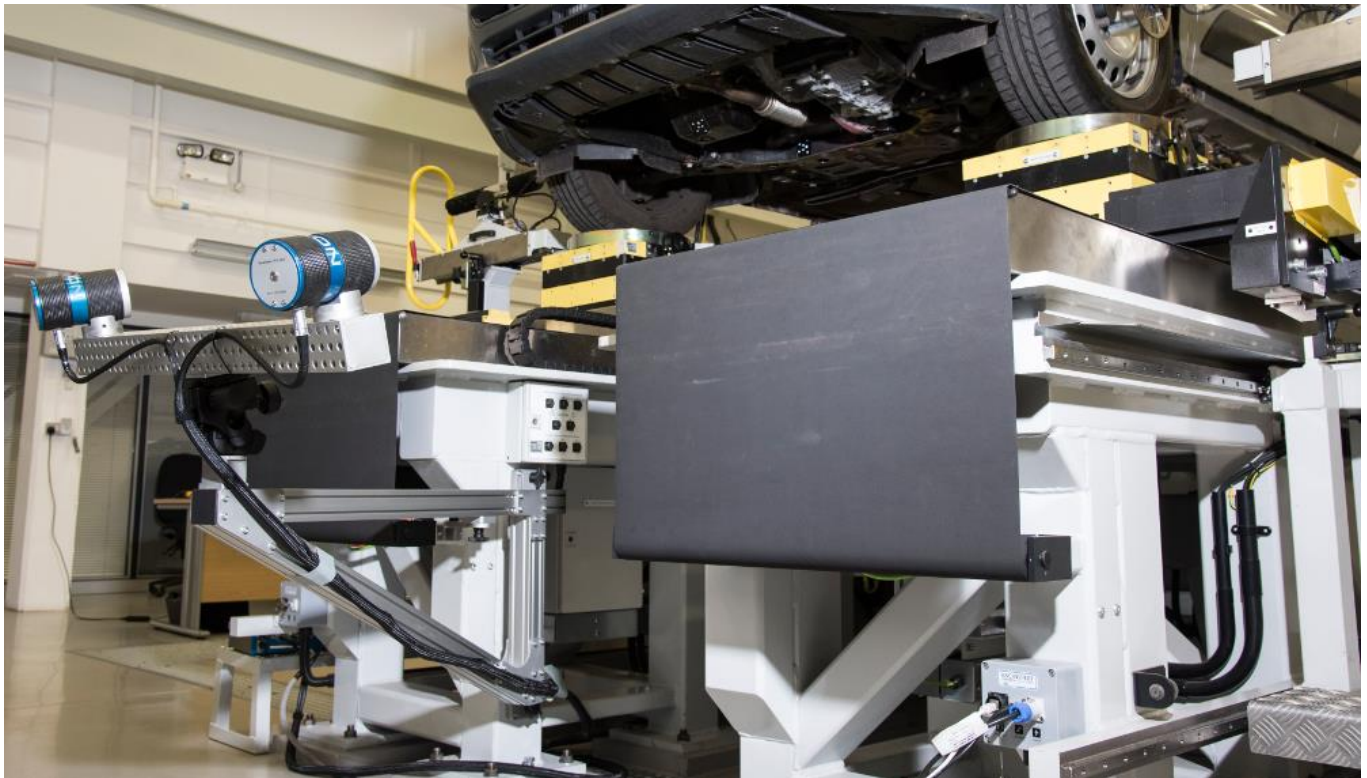




K&C Inspect System for SPMM 5000e

Introduction



The AB Dynamics K&C Inspect System provides precise measurements of vehicle body and component deflections during vehicle Kinematics and Compliance (K&C) tests on an SPMM 5000e. By integrating vision system measurement technology from AICON into the SPMM control system, the relationship between applied forces and vehicle body and component deflections is precisely captured.

K&C testing is critical to understanding vehicle ride and handling performance. As loads are applied to suspension and steering systems, complex reactions are produced, and component displacements and deformations are very accurately measured by the K&C Inspect System

System Components

- A pair of AICON HF4 photometric cameras
- Flexible camera mounting system, including mounting bar, brackets and tripod
- SPMM and AICON software for locating and tracking the X,Y and Z position of up to 50 reflective targets in rig co-ordinates

System Applications

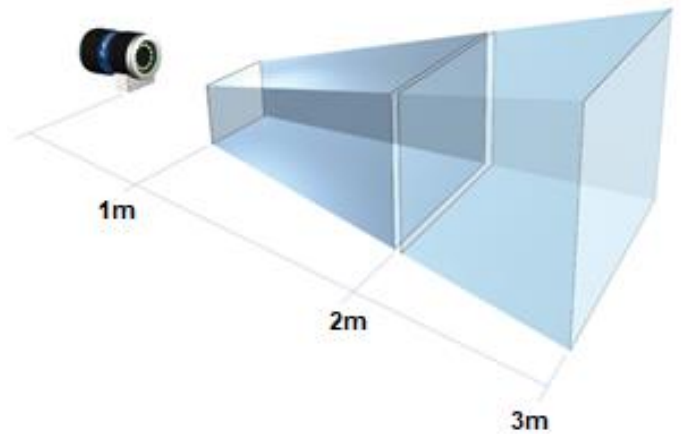
High accuracy measurement of:

- Steering rack displacement
- Steering and suspension arm displacement
- Roadwheel, body, subframe, stressed engine and gearbox deformation

Features

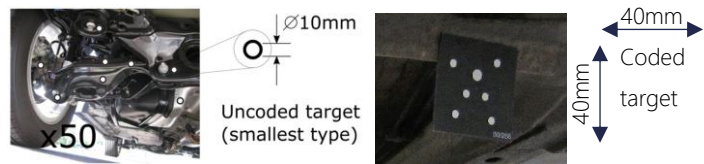
High Accuracy HF4 AICON Move Inspect Photometric Camera System

Distance from camera	X, Y measurement accuracy	Z (depth) measurement accuracy
1m	15µm	70µm
2m	25µm	90µm
3m	35µm	110µm



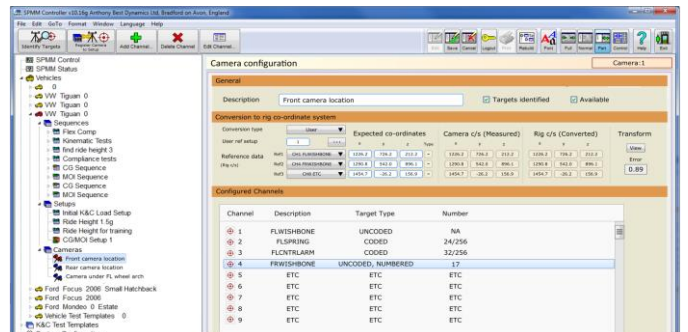
Coded and Un-coded Passive Targets

- Un-coded point targets, Ø13mm outer diameter
- Coded planer targets 40mm x 40mm



Simple User Interface

- The user interface is fully integrated into the SPMM Controller software
- Procedures for system setup, calibration and measurement tasks
- Integrated error diagram



Data Capture Capability

- Up to 1000Hz camera system data capture rate
- Data automatically transformed to K&C rig coordinates
- 150 data capture channels (x, y, z for 50 targets) synchronised with K&C data
- Real time data display in SPMM Grapher™ Software



Fixed & Flexible Mounting Solutions

- Front and rear wheel station mounting brackets
- Tripod for flexible positioning in other locations

