

# QTEC Solutions

## Case Study Snapshot: \$46 Billion Defense Manufacturer

A major OEM defense manufacturer was experiencing issues with part availability and the ability to meet the long life product support requirements for one of their major military defense programs. They participated in a study to determine the potential cost impact of implementing an obsolescence management program.

**Study Results:** The detailed University study revealed 205 instances of obsolescence requiring resolution in the program.

Resolution	Number of Instances (N)	Additional Recurring Cost
Alternate-Source	15	\$225,000
Substitute-Desktop	23	\$138,000
Substitute-Normal	8	\$384,000
Substitute-Complex	9	\$810,000
Aftermarket Mfg	30	\$1,950,000
Lifetime Buy	120	\$300,000
Total ( $C_{REC}$ )		\$3,807,000

Consequently, \$3.8M in cost could have been avoided by implementing an obsolescence management solution and identifying parts issues before they happen.

Furthermore, the results below do not include potential redesign costs arising from part unavailability which could dramatically increase the benefits.

## Q-Star

*Today's OEM's and manufacturers face mounting challenges in meeting growing customer demand for producing and maintaining long life products while ensuring availability and compliance in a rapidly changing component marketplace. To remain competitive, companies must find new ways of automating and optimizing the obsolescence management and compliance process, in real-time, to maximize productivity, efficiency, product quality, and ultimately, achieve key business goals and increase profit margins.*

## Capabilities Overview

Manufacturers of products with significant electronic component content struggle with the ability to continue production and product maintenance on a long term basis without interruptions in the supply chain or major cost impacts. Cost impacts occur as components enter later life cycle stages and component manufacturers increase part prices on average by 50% and as much as 300%. Without a proactive obsolescence management solution, companies are at the mercy of higher market prices and limited to no availability.

Manually managing component life cycle and supplier information across thousands of components with spreadsheets, websites or personnel, is costly, time consuming, and nearly impossible with any level of accuracy. A solution requires an automated and cost-effective approach that enables proactive management of product life cycles and the ability to anticipate potential cost increases and degradations in the supply chain.

Q-Star provides the information needed to analyze and develop proactive processes for managing the availability of electronic components and commercial off the shelf products (COTS). Q-Star answers the questions: 1. Which devices may be at risk of becoming unavailable, 2. When that risk is likely to occur, 3. What alternatives are available, 4. What is the RoHS/REACH/Pb-free status, and 5. If a Die solution is available from a qualified aftermarket supplier.

With a daily updated database over 57 million parts and 1,500 suppliers, QTEC's powerful Q-Star obsolescence management system provides comprehensive capabilities for instant identification and automatic early warning email notification of at-risk parts for changes in availability status and product content. Q-Star enables management of complex product configurations and provides component availability, sustainability, and environmental compliance through all life cycle stages.

Q-Star's proprietary 6 factor predictive algorithm and industry leading data quality delivers the most accurate component information available. In minutes, a bill of materials (BOM) can be uploaded into Q-Star and automatically processed to deliver BOM analysis, Project status, Part availability, Alerts, PCN's, Alternate part availability, & REACH/RoHS/Pb status.

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## About QTEC Solutions

QTEC Solutions is a minority owned business enterprise and global provider of innovative component obsolescence and counterfeit solutions for manufacturers of long life products with significant electronic component content.

**Q-Star Functionality:** Q-Star is a web based, easy to use component obsolescence solution that provides clients the ability to load and cleanse BOMs, research and compare parts, obtain life cycle predictions, receive configurable automated email alerts, find part commonalities across projects, and collaborate with other users & sites.

### Q-Star Features:

- Color coded Project Health Status for instant recognition of problem areas
- Part Counts, Part Availability, Alerts, Advisories, & Parts at risk maximize efficiency by

Project Name (Assy PN)	Total	Not Monitored	Part Counts		Part Availability				GIDEP Alerts	Q-Star Alerts	PCN Advisories	Parts with LTB	Parts at Risk	Health Value	Env. Data	
			Without Option	With Option	User Resolved	Consult Mfr	Available	Discontinued Alts								No Alts
COTSBOM	997		2	1	1	4	602	152	235	43	22	23	25	436	86	993
Counterfeit Parts	37		8	1	1	1	9	11	7	41	1	1	19	54	27	
Sample1027	20		1	2			6	6	4				11	57	17	
<b>TOTAL</b>	<b>1054</b>		<b>11</b>	<b>4</b>	<b>1</b>	<b>6</b>	<b>617</b>	<b>169</b>	<b>246</b>	<b>84</b>	<b>23</b>	<b>24</b>	<b>25</b>	<b>466</b>	<b>59.00</b>	<b>1037</b>

Click on any link to see a more detailed report. To return to this page click "Status" on the title bar.

quickly identifying issues that need immediate attention

- Comprehensive part libraries updated daily: Active semiconductors & Passives, Connectors, RoHS/REACH/Pb, COTS, & Die availability
- Advanced predictive Life Cycle and YTEOL

QTEC's flagship product, Q-Star, provides a fully integrated, critical information solution that enables manufacturers to predict, view and manage component life cycles by anticipating possible degradations and disruptions to their supply continuity.

With Q-Star's algorithm based life cycle predictions, collaboration capability, and market leading data accuracy, you gain greater control and management insight for better planning, decision-making and execution across every aspect of the obsolescence process.

### For more information

To learn more about our Q-Star component obsolescence solution contact QTEC Solutions at (951) 270-5357 or sales@qtec.us.

355 E. Rincon Street, Suite 219  
Corona, CA 92879  
www.qtec.us

algorithm incorporating: life expectancy, introduction date, discontinue date, family type, number of sources and current life time buy status

- Daily tracking of over 18 availability and product content statuses such as: lifetime buy, not in production, RoHS status change, assembly process, & material packaging
- Simple drill down part details including component data, all alert notifications for a part, possible alternates, and life cycle codes that predict product sustainability
- Customizable and exportable reports provide a vast array of options including multiple or single sourced suppliers, die availability, and project aging
- A Master Parts list for a clean master internal parts library
- Research requests with direct access to the Q-Star data management team
- Robust user preferences with customizable individual system settings

**Q-Star is Different:** The Q-Star system offers unique features that maximize value for customers such as Boeing, General Dynamics, Raytheon, Sanmina SCI, US DOD, Sikorsky and many others:

- Accuracy - The most accurate and complete component database
- Commercial-off-the-shelf (COTS) - One of the only solutions available today
- Service guarantee - QTEC guarantees a response to every research request within 24 hours or *2 weeks will be added to the subscription term at no cost*
- US based resources - Faster response time and better quality service
- Unlimited research requests - Other solutions charge extra or have limitations
- Subcontractors - Includes subcontractors for improved speed, accuracy, & cost
- Collaboration - Corporate wide collaboration for sites & projects with common component for increased leverage with suppliers with discontinued parts
- Die availability - Q-Star provides Die availability when parts become unavailable
- Direct part links to manufacturer sites - Q-Star offers direct links to manufacturer's part specific web pages saving hours of research time
- Part specific life cycle predictions - Some competing systems only have generic part predictions or none at all