# TILTWATCH

# Product Description

The tilt indicators detect unacceptable tilting on goods that must remain upright. When these indicators are used, the product cannot be tipped without indisputable evidence of mishandling.

## TiltWatch® XTR

The TiltWatch XTR is a single-use tip indicator used to monitor goods that must remain upright. When attached to a package, the TiltWatch XTR turns red if the package is tilted past 80°. The patented design ensures that the indicator remains unaffected by movement due to normal handling conditions or random vibrations.

## TiltWatch® Plus

TiltWatch Plus indicates whether there has been tilt to the left or right, the degree of the tilt, or if complete overturn has occurred.

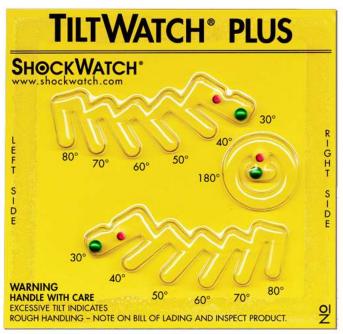
## Benefits

- Reduces mishandling during transportation or storage
- · Provides indisputable evidence of mishandling
- Alerts recipient to inspect contents before acceptance
- Promotes chain of accountability for all product handling
- Confirms effectiveness of packaging
- Helps increase quality of product from dock to dock
- Helps identify trouble spots in supply chain, from production to transportation and storage



# **Industries** Served

- Aerospace
- Engineering and
- Machinery
- Logistics
- Power and Refinery



# (TiltWatch® Plus)



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## **Key Features**

#### TiltWatch® XTR

- Detects Tilt greater than 80°.
- Tamper-proof
- · Indicator will not activate under normal handling
- · Provides simple, cost-effective prevention of tilting
- · Affixes directly to goods or packaging for clear visibility

### TiltWatch® Plus

- Indicates degree of tilt detection
- Complete overturn detection
- Tamper-proof



## (TiltWatch® XTR)

# **Product Specifications**

#### TiltWatch® XTR

Technical Specifications			
Monitoring Range:	Single plane		
Tolerance:	± 5% at 20°C / 68°F, 1 ATM		
Operating Temperature and Humidity:	-40° to 60°C / -40°F to 140°F 5-99% RH, non-condensing		
Adhesive:	2 mil high tack acrylic		
Adhesive Shelf Life:	2 years		
Composition:	Rigid polystyrene housing with non-magnectic steel indicator		
Dimensions:	2.92in x 2.37in x 0.21in/ 74.27mm x 60.31mm x 5.29mm		
Weight:	~14.17g		
Installation:	Pressure-sensitive adhesive or holes to accommodate screws, nails, or staples		
Customization:	Private logos available Minimum quantity applies		

#### TiltWatch® Plus

Technical Specifications			
Monitoring Range:	Single plane and rollover		
Tolerance:	± 5% at 20°C / 68°F, 1 ATM		
Operating Temperature and Humidity:	-40° to 60°C / -40°F to 140°F 5-99% RH, non-condensing		
Adhesive:	Vinyl acetate copolymer		
Adhesive Shelf Life:	1 year		
Composition:	Clear PVC housing and glass indicator		
Dimensions:	4.6in x 4.6in x 0.3in/ 116.84mm x 116.84mm x 7.62mm		
Weight:	~15.30g		
Installation:	Pressure-sensitive adhesive or holes to accommodate screws, nails, or staples		



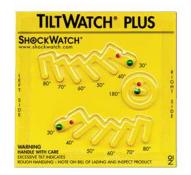
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# Selection Guide

	TiltWatch XTR	TiltWatch Plus
Sensor Type:	Steel disc, non-metallic	Glass Balls
Arming Method:	Remove adhesive backing	Remove adhesive backing
Serialized Barcode:	Yes	Yes
Indicates Tilt Direction:	No	Yes
Indicates Degrees of Tilt:	No	Yes
Inversion Indicator:	No	Yes
Activation Angle:	Greater than 80°	30° with 10° increments to 90°



(TiltWatch® XTR)



(TiltWatch® Plus)

# **Product Application**

- Biotechnology and Drugs
- Office Equipment
- Medical Devices and Supplies
- Appliances
- Agriculture
- Construction Supplies and Fixtures
- Furniture and Fixtures

- Logistics / Transport and Storage
- Computer Hardware
- Auto and Truck Parts
- Packaging/Crating
- Auto and Truck Manufacturers
- Chemicals/Petro-Chemicals
- Aerospace and Defense
- Art

- Energy and Utilities
- Scientific and Technical
  Instruments
- Consumer Electronics
- Electronics
- Industrial Equipment
- HVAC



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## Product Guide

#### Rules of Thumb:

Once the TiltWatch indicator is armed:

1. Do not tilt left or right.

2. Affix to carton immediately in an upright position.

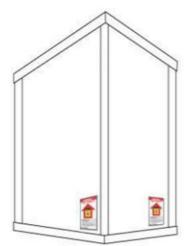
#### **TiltWatch Application Instructions:**

1. Remove the TiltWatch companion label from it's adhesive liner and place it carefully over the TiltWatch so the TiltWatch protrudes through the opening.

2. Peel the adhesive liner from the back of the TiltWatch. Make sure you hold it in an upright position. Once the adhesive liner is removed, the TiltWatch is armed.

3. Place the TiltWatch in an upright position near the lower corner of the shipping container. This placement helps to align the TiltWatch properly and adds rigidity. Mounting as low as posible provides the best response.

4. Press firmly in the center and around the edges of the TiltWatch and TiltWatch Companion Label to make sure the adhesive makes good contact with the container to which it is being applied.



#### Tip:

Rough wood and heavily waxed wood containers may require special attention. If the wood is extremely rough, ShockWatch recommends the use of a spray adhesive to increase bonding strength.

## **Related Products**



ShockWatch Flex



ShockWatch Dot





ShockLog® 248

ShockWatch RFID



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