



## **Product Alert – Counterfeit Tyco Fire Products - Automatic Fire Sprinklers (TY7226)**

**July 14, 2023**

### **Type of Notification: Counterfeit**

FM Approvals has been made aware of counterfeit automatic fire sprinklers found in Brazil bearing an FM Approvals mark. FM Approvals has neither tested nor certified these products.

**Company Identity:** Unknown

**Product Identity:** The sprinklers bear the sprinkler identification number (SIN) “TY7226” which is designated to Tyco Fire Products and the letters “TFP,” however, these were not made by Tyco Fire Products. The identity of the manufacturer is unknown.

**Description:** ¾ inch NPT fusible type pendent style sprinkler

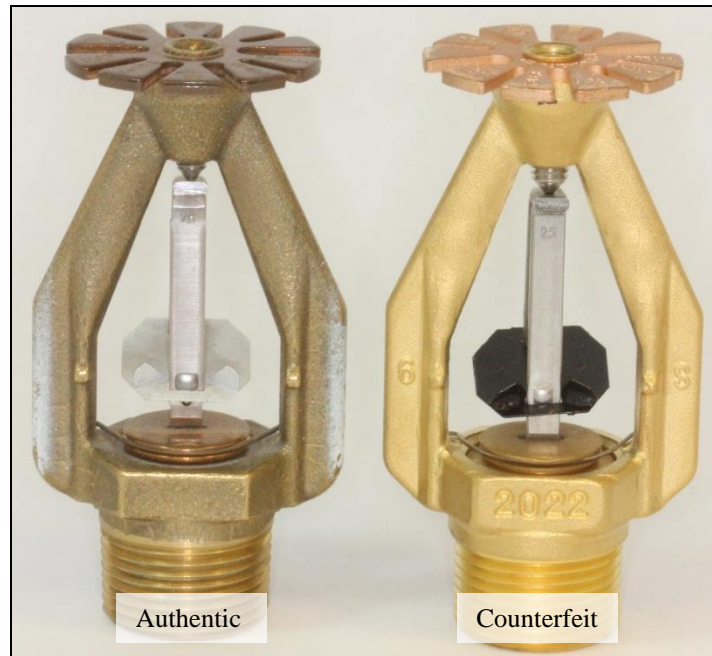
**FM Approval Status:** Not FM Approved.

**Hazard Involved:** These automatic sprinklers cannot be relied upon to react to or control a fire. Failure by any of the following mechanisms is possible: failure of the thermal element, orifice leakage, premature or delayed operation, separation of the deflector, inadequate or excessive discharge rate, corrosive attack, failure to operate, failure to produce an adequate discharge pattern, etc.

If you suspect you are in possession of counterfeit TY7226 sprinklers bearing the FM Approvals certification marking or if you have any information relative to these referenced products, please bring that to the attention of:

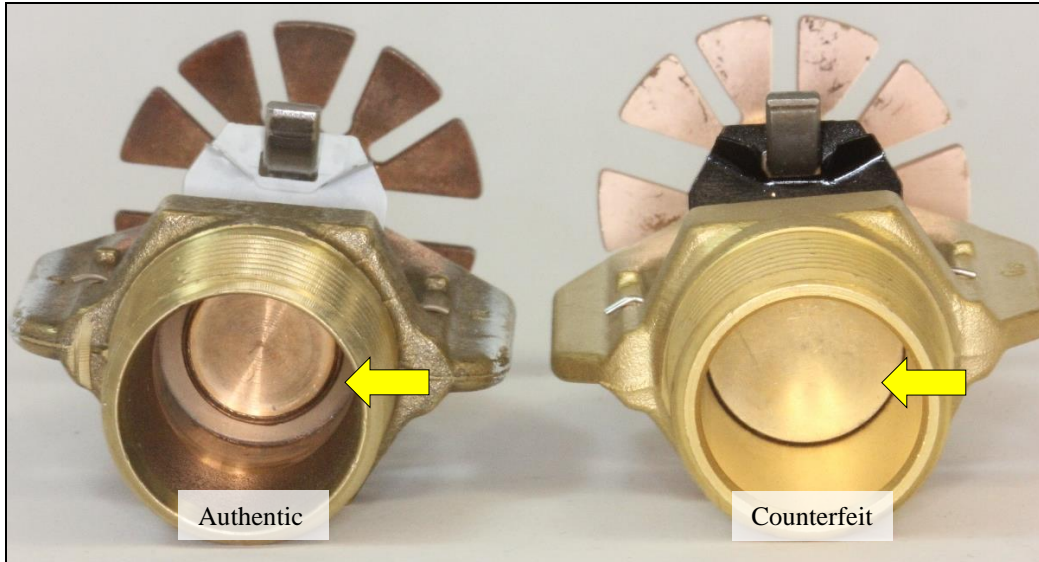
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**Figure 1** shows a profile view of an authentic Tyco TY7226 next to one of the counterfeit sprinklers. The frame of the counterfeit sprinkler is a lighter color than the authentic version but looks very similar otherwise. The authentic example in the photograph has a 214°F temperature rating, which is the reason for the white paint on the frame arms and fusible link. Authentic TY7226 sprinklers rated at 165°F would have no paint on the frame and black coating on the link, like the counterfeit.



