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The Amazon company is a very well known company that uses the engineering design process to produce their products efficiently for their customers. As the world becomes more technologically advanced this company rapidly thrives because of its convenience for consumers. Much like my VEX team, Amazon uses the engineering design process to advance their effectiveness.

This company has a diverse set of applications that capture the interests of many customers. As the company has to cover a lot of orders in a single day they needed a process that would help them complete the orders and keep everything organized at the same time. Like most apps, Amazon utilizes the feedback that their customers give them on their product. They prioritize all feedback, continuing to collect data to find ways to make the needed adjustments. When packages started to pile up and people were not getting the things they ordered, they started to develop a solution to fix these problems. They decided to incorporate robotics into their company. They identify the problem and start researching ways to fix the problem. They carry out many trials to locate any issues they have and enhance the performance of the product. The testing stage consists of rigorous trials where machines learn AI algorithms in warehouses that are used to predict their customers' preferences. These trials help the robots to adapt to the

environment by teaching them to navigate safely throughout the work fields. Along with creating

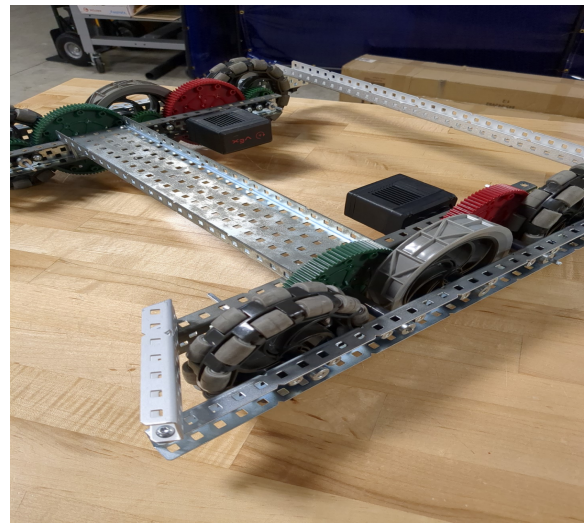
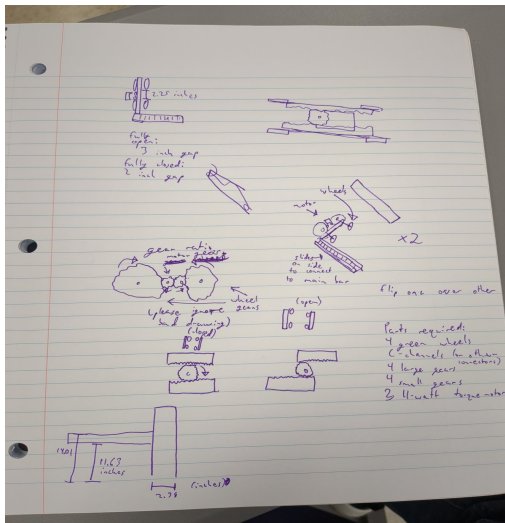


many rules and protocols to ensure the safety of their employees. The final step they complete is sending out the finished product into their work fields.

The Amazon corporation has grown so much that they need more and more employees to help produce and deliver their products. In 2012 Amazon introduced its intelligent robotics system into their facilities. This new advancement enhanced Amazon's speed, accuracy and efficiency within the company. The robots are used for the picking, packing, and shipment process. These robots benefit customers as well as the employees. Amazon continues to create and test their robots to make sure they are safe to work in the workplace with their employees. They have created many rules and protocols that workers have to follow to keep their environment safe. They create small scale tests, trying their best to improve their robots before making any big implements.



Like Amazon our robotics team studied the objective of the VEX over under game. We approached the problem and brainstormed the best way to create our robot to win the most points in the matches. During our engineering process we documented the technical drawings and kept a record of how many times we decided to change a feature of the robot. We also ran many trials in the field to see what our robots strengths and weaknesses were. VEX robotics is a great way to prepare students for their future career paths because it enables them to actually apply what they know about the engineering design process and solve hands-on problems.



I chose Amazon because it is a very well known company and people use it well outside of the United States. Our robotics team uses a similar process when approaching the VEX robotics competitions. Both Amazon and our robotics team utilized the engineering design process to create an effective way to run a company and work with a team to advance in VEX robotics.

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Pictures

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