Dr. Lin's talk - No.3

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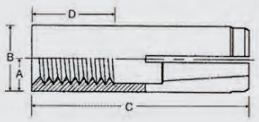
Drop-In Anchor:

A Case Study on Claim Settlement

In this episode, I will stress on the importance of quality control and talk about a case where an end user submitted a successful claim to a manufacturer. Today's topic is Drop-in Anchor.

Drop-in Anchor uses a wedge-shaped cylinder to generate external expansion, friction, and consequent fastening effect. It is generally applied to protective fences, canopy, exterior wall air conditioner setup, and so on, and in correspondence it is also fastened on cement surface, brick wall, etc. However, one should not fully rely on its fastening performance because it may loosen when it bears the load in an application that involves bigger vibration. Accordingly, I suggest you avoid applying it to ceiling fixtures like ceiling fans.



Preface

In a common factory, quality control division is always a pain in the neck for manufacturing division. It is not rare to hear such dialogue in the manufacturing shop:

"It's just a little shy and it does not affect the use of the function. You shouldn't have even bothered to shut down my machine. I didn't do that on purpose!"

"You're saying you can get away with this just because you didn't mean it?!"

"I'm not, but I'm saying I didn't expect this to happen."

"You really pissed me off!"

"No, YOU are getting on my nerves! Go tell the plant manager if you like as I don't care."

Cause of the Case

One of our clients (users) spotted a major problem in our shipped drop-in anchors, and declined to accept a particular dimension in the shipped products.

He wrote an e-mail and explained, "The anchors were shipped from Plant A of your company. **Picture A** indicates core of the detected problem. We have also verified that the anchors originated from your Plant A. When the anchors were taken out of the package box, I found loosened dilating plugs in one third of your anchors."

Picture A: Loosened dilating plugs and plastic plugs.

That implies the client (user) had to ask operators to perform manual sorting to filter out intact drop-in anchors with the plugs attached. The client continued, "I will send back a few defected products along with unsorted small packages to you for further investigation. Kindly let me know the cause of this problem and how to resolve it." He even said, "I will submit a claim for all the cost derived from the manual sorting of our operators, and the cost will be calculated after the operators complete the manual sorting."

Settlement

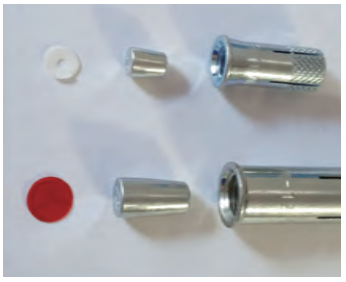
First, I told the client to calm down and expressed my apologies for this incident, "I feel sorry that our oversight resulted in your loss and inconvenience. We have formed a team to investigate into this issue. I will pay full responsibility if we verify the problem was originated from our plant. Please wait and I will give you a satisfying response." Then, I forwarded the e-mail to Plant A, and ordered the plant to recheck the products of the same batch number and type to see if the same problem occured. I told the plant to report to me immediately when the check was completed.

Picture B: After assembly, the red and white plastic plates hold the dilating plug.

Investigation

As far as I know, a dilating plug is assembled with a round plastic plate (plug) (see **Picture B**). Before the anchor is

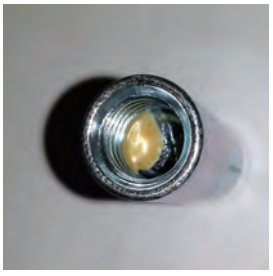
Picture C: Before assembly. Diameter of the red and white plastic plate should be larger than the diameter of the dilating plug.



Picture D: Drop-in anchor before assembly where the plastic plate is not yet inserted.

assembled (see **Picture D**), the diameter of this plastic plate must be larger than the anchor's internal thread diameter (see **Picture C**). During assembly, the plastic plate will reach the anchor point and hold the dilating plug within the drop-in anchor (see **Picture B**). There is no way that the wedged cylinder can loosen unless the incorrect plastic plate is inserted. If the loosening does occur as described by the client, I suppose something must be wrong with the plastic plate.

Conclusion



Picture E：Another way of assembling (point glue)

A week later, the client received the sample. The manufacturing division of Plant A fully agreed with the problem found by the client. Based on the investigation, onsite operators made an unforgivable mistake during plastic plate insertion, causing loosened dilating plugs. The plant manager has ordered involved manufacturing units to run self-examination and punishment. To prevent the problem from reoccurring in the future, we have changed to another way of assembling (see **Picture E**). We inquired the client for all the cost for manual sorting.

I informed this result to the client the other day. The client expressed gratitude and knew I had taken preventive measures to eradicate the same problem. I paid the client USD 808 as an indemnity for manual sorting along with a credit memo.

Dear readers, I wonder if you noticed the fact that factory quickly agreed on clients' claim when the mistake was found to be caused by the factory. With wrong quality and defective rate as high as 33%, the factory will usually have products returned and produce a new batch for clients, but quite differently my client only asked for the cost for sorting. This case proves once again that "quality is the heart of the factory." Excellent quality is the one and only key to sustainable business operations. ■