



# 2018 April Case Study

Sulfur Hexafluoride

Challenges Of An Overseas Supply Chain

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# Case Study Introduction

Broadcom purchases Sulfur Hexafluoride for critical etch applications, in relatively significant volumes.

Praxair imports the product in Ton cylinders from a raw material supplier overseas. Warehousing and final QC are performed in the U.S..

## Case Study Challenge

Broadcom's increasing demand for SF6 posed the risk of outpacing the fleet of Ton cylinders. Additional containers are expensive and time consuming to add.

Raw material price increases added to the burden of container fleet expansion.

A relatively unique grade of raw material limited the options for substitution.



# Case Study Approach

Competitive bid to search for market alternatives.

Collaboration with Praxair to reconfigure supply chain to improve flexibility and manage cost increases.

# Case Study Results

Praxair identified a new raw material supplier which Broadcom successfully qualified.

Raw material shipped to the U.S. in Tube Trailers and then trans-filled to Ton cylinders.

Greatly reduced the required container fleet size, improving flexibility for growth.

Minimized cost increases.



# Case Study Critical Success Factors

Seamless transition in material quality.

No process adjustments at Broadcom.

Capacity expansion capability.

Competitive material pricing.

# Case Study Lessons Learned

Localizing container assets improves volume flexibility.

Competitive benchmarking helps motivate both the supplier and the customer.

Collaboration helps to stabilize business relationships.



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