MEASUREMENT TASK

The fabrication of microchips and circuit boards consists of a sequence of photographic and chemical processing steps. This work is carried out in controlled conditions in clean rooms which contain a very low level of environmental pollutants. One key stage of the production is wet etching during which unwanted materials are removed from the semiconductors and circuit boards by using a series of chemicals.

The cleanliness of the production rooms should be maintained at all times to avoid costly production stops. Consequently, any installation of flowmeters on the chemical lines risks compromising the sterility of the process and subjecting operators to the often highly toxic substances.

SOLUTION

This situation provides the ideal operating conditions for Katronic's ultrasonic flowmeters. The transit-time technology guarantees that the KATflow range can safely measure both the hazardous chemicals and the electrically non-conductive liquids found in the production processes. The flowmeters can be installed without the need for engineering work and subsequently jeopardising the sterile production environment.

Katronic are able to offer both portable flowmeters and devices for permanent installation to best meet the varying requirements of this demanding industry. Flowmeters like the KATflow 150 can ensure permanent flow measurement of aggressive media like hydrofluoric acid whilst the portable flowmeters are the ideal tool for fault finding and process verification.

ADVANTAGES

- Easy, quick and cost-effective installation on existing pipelines
- Applicable on pipes of various materials, diameters and liquids
- Integration of fixed installed KATflow 150 into existing control systems
- Flowmeters of KATflow series meet strict clean room guidelines
- Safe installation due to no contact with toxic chemical fluids
- Measurement of electrically non-conductive liquids

SPECIFICATIONS

Installation type	Portable and fixed
Media	Chemicals, hydrofluoric acid, purified water
Pipe materials	Stainless steel, PTFE, PVDF
Pipe diameters	10 ... 250 mm
Temperature	Up to +130 °C
Flow velocity	0.01 . . . 25 m/s

APPLICATION

The production of microchips and circuit boards involves flow processes of various toxic chemicals which need to be monitored.

INSTRUMENT SOLUTION

The KATflow 150 provides reliable measurements on a permanent basis without compromising process conditions.

Katronic Technologies Ltd. E-mail info@katronic.co.uk
Tel. +44 (0)2476 714 111 Web www.katronic.com