Taking tools to the next level with HiPIMS



The CemeCon Inc. sales team of Ryan Lake, Pete West, Autumn Carson, David Darling, Melissa Smith, Calvin Avery (left to right) and Chet Lewis (not on the photo) consult with customers to help them find the best solution for them.

Top support made in the usa by CemeCon

If you want to produce outstanding precision tools that are ahead of the competition, you need top-class technology in all facets of tool manufacturing – not least in coating. HiPIMS (High Power Impulse Magnetron Sputtering) from CemeCon is the best coating technology available on the market. The CC800® HiPIMS combines features that previously required multiple coating processes or even additional equipment. In the USA, the team at CemeCon, Inc. in Horseheads, NY supports tool manufacturers in multiple ways. Whether it be through coating service in their 40,000 square foot coating center or by providing technical assistance to customers who use a turnkey solution in their own production – CemeCon, Inc. is prepared to answer all questions concerning coatings and coating technology.



Because CemeCon Inc. offers its own coating service in Horseheads, the team knows the technology intimately and can provide the best possible support to technology customers.

"Many tool manufacturers in the USA are familiar with our coating service and greatly value the coatings we produce. We are now working to increase the awareness that we also offer turnkey coating systems. Our systems do more than just offer the possibility of in-house coating production, they deliver premium coatings using a technology that is future-proof. The CC800[®] HiPIMS is the fastest, most flexible and most economical production system on the market. This makes it the perfect platform for developing customer-specific processes. Tool manufacturers can use it to differentiate their products in the market and gain a competitive edge. We are ready to work with tool manufacturers that are looking to take their tools to the next level," said Ryan Lake, Sales Manager at CemeCon, Inc.



Kameron Waxman (right) and Eli Roberts (left) from CemeCon Inc.'s technical support department assist customers with any questions they may have about the plant technology.

Anyone who wants to see the advantages of HiPIMS for themselves have the opportunity to do so at the coating center in Horseheads. There, the team from CemeCon, Inc. will demonstrate the possibilities offered by the technology and how easy it is to handle during a live batch in the in-house coating production. If the tool manufacturer then decides to use a CC800[®] HiPIMS in their own production, they

receive a complete package consisting of substrate pretreatment, coating system and all the necessary other peripherals – plus the full made in the USA service package. From its daily practice, the CemeCon team knows the most diverse processes and workflows down to the smallest detail and can support every self-coater in the best possible way.

"To make it as easy as possible for the customer to start their own coating production, we train their employees in our coating center and familiarize them with the intricacies of the CC800[®] HiPIMS. Even after the system has been installed, our experienced technicians at CemeCon, Inc. are on hand to answer any questions they may have about coating technology," promises Lake.

Advantages of HiPIMS technology

HiPIMS technology opens up new markets through better coatings and offers future security through maximum flexibility. The spectrum of what is possible is enormous: from high-performance coatings with a layer thickness of 1 μ m for micro tools to wear-resistant insert coatings with a layer thickness of up to

12 μ m. HiPIMS coatings are extremely smooth, hard and tough at the same time. The morphology is exceptionally dense with the best adhesion and very low residual compressive stresses. In addition, almost any element of the periodic table can be used and combined as a coating component. This creates options for an unlimited variety of structures and composition! And almost all substrates can be coated - from HSS and carbide to CBN and ceramics. What's more, the CC800® HiPIMS is a real workhorse: deposition rates of up to 2 μ m/h and large holding capacities of up to 1,800 shank tools or 5,000 inserts ensure high productivity. Changeover to other coating materials or adaptation to changed tool quantities is possible within a short time. The system runs fully automatically with low maintenance requirements. No other system offers this combination!

USA Future HiPIMS

Coating service