



# A COUNTERFEIT HITLIST

TEC Transnational's managing director, **Dr David Scrimshire** looks at the threat of counterfeit parts and their potential impact on manufacturing supply chains.

**D**r David Scrimshire is an enthusiastic communicator, trainer, course designer and consultant dedicated to turning world-class principles into practical management systems that can be used immediately by manufacturing organisations and their supply chains.

With over 40-years consulting and training experience working with both multinational supply chains and SMEs in the UK, USA, Europe and Africa - principally in the aviation, automotive and defence sectors, Scrimshire has published over 80 technical articles concerned with Lean manufacturing, quality systems, human factors and, more recently, combatting counterfeit parts in supply chains.

Counterfeiting has a long and ignoble history, ranging from art and literature to manufactured goods. Unlike other industries, counterfeiting in the aerospace, defence and automotive industries may have life or death consequences. For example, the US National Transportation Safety Board has found unapproved parts were 'causal factors' in numerous accidents and emergency landings with airlines, small private planes, cargo carriers, crop dusters and helicopters.

Although it is clear that counterfeit parts do enter the industrial supply chain, the time and place of their entry is unpredictable. Managing this uncertainty has become more important due to the recent rise in the incidence of counterfeit reporting.

## What are counterfeit parts?

A counterfeit part is any material/part/assembly that has been confirmed to be a copy, imitation, or substitute that has been represented, identified, or marked as genuine, and/or altered by a

source without legal right with intent to mislead, deceive, or defraud.

Examples of a counterfeit part can include, but are not limited to, the false identification of marking or labelling, grade, serial number, date code, documentation, or performance characteristics. Although most of the focus is on Electrical, Electronic, and Electromechanical (EEE) parts, the principles and practices are applicable to other commodity types, including: raw materials; outsourced special processes; mechanical components; standard and COTS parts; IT and communications technology. In fact, all types of 'matériel' i.e. the aggregate of 'things used' or 'needed' by any organisation for the production of its products as distinguished from personnel.

## Meeting the requirements

At this time, the following three standards contain requirements relating to counterfeit parts (matériel): AS5553:2016 Rev B; IEC TS 62668-1:2016; AS9100:2016 Rev D. These documents may be augmented by 'customer-specific' requirements. Additional guidance for AS5553:2016 Rev B is now included in ARP6328.

Organisations must plan, implement, and control processes, appropriate to their operations and the product for the prevention of counterfeit or suspect counterfeit parts use and their inclusion

in product(s) delivered to the customer. Such processes should consider: training of appropriate persons in the awareness and prevention of counterfeit parts; application of a parts obsolescence monitoring programme; controls for acquiring externally provided product from original or authorised manufacturers, authorised distributors, or other approved sources; requirements for assuring traceability of parts and components to their original or authorised manufacturers; verification and test methodologies to detect counterfeit parts; monitoring of counterfeit parts reporting from external sources; quarantine and reporting of suspect or detected counterfeit parts.

Clearly, counterfeit parts pose a clear and present danger to organisations, their customers and the end-user of products. To minimise the risk of counterfeit 'matériel' the golden rule is to only use authorised suppliers! Preferably use stockists, which are ISO 9001:2015 or AS9120:2016 certified.

Reducing the potentially harmful effects of counterfeiting activities requires increased diligence and active control measures from all levels of the industrial supply chain. Conforming to the industry-wide standards and holding suppliers accountable for ensuring the quality of their products is a reasonable strategy.

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→ Dr David Scrimshire, managing director of TEC Transnational (above)

→ Counterfeit parts pose a threat to organisations, customers and product end-users (below)