**Figure 1.** Comparison of one of the counterfeit TY7226 sprinklers (right) and an authentic Tyco TY7226 pendent sprinkler (left).

**Figure 2** on the next page shows the inlets of the authentic (left) and counterfeit (right) TY7226 sprinklers. The cap of the authentic TY7226 is darker in color than the counterfeit. No seal is visible in the inlet of the counterfeit while the PTFE-coated washer can be seen around the cap in the authentic sprinkler.



**Figure 2.** Authentic TY7226 (left) and a counterfeit (right). The inlet side of the orifice caps differ in color and the PTFE-coated spring washer seal can be seen around the cap of the authentic sprinkler as a light-colored ring.

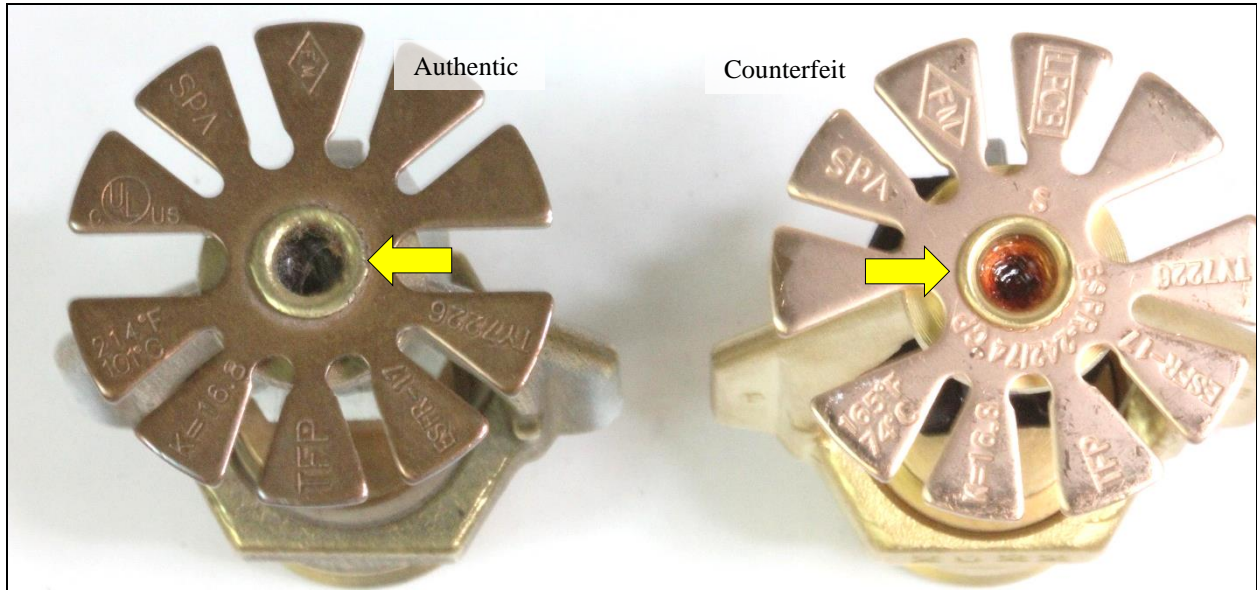
**Figure 3** on the next page shows close view of the orifice cap counterfeit sprinkler removed from the final assembly. The counterfeit sprinklers use O-ring type seals which are not in any current FM Approved sprinklers and have not generally been used since 2001 when the Consumer Product Safety Commission recalled some O-ring sprinklers after discovering they failed to operate after some time in service.



**Figure 3.** Counterfeit TY7226 sprinkler seal. The counterfeit cap superficially resembles the authentic version but conceals a potentially unreliable O-ring type seal.

**Figure 4** shows the deflectors of an authentic TY7226 and one of the counterfeit sprinklers. The content and positioning of the stampings on the deflectors are nearly identical. Both sprinklers have a substance applied in the bore in the center of the deflector. In the authentic sprinkler this

is a thread adhesive the covers the top of the load screw and prevents tampering and keeps the load screw from backing out under load. The adhesive is green in color in authentic sprinklers. Similarly, there is a substance on the load screw of the counterfeit but it is translucent red rather than green and it is unknown if it is actually thread adhesive.



**Figure 4.** Authentic TY7226 deflector (left) and counterfeit deflector (right). The markings are similar, but the counterfeit deflector material is lighter in color and the thread adhesive is translucent red rather than green like the authentic sprinkler.