CUSTOMER MAGAZINE
FOR COATING TECHNOLOGY

FACTS

No. 48 May 2019

HiPIMS MAKES THE DIFFERENCE

HIGHEST QUALITY WHEN COATING CUTTING INSERTS

Pages 6-8

FANAR TAP DRILLS: GROWTH THROUGH HiPIMS

FANAR EXPANDS ITS TAP PRODUCTION WITH THE CC800® HiPIMS

Pages 12/13

ARNO WERKZEUGE: KNOW-HOW GETS A BOOST

TOOL EXPERTS FROM ARNO EXPAND THEIR KNOWLEDGE OF COATING TECHNOLOGY

Pages 10/11

UNIQUE IN THE WORLD

CemeCon customers include the top tool manufacturers as well as many small and medium-sized companies on every continent. What drives them? To produce the highest quality tools at the highest possible standard of excellence, giving an edge over the competition and helping their clients to long-lasting success! To help them achieve this goal, CemeCon's coating service ensures that tool manufacturers get the same premium quality anytime, anywhere, all around the globe. An example: Tools that have been coated in our coating center in Würselen and then sold in the USA can easily be re-ground there and re-coated to exactly the same quality at our Horseheads site. We ensure this with mirrored processes and production at all our sites, as well as with quality assurance from the outset (see pages 6 to 8).

The article on Dürr Präzisionswerkzeuge GmbH on pages 4 and 5 describes what "from the outset" can mean. Working in close cooperation, great machining solutions, such as the DIAplus countersink for machining high-performance composite materials such as carbon fiber reinforced plastic (CFRP) are created time and again using our Premium Plus service.

CemeCon has clearly won the market over with its consistent quality-consciousness. Our coatings are rated excellent, and worldwide demand is increasing! This puts us in the position of being able to continuously expand our capacities everywhere. Read more about this on pages 15 and 16.

Yours sincerely,

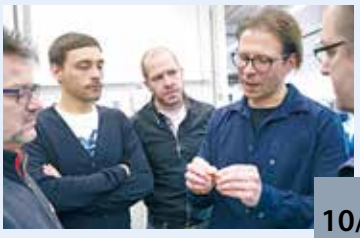
Dr Toni Leyendecker Dr Oliver Lemmer Bernd Hermeler

CemeCon works according to the same quality standards at all of its worldwide locations, such as here in the Chinese production in Suzhou.

IN THIS ISSUE

4/5

DIAplus countersink of Dürr with CCDia®AeroSpeed®-coating.



10/11

ARNO experts on a coating workshop at CemeCon.

12/13

Growth through HiPIMS at FANAR.

15

CemeCon expands diamond capacities worldwide.

Imprint

Published by
CemeCon AG
Adenauerstraße 20 A4
52146 Würselen
Phone +49 24 05 44 70 100
Fax +49 24 05 44 70 399
www.cemecon.de
info@cemecon.de

Editor
KSKOMM GmbH & Co. KG
Jahnstraße 13
56235 Ransbach-Baumbach
Phone +49 26 23 900 780
Fax +49 26 23 900 778
www.kskomm.de
ks@kskomm.de

Circulation English version: 5,600
Circulation German version: 9,000

Photographs
Photographs unless otherwise indicated: CemeCon.

Data Protection Information
If you have received this newsletter by post or electronically, CemeCon AG has stored your address data as specified in accordance with Art. 6 Para. 1 f GDPR in order to inform you about our products and services. If you no longer want to receive this newsletter or wish to make use of your data protection rights (rights to information, correction, deletion, limitation of processing, data transferability), please contact us: Phone: +49 24 05 44 70 100 or e-mail: info@cemecon.de.

DEDICATED SOLUTION FOR COUNTERSINKING IN CFRP, GFRP AND COMPOSITES

A NEW STAR IS BORN

In order to reduce weight while maintaining high strength in complex components, lightweight materials such as CFRP, GFRP and CFRP-titanium/ CFRP-aluminum stacks have become indispensable in the construction of automobiles, aircrafts, wind turbines and sporting equipment. However, machining them is no easy task. Anyone wishing to perform precise countersinking in sandwiched materials with high surface qualities will need special tools such as the new CCDia®AeroSpeed® coated countersink from Dürr Präzisionswerkzeuge GmbH.

