

challenge » solution

Solutions for packaging reduction—downsize footprint

product description

- » USB Flash Drive
- » Sales unit = 1 jump drive
- » Current package design consists of large format (7" x 9") two-part RF-sealed clamshell with a printed paper insert
- » New solution consists of a downsized (5" x 7") two-part hot/cold seal package with fold-over printed paper insert

challenge

- » Eliminate over-sized RF-sealed package style, while maintaining tamper-resistance security & pilfer resistance
- » Reduce total package cost
- » Reduce amount of packaging waste going to landfill

solution

- » Utilize Pentaform® TH-M280F/14 vinyl film
- » Provide a film that allows for lower energy hot/cold impulse seal to replace RF seals
- » Replace existing large format design with a downsized hot/cold seal package that reduces the existing package footprint by 45%
- » Reduce plastic thickness by 15%
- » Use fold-over insert card to retain all graphics

results

- » Removes 180 tons of packaging
- » Saves enough energy to power 91 single family homes for a year (10,203 GJ)
- » Uses 1,667 fewer barrels of oil per year
- » Reduces greenhouse gas emissions by an amount equivalent to driving 67 passenger cars for a year (365 tons CO2E)
- » Achieves 8% improvement in the product-to-package ratio
- » Doubles the number of shelf facings in the same amount of space
- » Able to ship twice as much product in same cube, thereby reducing freight costs and fuel usage
- » Saves 48% package weight (reduced by over 200,000 kg/year)
- » Attains total package & freight cost savings exceeding \$500,000 per year

Results based on 5 million units sold per year

before



after



sources:

Boustead I, *Eco-profiles of the European Plastics Industry*, PlasticsEurope, Avenue E van nieuwenhuyse 4, B-1160, Brussels, Belgium. <http://www.lca.plasticseurope.org>

Franklin Associates. *Life cycle data for various paper products*.

Environmental Protection Agency Calculations and References. <http://www.epa.gov/cleanenergy/energy-resources/refs.html>

Energy Information Administration. *2005 Residential Energy Consumption Survey*. http://www.eia.doe.gov/emeu/recs/recs2005/hc2005_tables/hc3demographics/pdf/tablehc2.3.pdf