

# Managing Shelf Life with fab|Smart®

Avoiding costs of shelf life expiry



## Our Client

Total Chemical and Gas Management (TCGM) service provider.

## The Problem

Almost all packaged gases and chemicals used in semiconductor manufacturing have shelf life expiry dates. If the shelf life of a stock item reaches its expiry date the item has to be quarantined and if the stock item is actually in use the product is removed and then quarantined. When the above occurs the costs, in terms of wasted product and the associated labour can be significant.

## The Solution

fab|Smart®, a total gas and chemicals management system, developed by us in conjunction with an industrial gas and chemicals service provider, provides advanced warning of shelf life expiry using real-time consumption data and statistical forecasting to minimise shelf life expiry issues.

## The Benefits

The speciality gases and chemicals used in semiconductor manufacturing can be very expensive with some stock items costing in excess of 20,000 USD per unit and a typical speciality gas cylinder costing approximately 1,000 USD. Using fab|Smart® functionality to

avoid shelf life expiry, savings in excess of 100,000 USD per annum can be achieved with relative ease.

## The Detail

Almost all gases and chemicals used in semiconductor manufacturing have limited shelf life, in some cases this can be as short as just a few months and replenishment lead times can also be quite long. The cost of these speciality gases and chemicals is often very high, sometimes in the region of 1,000s of USD for a small quantity. So one significant challenge faced by those with responsibility for managing the supply and use of these products is to avoid shelf life expiry when the product is in stock or in use.

Using the existing, inadequate IT systems the on-site chemical and gas management team with considerable time and effort were able to avoid shelf life expiry issues some of the time.

fab|Smart®, developed by TR Control Solutions Ltd in conjunction with an industrial gas and chemicals service provider, provides extensive features to help avoid the costs associated with shelf life expiry with minimal effort on the part of both the fab and the chemical and gas service provider.

fab|Smart® captures real-time data on gas and chemicals consumption and using statistical analysis is able to accurately predict stock item consumption. Coupled with stock item shelf life expiry dates it is able to alert users to the likelihood of stock expiring when in stock or in use thus helping avoid the significant costs associated with shelf life expiry issues.



2018 © TR Control Solutions.

All rights reserved.

**Email** [info@trcontrolsolutions.com](mailto:info@trcontrolsolutions.com)

**Phone** +44 (0) 1932 242 444