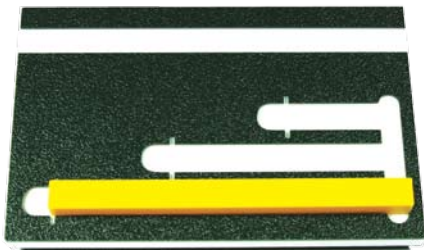


Pipe Inspection

Quality control activity, sorting plastic pipe into six size categories.

Materials

- 1 storage bin
- 1 quality control jig with non-skid feet
- 1 clear plastic 6-compartment box
- 1 small bin
- 54 plastic pipes
- 18 odd-size plastic pipes



Setup

Place the storage bin on its side on the table to the left, with the open top facing the pipe inspector. Place all pipes, including the rejects, into the bin, mixing them thoroughly. Slide the jig under the bottom edge of the bin, aligning it with the groove at the top of the jig. This will keep the bin positioned on the jig. Place the empty divided box to the right of the bin. Place the small bin to the right of the divided box.

Procedure

- Take a pipe from the red bin. Place it on one of the three grooves. To pass inspection, pipe length needs to be within $\frac{1}{8}$ inch of the white crossbar on one groove.
- If a pipe doesn't measure within $\frac{1}{8}$ inch of the crossbar, try the other grooves. If it doesn't fit any of the grooves on the jig, it's a reject. Place it in the bin on the far right.
- If a pipe does measure near a crossbar of one of the grooves on the jig, it's acceptable. Place the pipe in one of the six compartments of the divided box. Sort the acceptable pipes in the divided box, organized by size and color.
- Repeat until all pipes in the storage bin are gone.

Variations with Pipe Inspection

- Combine and measure several lengths of pipe to total less than 12 inches.
- Give workers a ruler and have them find, for instance, 3 combinations of pipes that total 9 inches.
- Continue with other measurements and combinations.

Disassembly

A different person should disassemble the task.

Setup

Place bins and supplies as in the assembly task.

Procedure

- Place all the pipes from the divided box into the storage bin.
- Place all the rejected pipes from the small bin into the storage bin. Mix the pipes thoroughly.

Quality Criteria

There should be 18 rejected pipes in the small bin. The divided box should have 54 acceptable pipes (nine in each division, one color per division).