

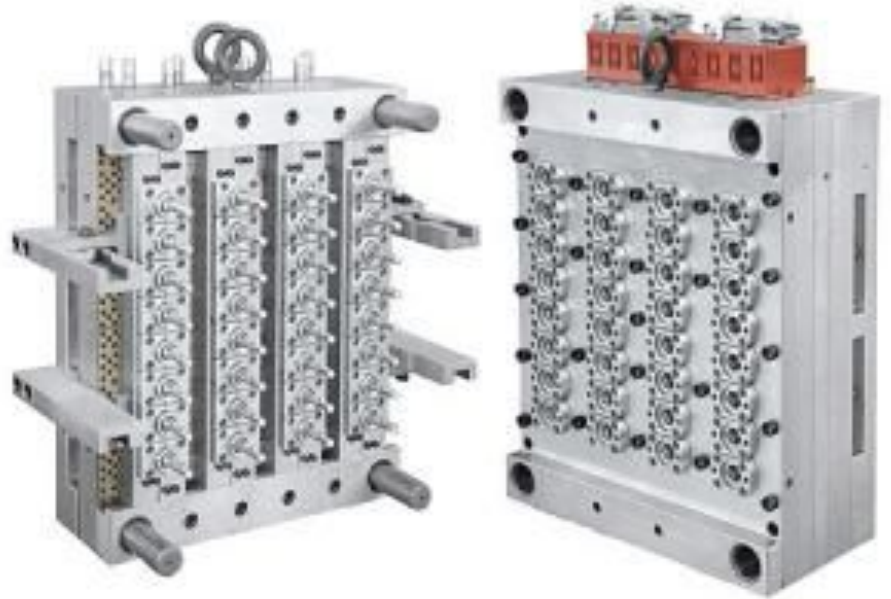
Manufacturing Processes

Activity 2.2.2

Alex - Tyler - Brody

Injection Molding Of All Plastic Parts

Machine melts the plastic and injects it into molds for each of the different plastic parts.



Gripper Applied To Casing

Machine holds the gripper while another pushes the casing up and through the gripper.



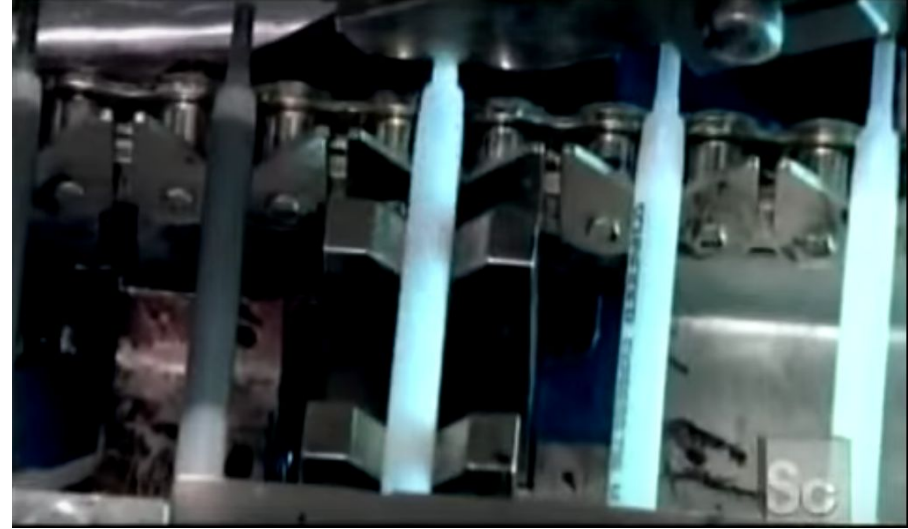
Labels Are Screen Printed Onto Ink Cartridge

Labels for the company are printed in black ink onto the ink cartridge.



