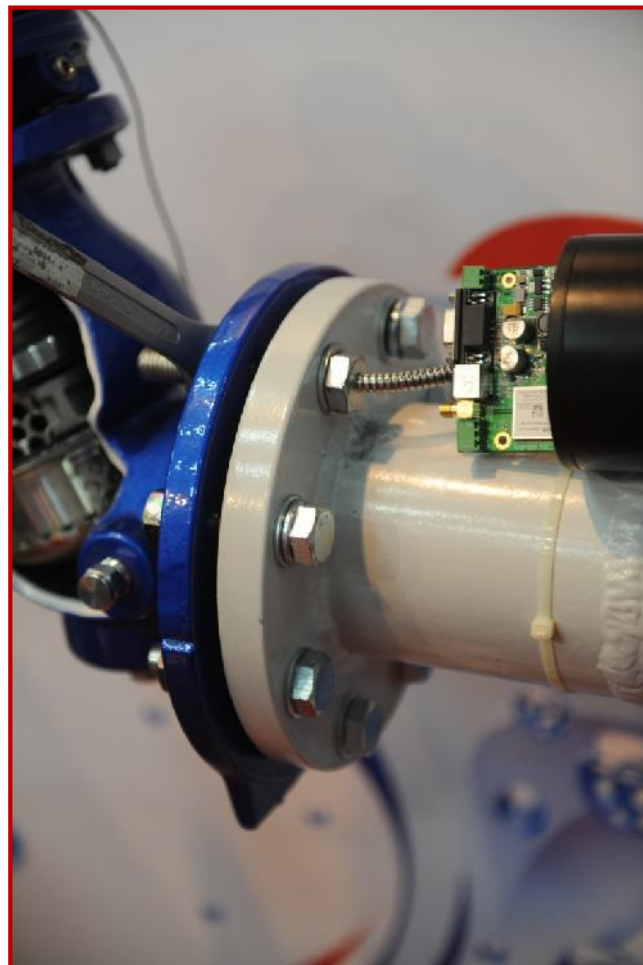


Key Benefits

- Fits bolts and screws of many calibers
- Ideal to provide protection for equipment in remote areas
- Completely invisible and tamper proof
- False Alarm Rate of almost **Zero**
- Based on D-fence's rugged and robust Strain Gauge Sensor
- "Shoot and Forget" system. No need for on-going maintenance.

Applications

- Electric Generators
- Water Pumps and valves
- Oil Pumps and valves
- Air Conditioning Units
- Any other type of equipment held by bolts and prone to theft



D-Bolt Technical Specifications

System Unit Processor	
Unit dimensions	According to client's needs
Processing unit	Up to 32 sensors per processing unit, or up to 30 sensors with additional connector for a vibration sensor and a fiber optic cable
Deflection force	25 KG of force and above will activate alarm
Dry contact	N.O & N.C. 1A@48VDC
Power supply	12mA@48VDC
Communication Output	Wireless, GSM, GPRS, SMS
Environmental Conditions	
Temperature range of operation	+72°C to -25°C (162°F to-13°F)
Storage Temperature	+80°C to -32°C (176°F to-26°F)
Corrosion	All system parts received anti-corrosion treatment according with MIL T 152 all parts are S.S
Humidity	95%
Lightning & electronic trasients	MIL STD 9094
EMI & RFI	According with MIL STD 461, 462
Reliability and Maintenance	
False Alarm Rate (FAR)	Less than one per km per three months maximum
MTBF sensor	4.7x10 ⁵ hours
MTRR	30 minutes
Warranty	Life Time for the Sensor