"Composites consist of several layers. The individual materials exhibit different properties and are often highly abrasive. Protruding fibers and delamination must be avoided at all costs, as components with these defects end up on the reject pile. With countersinking, the fact that the tool penetrates the material with its angular cutting edges quickly causes tool vibrations that result in chatter marks in the countersink," says Wilhelm Marx, CEO and Production Manager at Dürr, outlining the challenges of CFRP machining.

Dürr Präzisionswerkzeuge GmbH is an expert in the manufacture of drilling, countersinking and reaming tools for a wide range of materials. In order to master the challenges of developing a countersink for machining composite materials, the Hohenlohe-based company first brought the know-how of CemeCon's coating experts on board.

PERFECTLY TAILORED COATING AND GEOMETRY

"Wear-resistant tools with extremely smooth, hard surfaces and special geometries with very sharp cutting edges were required. As part of our Premium Plus Service, we approached the optimum solution with a targeted variation of several factors for both the tool and the coating," says Marco Furrer, Sales Manager at CemeCon.

The countersink with the customized CCDia®AeroSpeed® coating ensures smooth countersink surfaces. (Photo: Dürr Präzisionswerkzeuge GmbH)

During the cooperation, Dürr further developed its tried and tested cutting geometry to meet the special requirements of CFRP machining. "The customized geometry prevents delamination and cuts the fibers of the laminates very accurately throughout the entire countersink area. This yields countersinks with smooth surfaces – with no objectionable fiber protrusions," says Wilhelm Marx.

Therefore, it was important to maintain the extremely sharp cutting edges during coating. "The ultra-thin coating specification based on CCDia®AeroSpeed® has no influence on the microgeometry and, therefore, does not affect the sharpness either," states Marco Furrer. The extremely smooth surface topography of the coating allows the countersinks to operate without vibrations or chatter, and this optimizes the removal of swarf and heat from the machining zone. With a coating hardness of approximately 10,000 $HV_{0.05}$ – nearly that of natural diamond – the tool also provides outstanding resistance to the very strong, highly abrasive fibers.

The CCDia®AeroSpeed® coating specification facilitates the long service life of the DIAplus countersink when machining composite materials. (Photo: Dürr Präzisionswerkzeuge GmbH)

AN INSPIRING RESULT

The DIAplus countersink is the result of intensive cooperation – the perfect combination of optimized cutting geometry, a selected grade of carbide and a customized diamond coating. "Countersinking in composites and stacks was previously considered a major challenge. The symbiosis of our countersink and the customized CCDia®AeroSpeed® coating now ensures brilliant performance in the machining of GFRP and CFRP as well as CFRP-titanium and CFRP-aluminum stacks. The service life of the tools is disproportionately long, and DIAplus guarantees almost unrivaled process reliability for machining tasks. Countersinking in installed components can even be done with hand-held machines under difficult operating conditions," enthuses Wilhelm Marx.

Uwe Späth, CEO and Sales Manager at Dürr, is pleased with the large volume of positive feedback from users: "Satisfied customers are our top priority; firmly convinced users are important to us. With the DIAplus, we have achieved this brilliantly and have been able to prove our status as a solution provider yet again. Last but not least, thanks to our intensive cooperation with CemeCon, we now offer lightweight construction a perfect solution for countersinking in composites."

DÜRR PRÄZISIONSWERKZEUGE GMBH

Dürr Präzisionswerkzeuge GmbH, founded in Hohenlohe in 1994, is an expert in the manufacture of machining tools, in standard and customized designs. With the innovative ENORM plus countersink for machining wear-resistant and structural steels with tensile strengths of up to 1750 N/mm², the company has successfully established itself on the market as a problem solver. Dürr offers the new DIAplus countersinks in 90° and 100° countersink angles and in five different diameters each. Other angles and diameters are available on request.

www.duerr-tools.de

QUALITY WHEN COATING CUTTING INSERTS

WHICHEVER WAY YOU LOOK AT IT

Cutting inserts with HiPIMS premium coatings are the key to maximum performance for both standard applications and demanding machining tasks. They achieve very smooth surfaces at very high feed and cutting speeds. With the Premium and Premium Plus Service from CemeCon, the coatings are precisely matched to your requirements. Eric Knipprath is one of those responsible for consistent quality.

