

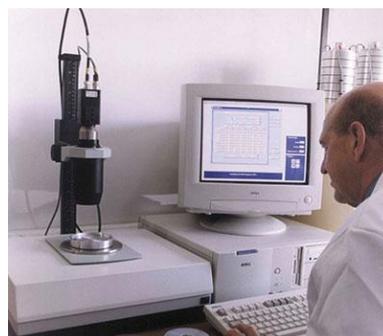


The performance of cascade impactors can be defined by the collection efficiency of each stage in removing entrained particles and droplets from an aerosol stream introduced into the impactor. This collection efficiency is derived from the relationship between the spatial orientation of the jet or jets with regard to the impaction surface, the size of the jets and the velocity of the stream as it passes through them controlled by measuring flow rate.

The calibration of the impactor can be defined in two ways:

- The mensuration of the critical dimensions of the impactor particularly the diameter of the jets on any individual stage
- The empirical measurement of the collection efficiency of any stage stated as its D50 cutpoint using standard aerosol - a process called dynamic calibration

The process of dynamic calibration using standard aerosols is an expensive and time consuming process and has been successfully replaced by mensuration - the measurements of the critical dimensions of a stage especially the measurement by vision inspection of the diameters of the jets. Westech has been measuring and calibrating its own impactors using vision inspection for over 15 years and has continuously offered a complete service to measure, certify and service where required all types of impaction devices and accessories.



Westech has added two **Mitutoyo QV404 Automated Vision Inspection Systems** to its onsite inspection facilities in the UK and US which extend its capability to perform the mensuration of all impaction devices including the ACI, the NGI and the Westech W7 using the parameters set out by the instrument manufacturers or the relevant international Pharmacopeia.

Westech will continue to offer mensuration services using its own IVIS system as required for continuity and to provide comparison measurements for quality control and calibration - a service only offered by Westech.

Westech's Mensuration Service is situated in its own facilities offering a competitive and comprehensive service internally controlled at all times.