Air Compact Station Setup

This canvas will take you through troubleshooting the Air Compact station and the settings necessary to making a well compacted joint. Joints that don't have a sufficient pack can experience problems down the line so it is important to make sure this part of the process.

Correct Tooling

It is important to make sure the correct sized air compact nozzle is being used for the cones being run. It would be problematic if the nozzle is too big (crushes cones) or too small (doesn't create a nice seal with the cone) which creates an insufficiently packed joint. For most cases, the nozzle color will align with that of the nests/cones, but there may be special scenarios where the Accelerant Team suggests a different fit.

Incoming Material Level

The material level in the cone about to be filled can play a role in how compaction goes. Typically, there is only an issue with compaction if the incoming material level in the cone is too high. Material may get shot up and stick to the nozzle, then when the nozzle returns to its home position some of the material is still stuck up and not falling. Monitoring how much material is in the cone is important as a result. This goes hand-in-hand with selecting the right cone for the weight of joint you would like to produce. A guide to this can be found HERE.

Creating a Good Seal

It is important to create a seal between the air nozzle and the cone during compaction. This can be accomplished by adjusting the nozzle starting position. Increasing this value will send the nozzle further down for when it starts blasting air. If the nozzle starting position is set to a value that is too high it could begin to crush the tops of the cones or blow them out, potentially losing material. On the other end of the spectrum, if the nozzle starting position isn't set high enough, a seal with the cone won't be created. As a result, material/air will escape out the top and the pack will feel loose

on the joint. Finding a middle ground between both helps create the best results from the Air Compact Station.

Checking Pressure

Sometimes even after creating a nice seal with the cone, the pack of the material isn't great. If this is the case, try adjusting the air pressure of the blasts from the HMI. A typical range for values of pressure is about 20-30 psi, but can be adjusted higher depending on the case.

Evaluating the Pack

After running the compaction cycle, it is important to check the pack of the joint and make sure it is quality. Look for a firmness in the joint, not being able to move material around easily, but also that it isn't hard as a rock. If these conditions are met, the joint is likely well packed. This will become easier to identify with time. It will be easier to tell by feel than from visual inspection.

Helpful Tip

The number of air blasts and duration of air blast are typically setting values that don't need to be changed. Three air blasts for 0.5 seconds each is standard for the equipment. Any changes to this likely won't help pack the joint any tighter and will just add time to the overall cycle time.

□ Links to Help

https://acceleranthq.slack.com/files/U0239EH4KK9/F078SCAEC77/accelerant_pro4_pre-roll_machine_manual_6-13-23__1_.pdf