Abstract submission for an EJC-PISE oral presentation
in the category of "decorative coating of plastic and metal parts"

The Art of Choosing the Right Power Supply

By
Ken Nauman, Doug Pelleymounter
Advanced Energy Industries, Inc.
1625 Sharp Point Drive, Fort Collins, CO 80525 USA
ken.nauman@aei.com

Wise decision-making regarding process power helps process engineers meet their particular goals for sputtering rate, film quality, and setup cost and complexity. Each power method offers a unique set of benefits and drawbacks. Therefore, there are no clear-cut answers. Power selection must be based on the considerations presented here, as well individual process priorities.

The primary, but not sole, factors involved in power-supply selection will be introduced, including: sputtering type, appropriate target materials, typical sputtering rate, cost and complexity, campaign length, and film quality.

These factors must be weighed against the capabilities and benefits of available process-power types: DC, AC, pulsed DC, RF, and pulsed DC with RF.

Our talk will conclude with guidelines for choosing among the several types and combinations of process power, including:

- RF
- AC or RF
- AC or pulsed DC, or RF, or pulsed DC
- DC or pulsed DC
- DC with RF or pulsed DC with RF

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