

Double Shot Molding

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Scope

My initial goal with my plastic injection molding machine is to pot wire splices. When done as a single step mold, the wire tends to be pushed to the perimeter and not be entirely protected by the mold. I can put tension on the wire and get it to center but this stresses the wire.



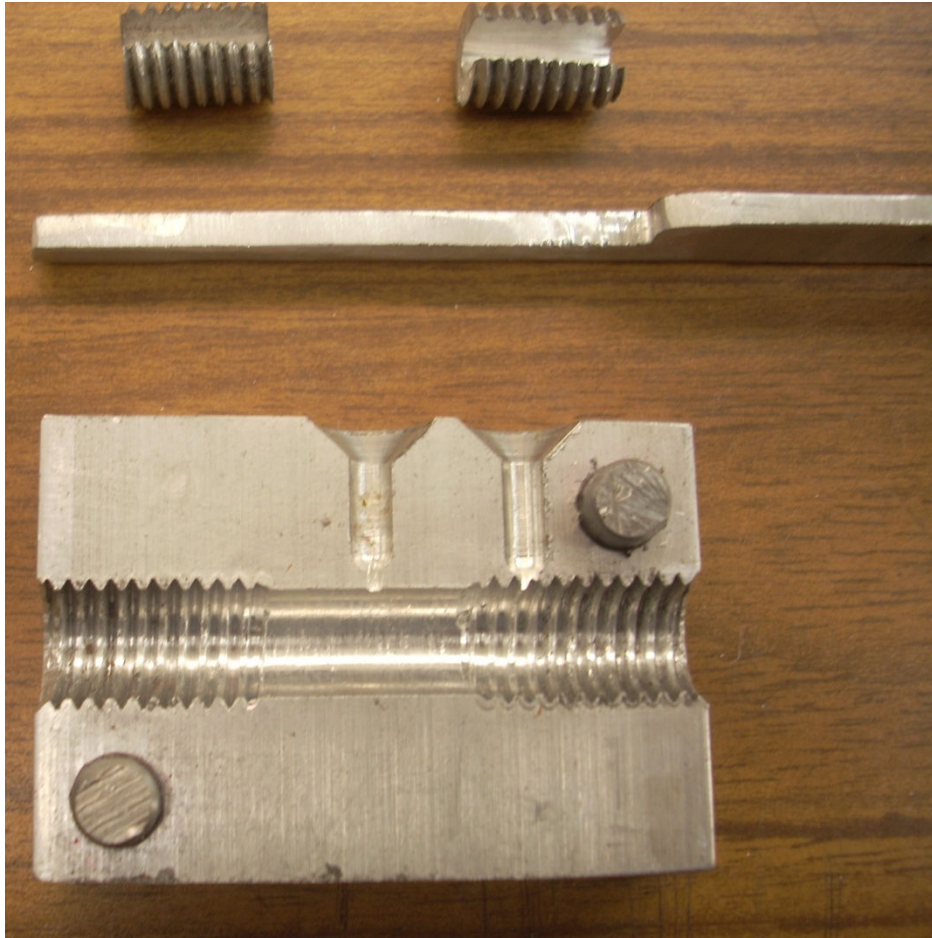
An alternative is to do a double mold. The first mold is a cylinder with a slot in it. I put a red wire in the slot to make it easier to see.