HiPIMS-coated cutting inserts offer crucial production advantages including maximum material removal rates during roughing and the highest levels of precision and speed during finishing. The FerroCon®, InoxaCon® and AluCon® coating materials are extremely smooth, low-stress for high coating thickness, exceptionally hard and wear-resistant and have incomparable adhesion of the film. This ensures a longer tool life, better workpiece surfaces and the possibility of optimized cutting data.

HiPIMS MAKES THE DIFFERENCE

"Revising the geometries of cutting inserts is very time-consuming and cost-intensive," says Inka Harrand, Product Manager for Cutting Inserts at CemeCon. "By moving to HiPIMS, tool manufacturers and users can quickly achieve significant performance gains in machining."

One example: Face milling with cutting inserts involves a high swarf volume. With InoxaCon®, we were able to remove 1,500 cm^3 of heat-treatable steel (42CrMo4) at v_c = 180 m/min, a_p = 2 mm and f_z = 0.25 mm. An AlTiN-coated cutting insert was only able to complete 1,000 cm^3. That is an increase of 50% in swarf volume!

The coating material is only one component of the premium coating. It is the result of numerous options; the CemeCon dedicated production line for cutting inserts is precisely geared to the requirements of this category of tools. Individual coatings which allow every customer marketplace distinction are created through the targeted combination of special pre- and post-treatments, coating material, coating thickness and other details.

Eric Knipprath checks the quality of the cutting inserts and their coatings.

CemeCon clearly differentiates between the individual requirements for these. Premium Service focuses on the unique form and function of each tool, while Premium Plus solutions involve CemeCon's experts working closely with the tool manufacturer to design a coating solution that is precisely tailored to market requirements.

All cutting inserts are provided with dedicated coatings.

QUALITY IS EVERYTHING

"In order to guarantee outstanding quality in series production later on and to provide our customers with the best possible coating consistently to the same specification, it is important to pay close attention from the outset. Are the parameters and working steps selected correctly?" asks Eric Knipprath, who, among other things, checks the quality of the first cutting inserts at the coating center in Würselen and integrates, monitors and produces photo documentation of engineering tasks in production. "For the first order, I inspect all the tools very closely under the microscope and assess the condition of their coatings. For example, I pay attention to the quality of the edges, check for possible damage, assess the degree of soiling and examine the substrate surface. These criteria can influence the coating quality."

The surface conditions of cutting inserts can vary. "For this reason, pretreatment is an important com-

HiPIMS coating materials

FerroCon®

for unalloyed and alloyed steels as well as cast iron

Coating material:
AlTiN-based

Max. operating temperature:
1,100 °C

Color:
Anthracite

Coating thicknesses for cutting inserts:
3 µm, 6 µm and shortly: 12 µm new

InoxaCon®

for stainless, high-alloy steels, titanium, nickel-based alloys and difficult-to-machine materials (CrCo)

Coating material:
TiAlSiN-based

Max. operating temperature:
1,100 °C

Color:
Copper

Coating thicknesses for cutting inserts:
3 µm

AluCon®

for aluminum, titanium, copper and non-ferrous metals

Coating material:
TiB_2-based

Max. operating temperature:
1,000 °C

Color:
Silver

Coating thicknesses for cutting inserts:
2 µm

ponent in achieving optimum adhesion and, with it, a successful coating," says Eric Knipprath. "This is why I recheck the engineering orders after preparation and again after the subsequent working steps."

THE RIGHT COATING THICKNESS

Another important factor is the thickness of the coating. High-precision finishing of materials, such as titanium, nickel-based alloys or aluminum, that are difficult to machine, requires a sharp edge. Hence a thin coating is needed. For wear-intensive roughing operations on steel with high removal rates, an 8 µm thick FerroCon® coating layer offers a high wear volume and protects the tool. To that end, Eric Knipprath states, "Sufficient rounding of the edges is an important prerequisite for coating thicknesses of this magnitude. If I discover during the incoming inspection that a very sharp cutting edge is supposed to receive a very thick layer, we seek a solution in cooperation with the manufacturer, and the combination is customized."

