

COMBATING COUNTERFEIT PARTS AND SUBSTANDARD MATERIALS

BACKGROUND

In May 2011 the Engineering Practice Board considered the following two questions in response to members concerns:

- Is there a government agency tasked with preventing potentially dangerous engineering parts from being imported into New Zealand?
- If not, is there any process or guidance allowing importers to detect untrustworthy paperwork accompanying imported engineering parts?

The following reiterates and expands on IPENZ's 2011 response to these questions.

There is no government agency tasked with preventing dangerous engineering parts from being imported into New Zealand. Parts and materials can enter New Zealand under various free trade agreements. Were mandatory testing of all imported goods to be introduced such rules would also need to apply to New Zealand made products in order to not appear protectionist. There was in 2011, and probably still is, little support for mandatory testing. This does not, however, prevent testing being a mandatory condition of any procurement contract.

New Zealand has two key pieces of legislation which deal with product safety. These are the Consumer Guarantees Act and the Fair Trading Act. The Consumer Guarantees Act is a general consumer protection law which gives minimum standards of quality for goods and services. The Fair Trading Act is designed (among other things) to promote product safety and to prevent injuries. The Ministry of Business, Innovation and Employment's Measurement and Product Safety Service administers the product safety elements of these Acts.

The Commerce Commission enforces product safety standards and product bans made under the Fair Trading Act. The New Zealand Customs Service can also enforce the safety provisions under the Customs Act. Although the Measurement and Product Safety Service performs safety checks these generally are for consumer items.

New Zealand has a number of inspection organisations and testing laboratories accredited by International Accreditation New Zealand (IANZ) against international standards. IANZ benchmarks its accreditation internationally through its membership of the Asia Pacific Laboratory Accreditation Cooperation (APLAC) - a forum for laboratory accreditation bodies in the Asia Pacific region. A full list of APLAC members, by category, and links to their accredited facilities, can be found at: <http://www.aplac.org/index.php?id=96>

Organisations that have achieved accreditation are encouraged to place their accreditation body's symbol on their test or inspection reports and certificates so that customers can easily identify results from accredited organisations. An accreditation body symbol is a clear statement the results reported are trustworthy.

Paperwork without this independent assurance may not be trustworthy –

there is no easy way of knowing, and fraudulent certificates and reports are still possible. Accreditation does not prevent fraud. However, accreditation bodies are generally government organisations which vigorously prosecute fraudulent use of their symbols.

The Engineering Practice Advisory Committee (EPAC) considered the concerns raised at this year's Engineering Professions Forum and agreed that further advice to Members was warranted.

WHAT CAN YOU DO TO PREVENT OR DETECT IT?

The problem of counterfeit parts and substandard materials is not new, and will continue to be a challenge to engineers. Preventing them completely is near impossible, but there are steps and precautions that if followed will reduce the risk of it happening. These include:

Specify Carefully: Ensure when specifying materials and parts that the selected standards are those recognised by industry and by accredited testing and inspection agencies.

Procure Smartly: Recognised quality system processes, which include accreditation, will reduce the risk of counterfeit and fraud. Specify quality control requirements in procurement contract documents. ISO 10845 and the Construction Industry Council Principle of Best Practice for Construction Procurement in New Zealand contain sound advice on procurement.

Oversee and Monitor: Engineers should recommend levels of oversight (inspection) or construction monitoring to support their designs. In recommending monitoring levels clients should be made aware of the potential consequences of using counterfeit parts or sub-standard materials. The recommended level of oversight should take into account the risk of these parts or materials impacting the success of the project.

Buy authentic products: The best way to avoid counterfeit products is to purchase them directly from the manufacturer or from its authorized distributors or resellers. There is a higher risk of counterfeits if one cannot trace the path of commerce to the original manufacturer.

Verify authentication: Some manufacturers provide on-line tools for check if products are counterfeit. By entering the bar code, part number and date code found on the item, the product's authenticity can be immediately verified. The website www.eaton.com/counterfeit provides an example of this system. For materials, where test certificates from credible testing agencies are not available, sample testing of the product to confirm quality may be required.

Scrutinize labels and packaging: When purchasing a product, check for certification marks from organizations that certify product quality and performance. Avoid products that lack any identifying branding label or affiliation. Be wary of additional markings or labeling not applied by the original manufacturer, missing or poor-quality labels, out-of-date product codes and non-genuine packaging. As counterfeiters become more sophisticated, counterfeit products become even more difficult to detect this way, creating an increasing need for additional scrutiny.

Be wary of “bargains”: When shopping for products, be wary of “bargains” that seem too good to be true. Compare the price of the product to a similar product at a different supplier. If it seems too good to be true, the odds are it is.

Pay close attention to products purchased: Quality control is often lacking in counterfeiting operations, so you may be able to spot a counterfeit simply because of its workmanship.

Make sure everything that should be there, is there: Counterfeit products often don't include supplementary materials such as the owner's manual or product registration card. Sometimes counterfeiters do not include all the parts that should come with the product, or some parts will be from a different manufacturer.

The above steps will not guarantee that you will avoid counterfeit parts or substandard materials. It is largely a situation of “buyer beware”. These steps will however help reduce the risk of inferior product purchases.

Consideration of product testing and acceptance is not covered as part of this advice but incorporates many of the thoughts presented above. More detailed guidance on this issue can be found from the Structural Engineering Society (SESOC) and Ministry of Business, Innovation and Employment (MBIE) as part of the Product Assurance Framework.

Detecting fraudulent paperwork and test documentation can be more difficult, but if you have confidence in the supply chain this risk should be significantly reduced.

Nevertheless you should always be vigilant. If you suspect something is amiss - question it. If it looks “too good to be true”, it probably is!