

HS System Control Region 8 PA-TSA (2018)

As always, consult your TSA rules for details. Remember to complete the necessary documentation. Be prepared to present to the judges and answer their questions.

Historically most of our Region 8 systems have been Lego based. The rules are not vendor specific. In the spirit of the competition, all systems should be student designed and constructed. Commercially available kits or components made to specifically solve the challenge are not to be used.

*****Include a bill of materials with retail cost for any “non Lego” components used in your solution.*****

HIGH SCHOOL LEVEL

We have all been there. You get your favorite fast food, it's hot on the tray and you are hungry. You head over to the condiment counter only to find the poorly designed dispensing device is no longer working, or there is a mess of ketchup, mustard, etc... all over the place. Back to the cashier you go to ask for the little single serve packets. Some reports say trillions of them are manufactured each year worldwide creating a not so “green” situation.

Your challenge, design a better condiment dispenser! Your device should dispense ketchup (you can choose your favorite brand). It should work **WITHOUT** any physical contact. Your device should dispense even proportions of the ketchup with each cycle. Each proportion should be roughly one teaspoon. It should store at least enough ketchup for five cycles before refilling. The device should be easy to refill and easy to clean. The device should work for a variety of food types (hotdogs, burgers, fries and the little paper cups). When empty, the device should somehow signal to staff that it needs to be refilled.

BE SURE TO CONFIRM NO TEAM MEMBERS HAVE KETCHUP ALLERGIES.....

Good luck!!