Where Road Cones Go To Die

By Simon Wilkinson

New Zealand road cone manufacturer, Proline Plastics, has closed the loop by taking back their old road cones to be shredded and recycled back into new cones. More than 15,000 road cones have been recycled by the company in the last 4 years at zero cost to their customers.

While road cones are a source of frustration to many New Zealand motorists, they are a necessary evil, as they play an important part in road safety. Every year, thousands of road cones come to the end of their useful life. They become damaged, or lose their reflectivity, and roading companies have to dispose of them. Auckland road cone manufacturer, Proline Plastics, has developed a process that enables them to recycle old cones into new ones.

2. 2,000 dead road cones from Fulton Hogan, Christchurch recently recycled by Proline Plastics

Most road cones in New Zealand are made of PVC, a robust plastic that can be enhanced with additives to make it resistant to the harsh UV put out by New Zealand sun.

Proline Plastics is a leading manufacturer of road cones in New Zealand. They injection mould around 50,000 cones a year in their plant in Otahuhu, Auckland. The company has been making cones for the last 20 years.

PVC (Polyvinyl Chloride) is a thermoplastic, and like all thermoplastics, it is fully recyclable. PVC also has particular properties

1. New Proline road cones contain around 16% recycled PVC from old cones

that make it the best choice for road cones, and many other products. It is inherently flame retardant and resistant to chemicals and oils. It is also very durable because it resists oxidation. PVC also takes well to additives that modify colour, flexibility, impact resistance and UV resistance. These strengths and abilities to combine well with additives make PVC well suited to recycling.

Companies from all over New Zealand deliver old road cones to Proline in Auckland. The cones are shredded by a heavy duty shredder at J&J Laughton Shredding Services Ltd, before being finely granulated. Proline grinds the plastic even further so the recycled material is in pieces small enough to go through production machinery.

The finely granulated material is mixed with additives including colourant, UV inhibitor and plasticiser, before being fed back into Proline's manufacturing process, replacing virgin PVC material.

4. Road cones being shredded at J&J Laughton

On average, finished Proline road cones contain around 16% recycled material. Over the last 4 years Proline has recycled in excess of 15,000, or 100 tonnes, of road cones. This is material that has been diverted from NZ landfills.

Proline is a great example of a New Zealand manufacturer offering added value to customers by closing the loop and recycling its own products back into new ones. It is important that when companies make purchasing decisions on road cones they factor in the cost of disposing of these cones to landfill.

Proline help their customers to avoid landfill costs by recycling these old cones for free. This stewardship of their products is not something that distributors of imported cones currently offer. This is an example of a

3. Granulated recycled material alongside new cones at the Proline factory

growing trend for manufacturers to help their customers deal with their products at the end of their life. It is a way of adding value for the customer, by helping them to improve their environmental performance and reduce the amount of waste being sent to landfill.

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