SHPE at UTK Pneumatic Machine Competition 2016

Introduction:

The Society of Hispanic Professional Engineers, SHPE at UTK, wishes to invite you to participate in our first ‘Pneumatic Machine’ competition as part of Engineer’s Day 2016 in The University of Tennessee, Knoxville. There will be a limit to 15 teams; please respond as quickly as you can to confirm your attendance. There will be awards and certificates for the top three (3) places. Each team will be limited to 5 students. Schools may register more than one team, but the first team of each school will be given registration priority to ensure representation from more schools. If 15 different schools are not registered by ED, then a second team from a participating school can enter the competition.

Instructions:
Design and assemble a simple pneumatic machine with given supplies and limited time. The pneumatic machine must be able to pick up an object(s) off the ground and be able lift the object(s) on its own without any additional help from the group members or objects not provided.

In engineering you must be able to work in a team with an established budgets and deadlines while making a safe product. On Engineers Day, your team will be given a limited set of materials to make the pneumatic machine and given 30 minutes to complete. The limited materials that will be provided are popsicle sticks, tape, a basket, and 2 syringes. A team can “purchase” more supplies to build their machine, and each team will be provided with a balance sheet to track their budget. Once the pneumatic machine is built, it will be tested for the height as well as weight capacity of the lift. The overall top three winners will be chosen by evaluating the machines for budget and functionality, height and weight lifted.

While the pneumatic machine will be built on Engineers Day, students are encouraged to look for possible design options ahead of time.

Contact:

Please, send emails directly to Josue Gonzalez, jgonza15@vols.utk.edu We look forward to seeing you at UT on Engineer’s Day 2016! Thank you!