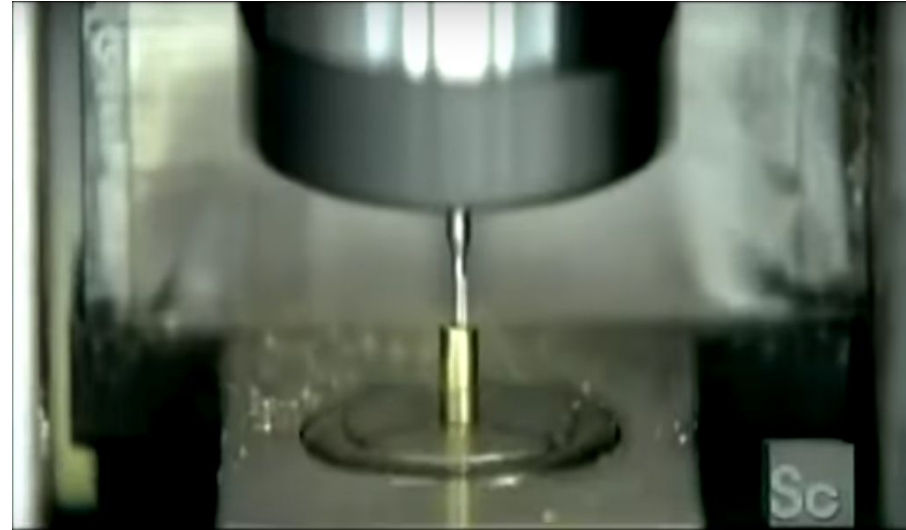
Ink Injected Into Ink Cartridge

Machine injects ink through the tip of the ink cartridge. Another machine injects gel into the other end that stops the ink.



Pen Tip Is Machined

Small cylindrical piece of metal is milled into a point with a small hole in the middle.



Ballpoint Inserted Into Pen Tip Which Is Inserted Into Ink Cartridge

Machine forcefully inserts the ballpoint into the pen tip. The machine then injects the ballpoint and pen tip into the ink cartridge



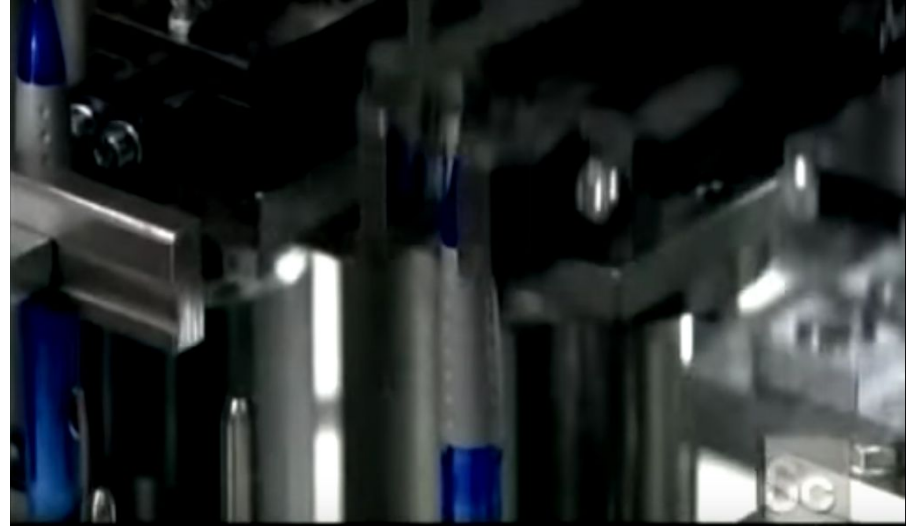
Pen Top Is Assembled

Metal clip is attached to the top of the pen and that is attached to the rest of the pen casing.



Ink Cartridge inserted into casing

Ink cartridge gets inserted into the pen casing. Spring is put onto the end of the ink cartridge. The gripper is attached to the end of the pen completing the assembly.



Video (Source)



Conclusion Questions

1. Some of the newer materials that are being used are becoming more environmentally friendly so they can be recycled and reused. The processes are also becoming more environmentally friendly so they don't disrupt the environment.
2. These changes are reducing the social conflicts between people who want to save the earth, they are becoming cheaper as time goes on and they are definitely saving the environment.