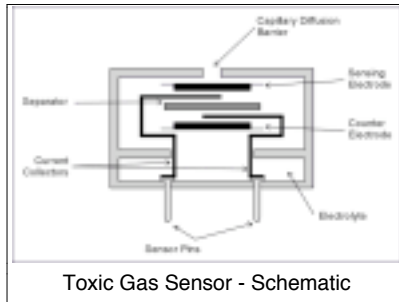


Trouble-Shooting & Disaster Evasion



World-wide Success - Under Threat

First Technology leads the world in gas detection sensors for safety critical, automotive and analytical applications. Some 3 million sensors are produced per year. This success is based on the very best scientific, engineering and manufacturing personnel.



Threat to Production

As with so many products the secret is in a small innovative component; a precision deposit of chemicals that react in the presence of specific gasses.

As Colin Arlott, Director and General Manager put it:

“Without warning, we found that we could not make the sensing electrode. The electrode catalyst material was not cleanly transferring from the metal (transit) foil - disaster. My team immediately concentrated on finding the answer - but we could

not and we were running out of time - in less than a week we would shut down half the product lines in the business and worse, badly let our customers down.

We had the very best but I instinctively knew we needed help; pride is not the issue, solving the problem is. My Customer Support Manager recommended Azteck and specifically Nic Williamson. Nic dropped everything and was on site in 2 days.

Afterwards I commented: “I don’t know what you did, but before you came we had a major problem; now it is solved.” This is more of a compliment than it may appear: Nic did not make a fuss, he did not seek to take the credit, indeed he knew little about chemistry, but:

- Δ Azteck’s work was an object lesson in troubleshooting;
- Δ Nic was the essential catalyst in finding the problem;
- Δ He identified the problem process within a day;
- Δ His inquiries lead to finding a subtle change in a raw material;

and from there we developed the chemistry to accommodate the material change.

My Unit Manager said: “The most valuable thing I have learned is to ask my own people”. He is right but also, Nic asked different questions.

This near disaster confirmed my belief that your own team are in the wrong place when troubleshooting, they are too close; a different viewpoint is essential. The clues were there for all to see; quite simply we did not see them, we were starting from the wrong place.”

“Trouble-shooting hinges on technique, not knowledge.”

Comment from Azteck: We are most grateful to Colin for these kind words, it was a pleasure working with his team. We would like to clarify that while we identified the exact area of the problem, the key material change, and the effect it had on adhesion, we did not understand the underlying chemical reactions. It was Colin’s own chemists who ultimately developed a chemical method to accommodate the new materials.

Finally: In troubleshooting, nothing applies pressure or focuses the mind like idle production lines.

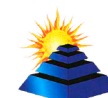
We gratefully acknowledge our client’s assistance in preparing this case study. City Technology is a division of First Technology plc, learn more about their gas sensors at www.citytech.co.uk



Gas Sensors
Part of a range of over 300 types.

Photo & sketch by courtesy of our client, thank you.

Trouble-Shooting & Analysis
for
Businesses with Ambitions



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