

Gro-Mars

Description of Element Use

Chains are used in the sprinklers which serve as a hanging barrier between the halves of the field. The 3/0 chains are 6.5' long and are hung so that the top of the chains are 9' above the ground, allowing a 2.5' gap between the floor and the bottom of the chain. Teams must either move through the chains without damaging or entangling their gro-bot, or build their gro-bot in such a way that it can move under the chains.

Chains are also used in the vertical hydroponic farms as part of the device for hanging the plants. These 4/0 chains hang vertically between the blocks, hang the blocks from the top of the frame and anchor the bottom block to the bottom of the frame. There are bungee cords attached to the lower two blocks. The bottom block is pulled the tightest because both bungee cords are pulling it up, so it swings the least. The middle block has less tension on it because it only has one bungee cord pulling on it, so it swings more easily. All of the slack in the chain is pulled up to the top, which causes the top block to swing and twist more than the other two. Because they are the most mobile and are more difficult to reach, the higher pegs are worth more points.