**Movement tools**

How will elements be moved across the production line?

What mechanics / tools will we give to the player?

Static conveyer: 1 square – 1 cycle

This will be the standard way of moving elements across the production line. It will move ingredients 1 space in the production line and this takes 1 cycle.

This mechanism can be rotated 90 degrees to face north, east, south or west.

Static long conveyer: 4 squares (straight line) – 1 cycle

This is a more niche tool used for moving items across the production line. It can move ingredients 4 spaces along the grid in 1 cycle.

This tool is balanced in the fact that it can only move four spaces in a straight line, it cannot move 2 up 2 down for example.

Rotating conveyer: 1 square – 1 cycle

This is like a static conveyer; however, it will rotate back and forth between two directions whenever an item passes over it. This ensures that every odd item gets sent to one direction, and every even item gets sent to another direction.

Sync tables / conveyer: 1 square – 1 cycle

Sync tables would come in pairs and act similarly to a static conveyer, however, whenever an object lands on a sync table, the sync table will stop moving until an object lands on the other sync table. When an object lands on the other sync table, both sync tables will continue conveying objects as regular.

Pulser: 1 square - x cycles

This acts similarly to a static conveyer; however, it waits for a user-defined amount of cycles whenever an object lands on it before passing the object onwards. If another object is pushed onto a waiter, the original object on it is passed off onto the next square.

We could balance this by limiting how many cycles it can wait. We could also add a high cost to this machine for each cycle waited because this can be abused to save physical space.

Portal / teleporter: x squares - y cycles

Like sync tables, portals will come in pairs. When an object enters one portal it comes out of the paired portal.

As these are very strong and arguably over-powered they could be balanced by not being unlocked until late into the game and could have a very high cost associated with them or could be limited to one per level.

Pusher / piston: 1 square – 1 cycle

A pusher is linked up with a trigger block, the pusher activates when an object lands on the associated trigger block. When activated, a pusher will push any object it faces forward one square; this can be used to push objects onto different conveyer belts and thus send objects down a different path.

Conditional rotating conveyer: 1 square – 1 cycle

This is like a rotating conveyer; it will rotate between two directions but instead it only rotates or faces a certain direction when a condition is met. For example: if object type A is on me, face down, else, face right.

**Special:**

Trigger blocks

A trigger block acts as a static conveyer, however it triggers whenever an object is on top of it. Trigger blocks can be linked up to other movement tools, such as Pushers, and the movement tool will activate when the trigger block is triggered.