





Case study – Conveyor Belt Repair, HNCC Coal Mining Group



Date : 10 October 2012
 Location : Hunan Province, China
 Damage : Longitudinal rip extending 6m on an inclined steel cord belt

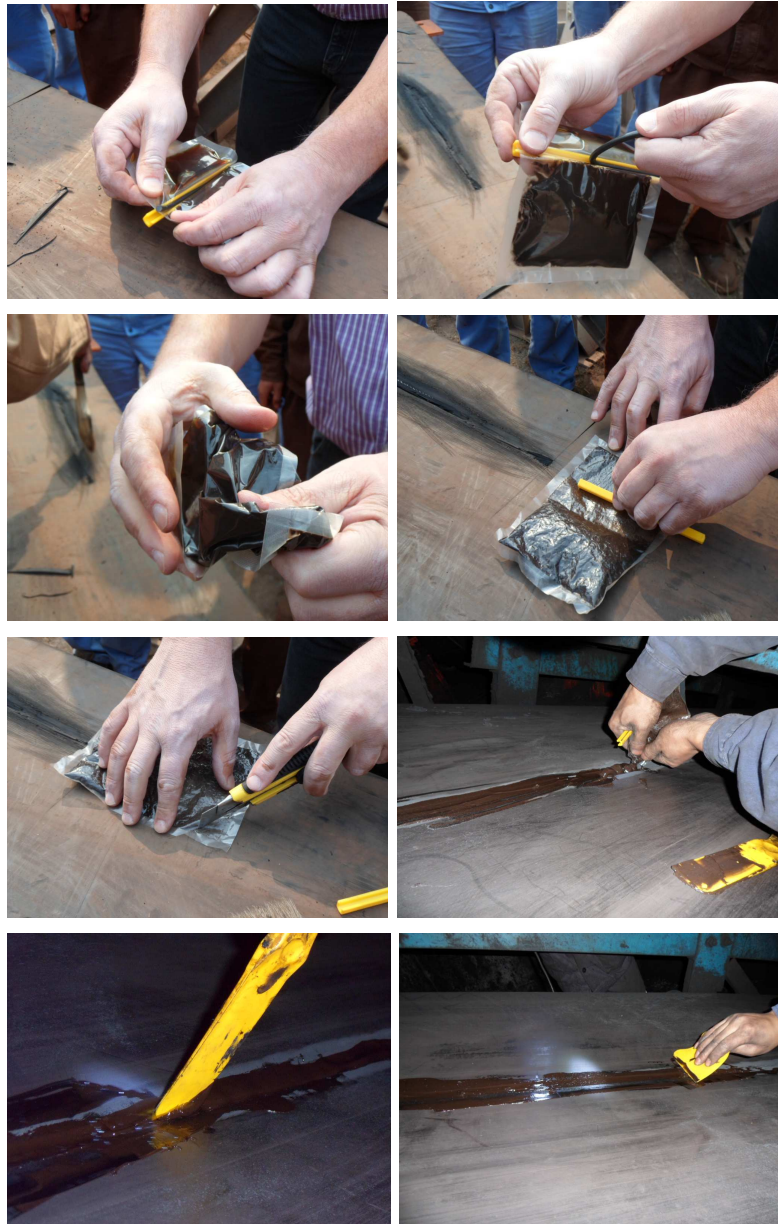
<p>The Challenge</p>	 <p>To successfully repair a 6m longitudinal rip to a depth of 5mm with the top cover gouged out and the steel cord exposed. The damaged area was underground on a 26° incline slope.</p> 
<p>Intended outcome</p>	<p>To return the belt into operation in a structurally sound condition within 3 hours. The gouge had to be terminated to prevent further ripping. The steel cord section had to be</p>

	effectively filled in and sealed against moisture ingress and the resulting rust / rotting of the belt which would inevitably occur.
Product used	Eli-Flex FR909N60, 3 X 500g packs
Established practice	<p>After careful belt preparation, Eli-Flex would be applied to the damaged section to achieve a quick and easy solution to the problem.</p> <p>Surface preparation is a three stage process :</p> <p>1) Groove out the edges of the split to 45° sidewalls</p> <div data-bbox="625 689 1318 1025" data-label="Image"> </div> <p>2) Roughen with a grinding disc to remove loose pieces of rubber as well as ensure a keyed-up scratchy surface to ensure good adhesion.</p> <div data-bbox="619 1236 1326 1697" data-label="Image"> </div> <p>3) Brush out any rubber crumb left behind by the buffing action.</p>
Product advantages	The repair area was underground, on an incline section and in a damp environment with abrasive coal dust present. Accessibility is severely restricted and working

conditions are difficult.

These situations call for a stand-alone repair method that is not dependant on machinery, power or any specialised equipment.

Eli-Flex satisfies all these criteria. It is self-contained, can be mixed and applied in a few minutes without the need for special tools, dispensing equipment or electricity. Eli-Flex can be used by unskilled personnel with no previous experience of belt repairing.





Outcome

The repair was successfully undertaken in a total time of 3.5hrs, incl. preparation work of 30 minutes and a stand-by time of 3 hours (to allow the resin to cure).