Automating your Paint Line: What Parts Should you Consider

PART 2

If you are considering automation, there are a few things to think through when analyzing what parts and processes to automate. Some areas to consider are high-volume parts, labor-intensive parts, or parts with similar configurations as this can reduce the investment related to fixtures and spray path programming.

Here are some guidelines.

Automate Parts that:

• Have the same or similar size/features/surfaces

• Are the same or very similar processes during painting

• Contribute to 80% of your volume and include only 20% of your part numbers

• Are already organized into a manufacturing line incorporating a continuous flow

• Require a high amount of non-value added labor like painter repositioning and movement

• Require precise control or allow zero margin for error
DO NOT Automate Parts that:

• Have unique features or processes different from the majority of your part volume

• Are difficult to fixture
  – Are not stable after fixturing
  – Are difficult to repeatedly align

• An operator can accomplish the task much easier or quicker than a robot

• Have low labor content operations, where automation would not gain anything in the manufacturing process

Keep in mind that these are only guidelines. The industrial automation being developed today allows for a lot more flexibility compared to what was available in the past. As with any significant manufacturing change, benefits should be evaluated carefully before making the final decision.