

## Insulation of Cable Reel and Spooling Devices

The Mine Safety and Health Administration (MSHA) has found that an exposed, accessible cable roller(s) located between the sheave wheels and the area housing the cable reel and spooling device on a shuttle car can pose a shock hazard. The potential shock hazard is created when accessible, uninsulated and ungrounded metal roller(s) comes in contact with an exposed trailing cable. Rollers are typically located between the sheave wheel carrier and the cable reel housing/spooling device assembly as shown in the picture below.



The purpose of this roller is to prevent the trailing cable from coming into contact with the machine frame or other machine components. The roller is electrically isolated by the bearing assemblies from the grounded machine frame. Most rollers are not made from or covered with a flame-resistant insulating material. If an exposed conductor, in a damaged section of an energized cable, comes into contact with this roller, the roller will become energized. Since the roller is readily accessible and shuttle car operators routinely clean the area around the roller, if the roller becomes energized, miners could become exposed to a shock hazard. Not all shuttle cars are designed or installed with this type of metal roller.

MSHA has revised its' policy on cable reels to require insulation on certain trailing cable components. This change in the Program Policy Manual Volume II, Section 18.45 as explained in MSHA Program Policy Letter P07-V-04 can be viewed at <http://www.msha.gov/regs/complian/ppls/2007/PPL07-V-4.asp>.

Contact the OEM or the rebuilder of the shuttle car to obtain a trailing cable roller that is made of or covered by a MSHA accepted material. OEMs of shuttle cars and coal transports have been notified of MSHA's policy relating to the insulation of cable reels and spooling devices.