

Abstract Submitted  
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**Advanced HIPIMS solution for RD and Process Development**

SEAN ARMSTRONG, Kurt J. Lesker Company — When HIPIMS was first introduced to the thin film coating industry, it was considered an advanced technique for production applications, which would provide optimal film properties and wear resistance. The HIPIMS supply options were very large scale directly suited to the production industry. However, it was found to have significant limitations in rate, which minimized its acceptance in production applications. Recently, the introduction of smaller scale supplies triggered an emergence of the technology into the RD community. This enabled a high rate of enhancements and helped innovate a more efficient capability and process optimization that could be utilized by HIPIMS supplies. This ultimately re-energized the interest and potential of HIPIMS in the thin film coating industry. One of the solutions to emerge from the crowd was the IMPULSE supply, which brings a unique range of features to the HIPIMS community. The IMPULSE is a 2kW supply that is offered in a single and dual configuration. It features touch panel controllability, the fastest pulse frequency, 200A peak current, and the most competitive pricing in the industry. The supply is slave capable and can be scaled from its 2kW standard configuration by adding additional units. This makes it an excellent option for process development. Test results will be shared that show its unique performance capabilities and compatibility with higher scale power requirements.

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