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IMPROVING OPERATOIONS OF FLEXIBLE PACKAGING PLANTS: A CASE STUDY IN ULTRASONIC CURING OF WATER-BASED VARNISHES (OPV) ON FOOD PACKAGING MATERIALS

ABSTRACT
Results of the operational advantages of ultrasonic curing of food packaging materials on rotogravure presses and coating lines.

This presentation by Heat Technologies, Inc. (HTI) will showcase the results of deploying its Spectra HE™ ultrasonic technology on wide web rotogravure press and corresponding coating line for printing and curing processes respectively.

At the outset of the presentation attention will be given to the customer selection of the most appropriate approach that was based on its own set of tests of the available technologies.

We will focus on practical experience and quantifiable improvements, including:

- **Increased Production and Process Speed:** Eliminating drying bottlenecks to better utilize the full mechanical speed of the press. Coating line originally built for multi-step food packaging processes, became available for new orders
- **Significant Energy Reduction:** Lowering energy costs by replacing two-step process with one-step and thus allowing utilization of the coating line for other orders
- **Reduced Labor and Waste:** Streamlining operations and improving final product quality.

Beyond a brief overview of the acoustic heat and mass transfer principles, the session will provide a technical roadmap for implementation, supported by photo and video evidence. Attendees will gain a clear understanding of how ultrasonic curing provides a competitive advantage in the production of modern, eco-friendly food packaging.