



# VERA™ SYSTEM

VISION ENABLED ROBOTIC ASSEMBLY

## The Problem

Currently, the nut welding process requires a separate line for each type of part that is to be run at the same time. Each line requires an operator, as well as its own maintenance costs and upkeep.

Some parts require multiple sizes of nuts to be welded on for future connections. Traditionally, this requires separate feeders, tooling, and hardware for each size. In some cases multiple nut sizes would require completely separate cells and additional operators.

## The VERA Solution

Our solution bases the total number of required operators and cells not on the traditional method, but on what is required to hit the necessary throughput.

Each one of our **VERA** cells can accommodate hundreds of different parts and nut styles. A single operator loads a part onto an infeed conveyor and a robot recognizes and locates it and transports it to the welding station. A second smaller robot then chooses the correct nut from an assortment of nuts presented and takes it to an automated welder. This eliminates the risk of nut contamination as well as making sure that the nuts are in the correct orientation.

Once the assembly is completed it is either placed on an out feed conveyor, or a parts bin, and delivered back to the operator.

By designing a system this way, the only consideration is how many parallel cells are required to hit the desired production. This system can also allow for full redundancy in the event of maintenance shut-down. By design, every cell can handle every part, allowing for production to continue.

