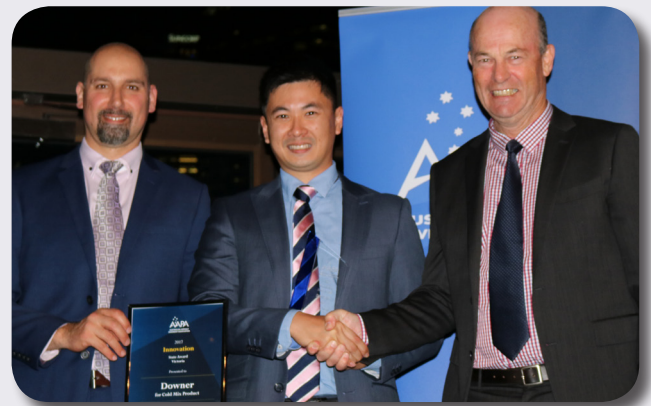


AAPA 2017 VIC INNOVATION AWARD WINNER



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Relationships creating success



SAFER MANUFACTURE OF COLD MIX ASPHALT BY UTILISING A NON-DIESEL BASED FLUXING AGENT

Diesel fuel has traditionally been used as a fluxing agent in cold mix asphalt, but its relatively low flashpoint makes it an explosion and fire risk, requiring strong process controls to manage safely. Diesel lowers viscosity of a bitumen to be workable at standard ambient temperatures, giving rise to the term, 'cold mix' asphalt. Over time, some of the diesel will evaporate, resulting in a re-stiffening of the bitumen and placed asphalt.

Utilising a fluxing agent with much higher flashpoint allows for much safer manufacture of cold mix asphalt, with no compromise to its intended use in the field.

A safety incident in 2016 resulted in a worker suffering burns to his face. The incident occurred during the production of diesel-based cold mix when the inspection hatch at the asphalt plant was opened. The new cold mix will prevent this from occurring again.

Various trials on selected fluxing agents in the laboratory and on-site allowed for a product that improves on the properties of diesel-based cold mix to create a safer product with no compromise on workability or overall performance.

The selected fluxing agent demonstrates lower air voids when compared to standard diesel. This provides numerous benefits over the standard diesel-based cold mix by greater workability, reduced water permeability to prolong life of treatment in potholes and better storage life.

Many clients have expressed their view that the new cold mix is "excellent".

This initiative came together in less than three months, which is an outstanding achievement.