



WHAT WOULD YOU LIKE TO TRACK.

Whether it's following a nutrunner in a sequence, a rivet gun in a pattern, or a powered screw driver installing a series of hardware, Tool Tracker provides for your error proofing needs.

WHAT IS IT?

Designed to support error proofing of nutrunner fastening sequences. Tool Tracker delivers unmatched 3D position accuracy at a great price.



Flexibility

It can be adapted to production lines, repair bays or stand alone stations.



Freedom of Motion

Fixed mount cameras do the tracking so no physical connection is needed to the tool. The targets are passive and do not require power while providing up to 6 degrees of Freedom.



Easy of Use

Tool Tracker allows you to create additional zones by simply placing the tool in the desired location and clicking a mouse.



Low Cost of Ownership

The Tool Tracker system integrates cameras, computer and communications all within one housing, making it easy to install and maintain.

Core Competencies

- Tracks any handheld tool in 3D
 - Targets Passive (Retro Reflective)
 - Vision-based tracking system
 - Poka-yoke changeover
 - Large field of view
 - Infrared cameras
 - Webpage interface



DESIGNED TO SUPPORT

ERROR PROOFING

DESCRIPTION

Designed for error proofing in a fastening sequence. This simple to install and teach vision appliance mounts above the workstation and ties to your PLC via either Profinet or ethernet communication. It's easy to teach by simply placing the tool (with affixed targets) where you want to have a fastening event and clicking a mouse you create a work zone, then you simply move to where the next work zone needs to be in the sequence. When you're working, the PLC enables or disables the tool depending on if the tool is in the correct work zone or not.

CHARACTERISTICS



Poka-yoke/ Mistake proofing

Tool Tracker (along with a PLC) creates an in process poka-yoke technique. Enabling tools when they are in the correct zone allows the operator to complete the correct work sequence. The tool is only enabled when in the right work zone.



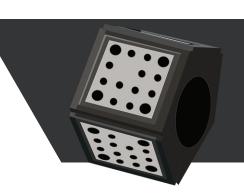
Lighting

Lighting for cameras is Infrared light (non-visible to human operators) this means there is no minimum visible light required for the system.



Targets

Tool Tracker uses passive retro reflective targets that require no power.





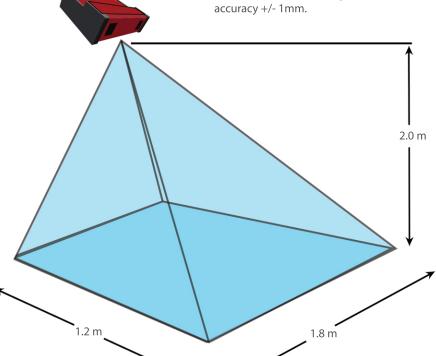
Box Dimensions

4.5" H x 11.4" W x 18.62" L



Field of View

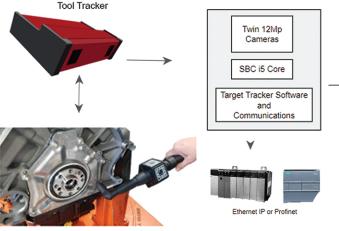
Tool Tracker has a large field of view of approximately 1.8m x 1.2 m @ ~2.0m. This allows this system to maximize the overlap of the two cameras for higher accuracy +/- 1mm.





Architecture / Communication

Module Components



Tool with Target Array Fixed



Webpage Interface

Target Tracker allows you to simply add addition target zone in the appropriate place with simply the click of a mouse.



SPECIFICATIONS

Power: (2.75A @ 24V, 9V-36V) - M12 5 pin male (aka 5 pin phoenix connector) Communications: M12-XCoded Female (aka X Coded Ethernet) Programming: M12-XCoded Female (aka X Coded Ethernet) HMI: Webpage via Programming port