

Coating technology up close



Handling is really simple: Scott Para (left) and Brandon Wilkins load the CC800® HiPIMS coating chamber.

HiPIMS-Live-Coating-Events in the United States

HiPIMS is the coating technology of the future and opens up enormous possibilities. In Horseheads (USA), CemeCon customers were able to experience the full production process and the benefits of the technology up close at three live events – and many were amazed at how quickly outstanding results can be achieved.

In the late 19th century, a United States Congressional representative from Missouri established the saying: "Fancy words don't convince me, you have got to show me!" This attitude summarizes how businesses work today: In order for a new technology or process to be implemented in an existing manufacturing chain, the product has to work more efficiently and provide a significant improvement compared with the status quo.

Show me!

That's what CemeCon Inc., has been doing at its Horseheads, New York, coating center. Since February, the experts have organized three HiPIMS live coating events, enabling customers to experience the CC800® HiPIMS up close. "We have introduced them in all details – from process technology to handling and maintenance. For example, they have helped change targets, sealed the

chamber and interfaced with the software to gain a better understanding of how easy the machine is to use," said Ryan Lake, Sales Manager at CemeCon Inc.

Customers who came to CemeCon with very different requirements followed the process from pre-treatment to post-treatment. The demonstrations, each of which lasted less than six hours, showed the tool manufacturers how easy it is to integrate premium PVD coating technology into their own production chain. Fast deposition rates and flexible coating options are clear advantages of HiPIMS technology. "Additionally the open software allows users to easily customize their own coating formulas, which will help establish a compelling product on the market," said Ryan Lake.



At the HiPIMS live coating events, CemeCon Inc. enabled customers to experience the CC800® HiPIMS up close.

Exceptional coatings in a short time

One customer expressed their delight: "This is great: I have completely new products and we can keep our legacy products." The coating time was also much shorter than expected. The customer was impressed with the final result: With a cycle time of just four hours and 40 minutes, the CC800® HiPIMS deposited FerroCon® coating on various types of indexable inserts.

CemeCon's patented HiPIMS technology is unique and achieves faster deposition rates without the loss of voltage as seen in other commercial methods. The adhesion of the coatings is unsurpassed, which currently makes them the most homogeneous PVD tool coatings on the market.

Another HiPIMS Live Coating attendee made, perhaps, the perfect summation, saying "The whole reason we're here is that this is different than anything else on the market – this has characteristics we can't find anywhere else."



Nicholas Kane retrieves the coated tools from the system.

Clean cuts, longer life, better surfaces

Since the introduction of HiPIMS, the product has been well received rather quickly by North American tool manufacturers, but especially in the coating service. InoxaCon® and FerroCon® have become integral parts of several customer products, and end users are impressed.

"In the meantime, the focus is shifting toward integrating HiPIMS into their own production processes. Since the CC800®HiPIMS was adopted early on in the European and Asian markets, pressure is now on North American companies. There is now an emphasis on integrating the technology, since HiPIMS-coated tools are firmly established in the global market, raising the bar for every tool manufacturer," stressed Ryan Lake.

When HiPIMS hit the market, not only was it a step forward for PVD tool coatings, but it is proving to be the big leap that tool manufacturers and end users have been waiting for. "By combining the best features of current PVD coating processes, HiPIMS is the technology of the future, don't take our word for it, see it for yourself at a HiPIMS live coating event," said Ryan Lake.

Live coating event ■ Coating centre ■ CC800® HiPIMS ■ Know-how transfer ■ Process reliability
■ Turnkey ■ USA ■ Future ■ HiPIMS ■ PVD ■