

Trailing Cable Repair

Application by ProCoat Specialities Pvt. Ltd.

ThistleBond

A Division of E. Wood Ltd., U.K.



Trailing Cables used in mining industry for equipment like Dragline, Shovels in open cast mines, or in underground mines are subjected to abrasion and loss of external insulation due to dragging over the mines rough soil surface. The usage and handling may often damage Trailing Cable resulting in cuts, exposure of conductors, loss of external insulation and sheath. Thereby the cable's function comes to standstill which leads to the costly equipment downtime.

ProCoat Specialities offers an In-Situ proven solution with ThistleBond emergency elastomer & insulation products to take care of this problem.

Surface Preparation

Clean damaged surface and adjacent areas with ThistleBond 'Cleaner' to remove dust, dirt, grease or mud. Cut and remove loose or frayed rubber. If the conductor is exposed due to damage, clean the conductor thoroughly and slightly emery to remove any film over it. The outer rubber portion should be abraded with coarse file or buffing machine to get cross hatched surface.

Application

Over exposed bare conductor, 'Power Tape' can be applied by wrapping over it. It fuses with exposed conductor. It can be wrapped easily over the conductor repeatedly as its flexibility facilitates and it provides an excellent electrical insulation @ 40 kV/mm thickness along with impermeability to moisture.

Over this, ThistleWrap repair tape to be applied. By wetting this wrap tape, it should be applied over the damaged & sides of damage in pulling and wrapping action quickly, at the same time with wet hand the expelled resin should be pressed firmly inside. Simultaneously it should be smoothened till it cures and leaves a glossy surface. This second layer will provide an additional insulation @ 16 kV/mm. After cure, it becomes a non-porous repair surface with resistance to water.

As a final protection against impact, sliding abrasion '60 Durometer Rapid Paste Elastomer' to be mixed and applied by spatula over the previous repaired area. This application not only protects the surface from mechanical damage but also provides an extra insulation @ 16 kV/mm along with its superior 800% flexibility after cure even at lower or higher temperatures. It will provide an effective bonding with old adjacent rubber and attains full mechanical strength in order to protect the Trailing Cable permanently.

This In-Situ, economic repair method not only reduces the down time but also ensures a trouble free operation.

The Benefits of this In-Situ Repair Method

ProCoat Specialities with ThistleBond "elastomer & insulation" range of products can provide extended life expectancy coating system which will effectively give

- High value of Dielectric Strength (Insulation)
- Superior flexibility after repair
- Excellent protection from sliding abrasion, erosion
- Prevents ingress of water, moisture into the cable
- Superior mechanical strength
- Very short repair time

Products recommended for this application : Power Tape, Thistlewrap Tape, 60 Durometer Rapid Paste Elastomer.

Product	Dielectric Strength	Curing Time	Flexibility	Resistance to moisture/water
Power Tape	40 kV/mm	Instantly	700%	Excellent
Thistlewrap Tape	16 kV/mm	5 Minutes	200%	Excellent
60 Durometer Rapid Paste Elastomer	16 kV/mm	10 Minutes	800%	Excellent

Distributor catering to your needs



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