Optimum Stack Details

Assuming the optimum stack height is 8 cones that means that the robot will need to be able to lift around 5.8 pounds.

# Optimum stack weight

Assuming we are aiming to score enough points for a guaranteed win, we would need to score 40 cones. Seeing that there are 5 possible areas to score them on, four mobile and one static base, we work out lowest effective stack height to score max points. 40/5 = 8. So, 8 cones is the ideal amount of cones we want to put on each goal. If we sub 8 in to the height equations we made earlier we can work out that mobile goals would have a height of 31” and the static goal of 46”. Therefore, by looking at this data we can conclude that we should aim for our robot be able to lift to a minimum height of 46”. This may not be achievable in the early season however we should aim to try to be able to get to this height by the end of the season.

# Optimum stack height