

## Application Note Get your 'gobs' right with a DT80 data logger

**Customer Requirements** ACI Operations in Victoria Australia manufacture glass bottles and jars. The furnace contains a constant level of molten glass. There is an opening in the furnace that releases the product to pour at a continual constant rate. The glass is then cut at a predetermined size by shears. The molten glass at this stage is called a gob. By inserting a gob of molten glass into a mould and applying compressed air completes the bottle manufacture process. It is crucial that the size of each gob is correct or the bottle will have inconsistent wall thickness.

ACI were experiencing varying sizes in the production of the gobs at infrequent intervals resulting in a large number of rejects. But what was causing it? Was it a mechanical fault on the shears that cut each gob? Was it the motor driving the shears? Was it the Variable Speed Drive (VSD) driving the motor?

### Equipment

*dataTaker DT80*  
USB Memory Stick

### Sensors

Current transformer  
Encoder  
Proximity switches



### Datataker Solution

The client installed a *dataTaker DT80* data logger with an encoder monitoring the motor position, a current transformer monitoring the output from the VSD and proximity switches monitoring each cut of the shears.

The sample speed had to be fast – 20 samples per second - to avoid collecting enormous amounts of data the *DT80* was set to store only the most recent 45 minutes (enough time for the electronic inspection equipment to discover the fault). When the fault finally re-occurred the operator inserted his USB memory stick and retrieved the data.

By matching the VSD output to the motor position and by accurately monitoring the timing between cuts of the shears the fault was isolated and identified.

### Other Applications

Monitoring timber processing production lines  
Tracking down intermittent faults

If you need more detail on this application please contact [joyce.reid@datataker.com.au](mailto:joyce.reid@datataker.com.au)

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