

## **PEABODY ELECTROSTATIC OILERS**

### **Key Features & Competitive Advantages**

#### **Aluminum Gap control blades for Uniform Coating:**

Electrostatics ensure that a uniform coating of oil is applied to the item at a precisely-controlled coating weight - thus reducing reject rates and hence costs as well as being better able to satisfy customer demands. This is accomplished by our latest design of Aluminum gap controlled blades.

#### **Aluminum Gap control blades also offer significant**

##### **Oil (Coating) Savings:**

Due to the high transfer efficiencies occurring, electrostatics reduce significantly the amount of oil/coating fluid needed for complete protection in comparison with blades with plastic and steel blades - therefore reducing coating costs.

#### **Coating Weight Flexibility and PLC programming:**

GFG-Peabody electrostatic applicator systems are capable of applying coating weights from as low as 1.25 mg/M<sup>2</sup> to more than 5000/mg/M<sup>2</sup>, if required. Hence, a wide variety of different coating programs and oil (coating) types can be handled by a single machine. If coating requirements change, the machine can normally accommodate them. Years, and numbers of oilers have given GFG – Peabody the experience to provide the best oiler on the market.

#### **Coating Material Transfer Efficiency Near 100 Per Cent:**

Any unused coating/oil is confined within the machine and is recycled, giving an overall transfer efficiency approaching 100 per cent. Thus, coating costs are further reduced.

#### **Improved Environment: Improved Coil Shape**

Because excessive coating is eliminated, seepage from coils does not occur. Thus, there is no opportunity for coils to lose shape and hence the tension in the coils remains stable. Further, capillary evacuation from high pressure points (which can cause circular dry patches) cannot occur.

Oil spillage to floors and nearby machinery and oil mist emissions are effectively eliminated, thereby improving the working environment and often allowing for reduced insurance costs.

#### **Few Moving Parts/Low Maintenance Costs:**

The GFG - Peabody electrostatic coating system achieves its objectives using very few moving parts. Hence, maintenance is minimized so downtime of the line is reduced to the lowest possible level, giving further cost savings.





WORLD LEADER IN COIL PROCESSING EQUIPMENT

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### **High Voltage Sources:**

GFG - Peabody uses solid state electronic High Voltage Power Supply. It enables us to use Dynamic Voltage Control (DVC) that automatically matches the output voltage potential to oil output that is set by the operator and the incoming line speed signal. Using Solid-state H.V. power supply, the output voltage can be raised instantaneously, increasing quality of oil spray. (DVC is a patented feature only used by GFG Peabody)

### **Linear Accelerator (LA) Blades**

GFG - Peabody also offers LA blades that extend and improve performance of the oil spraying by increasing atomization density of the blades. This feature, along with tool steel construction allow our blade to guarantee the quality and precision of the oil distribution to +/- 6%. (LA Blade is a patented feature only used by GFG - Peabody)

### **Blade Heating**

GFG - Peabody's Blade Heating System uses dedicated oil pump. Using the Blade Heating system increases the number of usable oils that maybe applied electrostatically by raising the oil temperature and putting the conductivity of the oil within the preferred range.

### **Metering Pump**

GFG - Peabody uses a positive displacement gear pump to minimize maintenance requirements. Each pump is built to GFG Peabody drawings and exacting specification.

### **Metering Pump Motor**

We use a brushless DC Servo motor with closed loop speed control for fast acceleration and wide dynamic range.

### **Maintenance as a priority**

GFG - Peabody oilers are designed with ease of maintenance in mind. Our H.V. power supplies are mounted directly on the spray enclosure thus minimizing the length of H.V. cable to the blades.