CAM ANALYSIS MACHINE

VDAS[®] TMI021

Studies the dynamic behaviour of different cams and followers and their 'bounce' speed.



SCREENSHOT OF THE VDAS® SOFTWARE

- Illustrates cam and follower separation or 'cam bounce' under safe and controlled conditions
- Fully interlocked for safety
- Highly visual and audible perfect for demonstrations
- Works with TecQuipment's VDAS® to capture data and show live traces (on a computer screen) of the follower movement even at bounce



LEARNING OUTCOMES:

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- Comparing actual results with theory for profiles of follower displacement, acceleration and velocity
- Cam bounce speeds for different cam and follower combinations, and comparison of speeds to those predicted by simplified theory
- How spring rate, preload and follower mass affect cam bounce speed

The main part of the product has a precision-machined heavy steel base which holds a high-torque, direct-drive variable-speed motor. The motor shaft connects through a coupling to the main shaft which then passes into the cam test area. Self-aligning heavy-duty bearings support the shaft which has a substantial flywheel. The flywheel reduces speed variations as the torque demand changes during the cam rotation cycle. The cam under test fits to the end of the main shaft, accurately mounted both axially and radially to ensure repeatability. The follower fits to the bottom of a vertical shaft running in low-friction linear bearings.

ESSENTIAL ANCILLARIES:

 Versatile Data Acquisition System – benchmounted version (VDAS-B)

NOTE: This equipment needs the latest VDAS® and will not work with early versions of VDAS®. Contact TecQuipment or the local agent if unsure.

ALTERNATIVE PRODUCTS:

• Cam and Crank and Toggle Kit (ES12)

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