

Applications

PACKAGING APPL CAT ON TYPICAL UN-WIND AND RE-WIND APPLICATION



On any un-wind operation, as the web is pulled from the roll, you have material separation. As the surfaces separate, electrons from each surface will migrate from one surface to another. As the surface of the material is non-conductive, it cannot flow back and a static charge is now on the web. This charge will create an electro-magnetic field which in turn attracts airborne contamination onto the web causing rejects and wastage.

Another area of concern is the electro-magnetic field can be absorbed into the bodies of operators who work in close proximity. The operator will then discharge when coming into contact with an earth potential such as. Machine casing. Door handle or another operator. Although painful, the charge is in most cases not dangerous. The resulting involuntary reaction of the shock however, is dangerous when working close to moving machinery.

During the wind-up operation, any static charges on the web will cause the material to repel and not roll correctly and leave a record edge finish. This again can cause loss of product, waste and down time. The problem of operators absorbing charges into their bodies is also prevalent here. On both un-wind and re-wind the application is the same. By neutralising the charge on the roll you will remove all the possibility of material misbehaviour, dust contamination and operator shocks.

PULSElectronic pulse DC bars can be mounted to ionise the nip of the roll. This will eliminate the charge on both sides of the web. If you are unable to position a bar in that configuration, an ionising blower can be mounted to bathe the reel in ionised air, which will neutralise the charge.