

PAINT MANUFACTURER VISION SYSTEMS IMPROVING QUALITY & EFFICIENCY

"Vision, the ability to plan for the future with imagination or wisdom" - Oxford English Dictionary

Industry Manufacturing **Sector** Paint Segment Vision Systems



Project

The client is an international manufacturer and marketer of premium branded paints and industrial coatings and had identified two production issues at their solvent-based paint manufacturing facility:

- Paint cans were mechanically orientated via a time consuming manually set-up system.
- Laser batch code etching on the cans was checked physically.

The client identified that a vision system could be utilised to:

- Automatically check batch and code conformity with their ERP system.
- Check the orientation of the paint can handle prior to the palletiser to prevent spillage or misalignment on the pallet.
- The client engaged Cromarty for assistance with the deployment of the vision system.

Solution

The system had to be designed, installed and commissioned with minimal downtime to not interfere with production. The solution involved two distinct parts:

- A vision system to read the batch number on a can, check the image matched the database and store the image in a network location.
- Use shape search to mark the orientation of a can to a known position and then
 rotate it so that handles aligned for robot stacking on a pallet preventing
 misalignment.

Cromarty Automation's scope included:

- Development of the functional description.
- Design of the system.
- Installation and commissioning.
- Operator/maintenance training.
- Ongoing support.



Outcome

The solution was extremely cost effective; two vision system controllers were used but with multiple cameras 6 production lines could be covered. The removal of manually checking the laser etching of batch codes eliminated cans being produced with no batch code. Reduced time and effort was required between product changes for can re-orientation, resulting in less palletising errors. Maintenance staff were trained to add new products to the system without the need for specialist engineering support. The client realised less downtime, more production and increased efficiency.