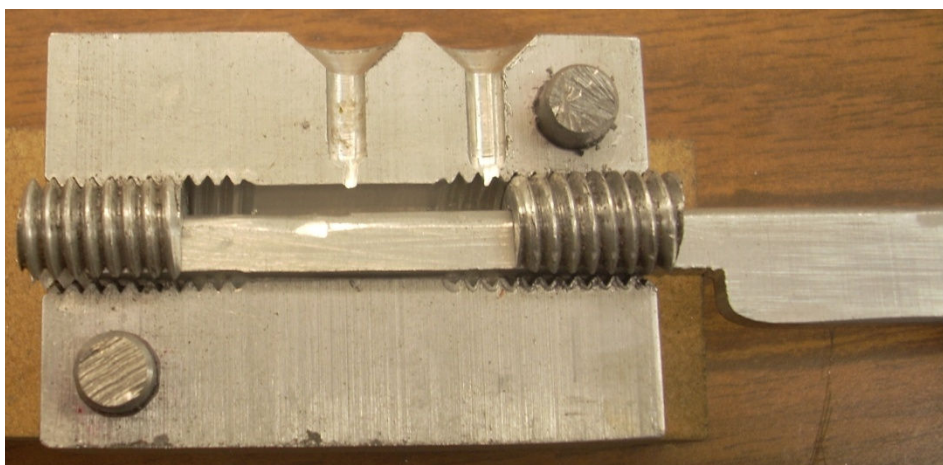
The second mold contains the wire and additional plastic to fill the slot.

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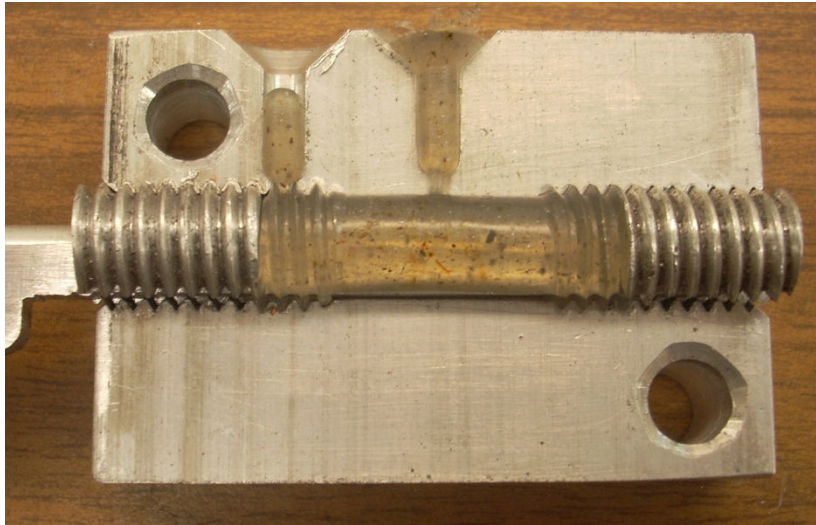
The First Molding



The only addition to my mold is the aluminum bar.



Here you see the bar positioned in the mold. The center sprue will accept the molten plastic. The sprue on the right acts as a riser.



I am using recycled plastic here which is why the molding is not translucent white. You can see the sprue full of plastic and the riser partially full.

It is a simple matter to pull this assembly from the mold, lift off the two threaded slugs, and pull

out the aluminum bar.



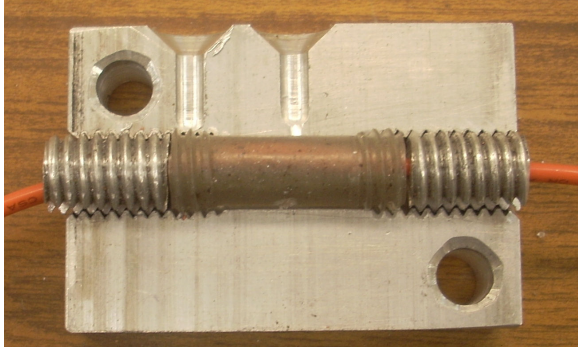
Here is the untrimmed first molding.



In this picture I have trimmed the part and partially inserted the aluminum bar so you can see the molded in slot. The threads cover the ends of the slot but are easily broken.

The molded in place wire will not be as solidly held because this first mold is cool before the wire is added. All holding power must come from the second molding.

The Second Molding



The first molding is placed back into the mold with the slot facing towards the sprue. Plugs are added on the end to hold the wire down into the slot.



This is a later double shot mold that worked. The second molding does seem to be fused into the first one.

I'm loaded for bear with 4 first moldings ready to be cleaned up and used with the second mold. That virgin plastic sure looks nice.



Your questions and comments are welcome. All of us are smarter than any one of us.

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