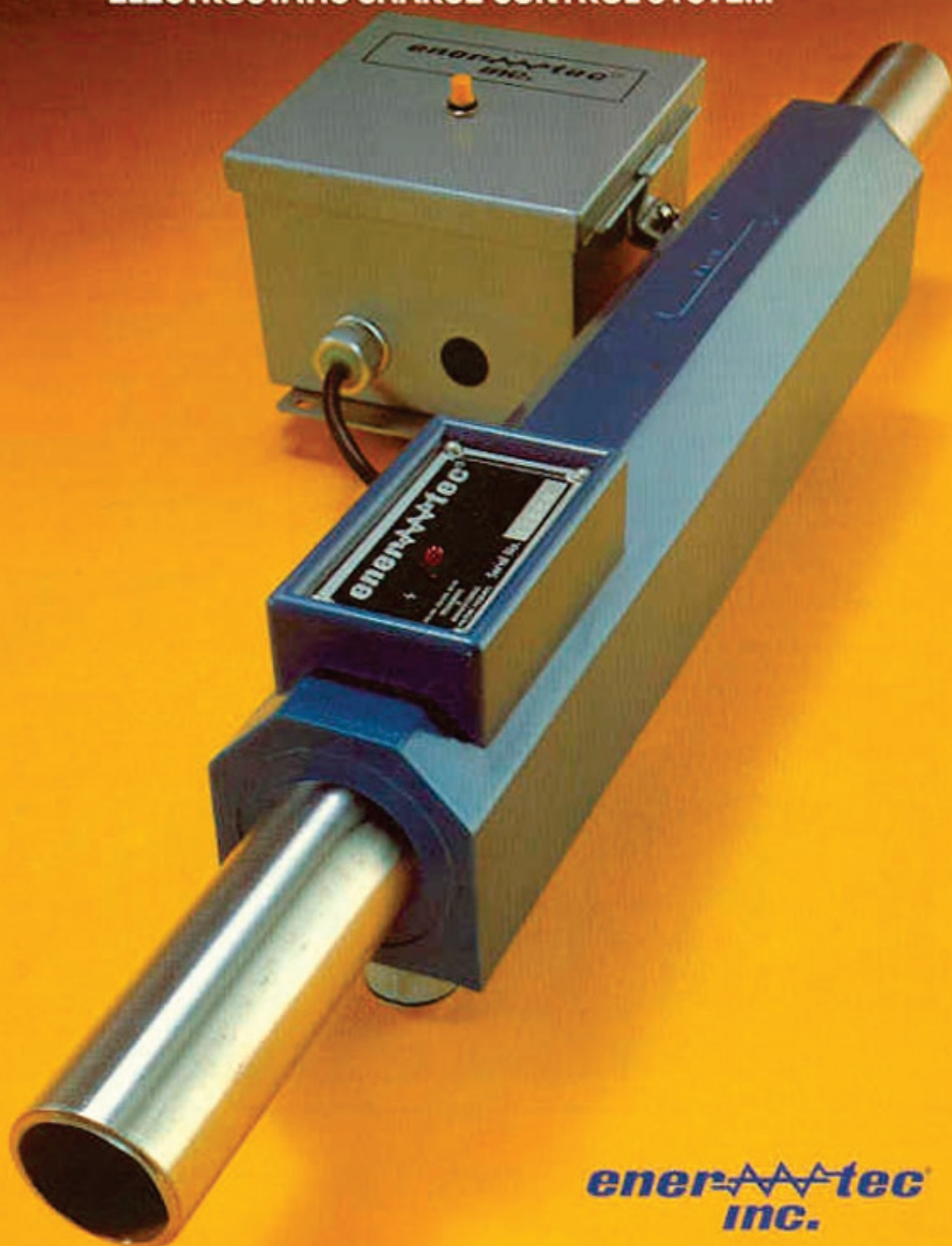


Linear Kinetic Cell

ELECTROSTATIC CHARGE CONTROL SYSTEM



ener-A-tec
INC.

Complete Static Control

with the Ener-Tec Induction Static Dissipator

The Problem:

STATIC ELECTRICITY:

Denoting or pertaining to electricity at rest. What a simple definition for a problem that costs industry millions of dollars each year.

The Cause:

Static electricity is generated by unbalancing the molecular construction of relatively non-conductive insulators such as plastics and paper. All matter is composed of atoms. A balanced atom contains positive charges that are present in the nucleus in the form of electrons. Both charges are equal and, therefore, the overall charge of a balanced atom is zero. However, should this configuration be disturbed and several electrons removed from this atom, we end up with a greater positive charge in the nucleus and a deficiency of electrons, which gives you an overall charge in the positive direction. Conversely, should we add a few extra electrons, we have an overall charge of negative, due to the fact that we now have an excess of electrons and the net charge is now in the negative direction. See Figure 1. Existing efforts to control static electricity are limited to: conductivity, mechanical induction, grounding and ionization.

Research & Development:

Ener-Tec, Inc. has researched the problem and has developed a relatively simple, but very effective product called the ENER-TEC INDUCTION STATIC DISSIPATOR, also known in the trade as the Linear Kinetic Cell (LKC). Ener-Tec, Inc. working closely with other industry interests, conducted extensive evaluation in the laboratory and field conditions, using the LKC with a variety of commodities in pneumatic conveying. Efforts were concentrated in the petro-chemical field where the separation of fines, dust and streamers was limited to 70-80%, using elutriators and existing static control technology. Using both low and high density polymers, and many special compounds, and simulating field conditions as closely as possible, it was observed that separation efficiencies were directly related to atmospheric relative humidity. However, by incorporating the Ener-Tec LKC in the pneumatic conveying line, the dramatic electro-static balancing or neutralizing effect became readily apparent. A series of low humidity tests produced improvements in separation up to 30% with the Linear Kinetic Cell in operation.

The Solution:

ENER-TEC INDUCTION STATIC DISSIPATOR.

The astonishing success in the petro-chemical industry prompted utilization of this remarkable product in many industrial and agricultural applications. The plastics industry has benefited in pneumatically handling polymer pellets in both production and process facilities. Agriculture can utilize the Ener-Tec Static Dissipator in grain elevators and flour mills. The baking industry has applied it to the pneumatic transfer of flour to eliminate static buildup and clogged lines.

Your static problems can be solved effectively and efficiently with the ENER-TEC INDUCTION STATIC DISSIPATOR. Explosion proof systems are available. Let us help solve your static electricity problems. Write or call today.

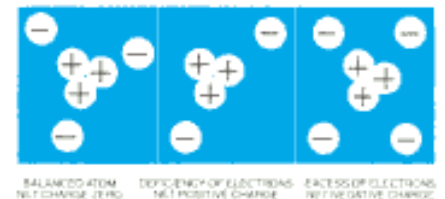


Figure 1