

ROBOTIC BOTTLE DESCRAMBLER

Description:

The Robotic Bottle Descrambler orients and soldiers bottles in an upright or inverted orientation on a takeaway conveyor without human interaction. The Robotic Bottle Descrambler is a pre-engineered to re-orient bottles from a random horizontal position after being washed, surface treated or drop molded. Bottles can be stood on their bases, or inverted for de-ionizing and other processes. The Robotic Bottle Descrambler, or RBD, is available in two models; the "RBD-Mate" with FANUC LR-Mate robot for applications with lower throughput; and the "RBD-3" with FANUC M-3iA robot for higher throughput applications. Multiple robots of either type can be teamed to meet the highest throughput requirements for bottle and other container handling. The Robotic Bottle Descrambler can be used for a wide range of other plastic containers as well.



Utilizing the FANUC R30iA's high speed integrated iR Vision system, the Robotic Bottle Descrambler is easy to use and meets or exceeds the highest production rates in the industry. The Robotic Bottle Descrambler takes bottles that have undergone a process which causes them to be scattered, and re-orient them onto one or more flat top takeaway conveyors.

One or more cameras captures bottle orientation for each bottle as it moves down a conveyor. Using data from the camera's images, the iR vision system calculates each bottle's "pick" position, and picking order. Each bottle can be picked and placed directly onto one or more flat top takeaway conveyors. Unstable or inverted bottles can be placed by the robot into holding fixtures, or "pucks" on the takeaway conveyor. The bottles can then be quickly, conveniently and reliably conveyed to downstream processing.

Other robotic solutions from your single source bottle and container handling automation expert, Motion Controls Robotics, for fully automated bottle handling include; De-Flashing, Leak Testing, Flame Treating, Case Filling and Case and Bulk Bottle Palletizing.



Customer Feedback on the Descrambler...

"I am awe-struck at the work done on the... bottle automation project. That equipment, the integration, the complexity of the project...seeing it in operation initially made me speechless...I was privy to the initial design concepts, layouts, etc... But nothing prepared me for how utterly slick and well engineered this work cell is in operation. I am sure (the end customer) will be extremely impressed with this engineering marvel. It will elevate their perception of our ability to handle the most complex packaging...I can't come up with enough superlatives about your collective accomplishment!"

Keeping our
customers
competitive
with quality
robotic
solutions

ROBOTIC BOTTLE DESCRAMBLER

Easy to use

- Easy change over - vision system is taught for each bottle simply and quickly
- Intuitive operation and teaching of new products
- Compact in-line, floor space saving, foot print
- Operator pendant for bottle adjustments and error reporting

Increased throughput

- High reliability and uptime; 80,000+ hours mean time between failures
- 50 to 100+ bottles per minute per robot achievable depending on the robot used

Reduced Cost

- Labor savings of up to two people per shift
- Reduced worker compensation
- Reduced floor space requirements



Programmable

- Built in pendant with menu selections
- On-the-fly adjustable pick and place positions

Quality

- No scratching or marring of surface compared to other descramblers on the market

Options

- Any bottle shape
- Any bottle color including opaque and clear
- Proper bottle orientation for triggers and other downstream assembly operations

