

Automation

Your partner in automated material handling and precision assembly

OpTek Systems provides innovative, bespoke automation solutions for the most challenging manufacturing requirements. Engineered to meet your specific requirements, we will supply and install production line equipment, stand alone automated systems and modules to take care of high-speed, ultra high precision, intricate, repetitive and complex assembly tasks. OpTek excels at delivering automation and inspection solutions, especially to difficult applications, and works across a range of environments from foundry to clean room and power plant to food production.

OpTek Systems as a partner in your automation

OpTek supplies fully and semi-automated materials handling systems for:

- precision assembly,
- machine load/off-load
- de-reel and spool
- process interchange
- Enhanced product performance and productivity

Part Handling

- Integrated linear and rotary stages for precision positioning and orientation
- Robotic component handling and pick-and-place
- Reel-to-reel
- Bowl feeders
- Automated de-reel and spool
- Bespoke tooling for fully automated machine operation
- Part inspection and sorting

Vision, Control and QA

- Fully integrated vision and process control
- Standard features include shape search and recognition, alpha-numeric character recognition, ROI definition, calibrated measurements, image filtering
- Innovative image gathering and illumination techniques – inspect difficult to view or inaccessible areas of your product
- Composite image generation – create images that you cannot see through a microscope
- Augment with laser line generation, projected images and arrays, specialist detectors

Approach

- Fully engineered solutions, with mechanical design in 3D
- Closely integrated, in-house designed software, hardware and electronics
- Automated systems using intelligently designed tooling and approach
- Handling of components with one or more small dimensions
- Design in close collaboration with your production engineers
- Extensive experience in laser and optical technology

