CLAIMS:

1. A device for eliminating static electricity for a parts feeder that eliminates static electricity on workpieces, said device is applied to said parts feeder including an in-line feeder that conveys granular workpieces along a predetermined path, and a rotating drum that continuously drops a small number of fed the workpieces onto a predetermined position on said in-line feeder,

said device comprising:

at least a pair of electrodes including a positive electrode and a negative electrode provided on said rotating drum near a predetermined position on said in-line feeder for applying an electric field to the workpieces through said rotating drum;

a power supply that generates a DC voltage; and

a polarity voltage forming circuit that forms a polarity high voltage from said power supply, and applies a positive high voltage to said positive electrode and a negative high voltage to said negative electrode,

so as to eliminate static electricity by applying a positive or negative high voltage electric field in response to charging characteristic of the work.

2. The device for eliminating static electricity for a parts feeder according to claim 1, wherein said electrodes are needle electrodes.

3. The device for eliminating static electricity for a parts feeder according to claim 1, wherein said pair of electrodes are provided so as to sandwich the predetermined path of said in-line feeder.

4. A method for eliminating static electricity for a parts feeder that eliminates static electricity on workpieces, said parts feeder including an in-line feeder that conveys granular

workpieces along a predetermined path, and a rotating drum that continuously drops a small number of fed workpieces onto a predetermined position on said in-line feeder,

said method including:

providing at least a pair of electrodes including a positive electrode and a negative electrode disposed on said rotating drum near a predetermined position on said in-line feeder to apply an electric field to the workpieces through said rotating drum;

generating a high voltage to form positive and negative polarity high voltages; and

applying a positive high voltage to said positive electrode and a negative high voltage to said negative electrode,

so as to eliminate static electricity by applying a positive or negative high voltage electric field in response to charging characteristic of the work.

Claims

1. A device for eliminating static electricity for a parts feeder that eliminates static electricity on electronic components, said parts feeder including an in-line feeder that conveys granular electronic components along a predetermined path, and a rotating drum that continuously drops a small number of fed electronic components onto a predetermined position on said in-line feeder,

said device comprising:

at least a pair of electrodes including a positive electrode and a negative electrode provided on said rotating drum near a predetermined position on said in-line feeder;

a power supply that generates a DC voltage; and

a polarity voltage forming circuit that forms a polarity high voltage generated by said power supply, and applies a positive high voltage to said positive electrode and a negative high voltage to said negative electrode,

thereby applying a DC electric field from said electrode to said electronic components via said rotating drum so as to eliminate static electricity from electric components.

2. The device for eliminating static electricity for a parts feeder according to claim 1, wherein said pair of electrodes are provided so as to sandwich the predetermined path of said in-line feeder.

3. A method for eliminating static electricity for a parts feeder that eliminates static electricity on electronic components, said parts feeder including an in-line feeder that conveys granular electronic components along a predetermined path, and a rotating drum that continuously drops a small number of fed electronic components onto a predetermined position on said in-line feeder,

said method including:

providing at least a pair of electrodes including a positive electrode and a negative electrode on said rotating drum near a predetermined position on said in-line feeder;

generating a high voltage to form positive and negative polarity high voltages; and

applying a DC electric field to said electronic components between said electrodes via said rotating drum so as to eliminate static electricity from electric components.