

The ten hard truths of machine vision

Location is everything – that is, the location of lighting, location of the cameras, location of the fixturing, location of the debris/oil on parts, etc.

The 80/20 rule – 80% of your project labor will be spent on the last 20% of the job.

There's probably an easier way – in many cases, machine vision can be replaced or augmented with other sensing technologies that may work *differently*, but equally well.

Vision bites back – vision projects can have more natural variability than other controls projects and often surprise newcomers with the extent of the discovery period and testing required to develop a project specification.

Murphy is watching so work with Pro's – assemble a team that contains specialists in I/O, optics & lighting, control, vision programming, mechanical design, networking, etc., to support the deployment.

Orders of 10 – a new phenomenon, thought to be unlikely or impossible, will emerge at roughly 1,000 parts, 10,000 parts, 100,000 parts, etc.

If the plant doesn't want it, it won't work – day to day buy-in from process and maintenance staffs is critical to the successful deployment of any project, but especially so for vision systems that typically require PM.

Shift Happens! – a client who believes that the properties of parts will not shift or that process variability is completely understood (prior to a study with real optical gear) is quite possibly being naïve.

Cheap gear costs double – components chosen on price typically disappoint the whole team.

Miracles out of nowhere – in many cases, a technology applied in a different industry can hold the key to a novel or breakaway approach to your application.