



## An Environmental Case Study Disposables vs Custom Made Hearing Protection

For this case study, we are considering a manufacturing plant with 500 employees. If on average, each employee works 250 days a year and uses 2 sets of disposable ear plugs per day, they are using 500 units per year. In total, the manufacturing plant will therefore be using 250,000 units of disposable plugs per year. If we consider this over the average life span of a custom made ear plug, **5 years, this equates to a huge 1,250,000 units.**

If we imagine half of these are sent to a landfill site, that's a huge 625,000 units of non biodegradable ear plugs from only one plant over a 5 year period.

A solution exists to this environmental issue caused by disposable hearing protection. Custom made hearing protection requires one unit per user in five years, This means this plant in particular would require just 500 units of ultimate's custom made hearing protection rather than 1,250,000 units of disposables.

The difference in the size of the waste between the two options has significant negative financial and environmental impacts for the company itself and the wider economy. Furthermore, each disposable unit is usually wrapped in plastic and packaged in a box, creating even more waste. A comparison of the two types of packaging can be viewed below. It is clear the life long packaging of custom made units are far more environmentally friendly than the plastic wrapping associated with each unit of disposables.

