



Screw Out Tamper Evident Caps

The screw out tamper evident cap is a packaging design that opens with a twist and provides tamper-evident functionality. Commonly used in scenarios where the need for security is balanced with the user experience, such as used in the packaging of wine, beverages, pharmaceuticals, cosmetics and other products.

Structural of Screw Out Tamper Evident Caps:

1. Main structure: Aluminum shell, usually equipped with a threaded structure inside to match the threads of the bottle opening by rotation.

2. Anti-counterfeiting component:

Disposable sealing ring: located at the bottom of the cap, it breaks or detaches on first opening, leaving a visible mark.

Locking ratchet: Built-in one-way ratchet or barb to prevent secondary sealing after the cap is re-tightened.

Tamper Evident Principle of Screw Out Tamper Evident Caps:

- Physical Destruction: The sealing ring breaks or detaches on first opening, providing irreversible evidence of opening.
- Visual warning: broken sealing ring or color changing mark (e.g. thermochromic ink) indicates that it has been opened.
- Technology overlay: Digital tamper-evident technologies such as QR codes and laser engraving can be integrated to enhance security.

Comparison with Twist Off Tamper Evident Caps:

Characteristics	Screw Out	Twist Off
Opening method	Swivel opening, repeatable closure	Swivel breakage, one-way irreversible
Evidence of tamper-evidence	Sealing ring broken/separated	Tamper-evident ring left on the top of the bottle
Application Scenario	Products that require multiple openings	High-value products that need to be opened once

Core Advantages of Screw Out Tamper Evident Caps:

- Convenient to open: the rotary operation conforms to the user's habit and is suitable for products that need to be opened several times.
- Reliable anti-counterfeiting: the sealing ring cannot be recovered after destruction, effectively preventing tampering.
- Strong sealing: Aluminum + elastic inner cushion (e.g. PE cushion) ensures long-term airtightness, moisture-proof and light-proof.
- High-end adaptability: the surface can be plated, sprayed or laser engraved to enhance the packaging grade (e.g. high-end skin care products).

**Typical Applications of Screw Out Tamper Evident Caps:**

- Pharmaceuticals/healthcare products: bottled products that require frequent access but need to be tamper-proof.
- High-end alcohol: Whisky, liquor, etc. with screw-out tamper-evident caps, balancing convenience and security.
- Cosmetics: Creams, serums and other categories that emphasize sealing and brand texture.