"In order to be able to produce in series later on, it is important TO PAY CLOSE ATTENTION FROM THE OUTSET. Have the PARAMETERS and WORKING STEPS been selected correctly? That is what brings the HIGH QUALITY we deliver!"

Eric Knipprath, Production Engineering at CemeCon

After the coating process, the cutting inserts are finished. "The final step is the outgoing inspection. I look at the test tools under the microscope once again, conduct a coating inspection and create a photo documentation," adds Eric Knipprath.

ALWAYS THE SAME QUALITY

Once the dedicated coating solution has reached series production, regular inspections reliably guarantee consistently high quality. All employees at the individual stations continuously check the working materials, the individual process steps and the handling of the cutting inserts at each work step. Random incoming and outgoing inspections of each item in an order are components of series production.

Thanks to mirrored processes and production in the CemeCon coating centers throughout the world, tool manufacturers everywhere receive the same coating solution in the same quality as in Germany.

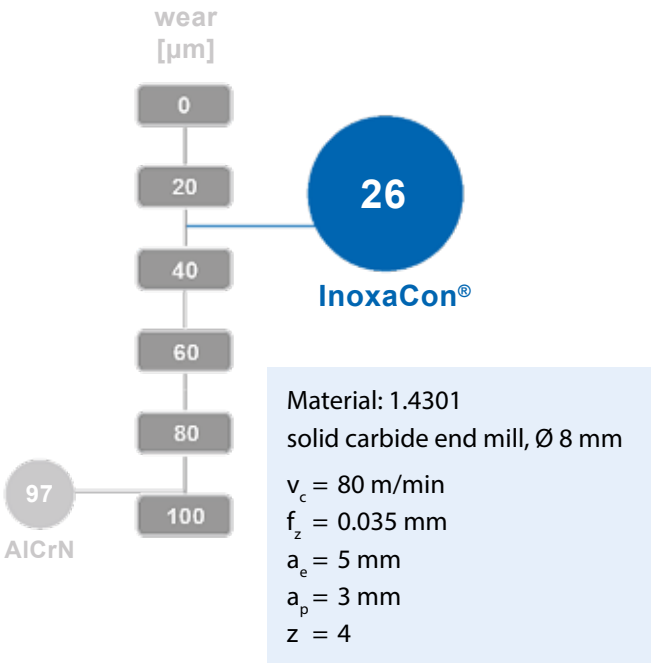
BEST CHOICE FOR STAINLESS STEELS

From machines, to stair railings, to cutlery, to automobiles, ships and aircrafts – stainless steel can be found in almost all areas of everyday life, i.e. wherever the material is exposed to environmental influences and must not rust. As the name implies, InoxaCon®, the hard, smooth, tough HiPIMS coating material, offers ideal conditions for the reliable cutting of stainless steel.

Stainless steels are characterized by a high degree of resistance to corrosion and acid. They are very tough and have a low thermal conductivity. "This is not a good combination for machining, because drilling, milling and turning generate high oxidation on the cutting edge which can damage the tool," says Dr. Stephan Bolz of PVD Process Development at CemeCon. "Thanks to its high temperature stability up to 1,100°C, InoxaCon® optimally protects the tool from heat during the machining process, and the heat is conducted into the swarf."

"Due to the high frictional heat, built-up edges can also occur on the tool. The slightly 'melted' chip bakes, so to speak, onto the face. If another chip then comes along, there is a risk that it will rip these welded-on chips off, taking parts of the coating and substrate with it. The result: The tool wears out,"- says Stephan Bolz, explaining the problem of cold welds. InoxaCon® has crucial advantages here: The HiPIMS coating material is very smooth, which reduces heat, and it has a low affinity for stainless steels. This dependably prevents built-up edges and ensures process reliability.

CemeCon offers two different variants of coating material: with a coating thickness of 3 µm for shank tools and cutting inserts and 1.5 µm but only for shank tools. "And another little tip: InoxaCon® also works very well when cutting titanium and nickel-based alloys," adds Stephan Bolz.



A practical example in comparison with AlCrN underscores the efficiency of the HiPIMS coating material.

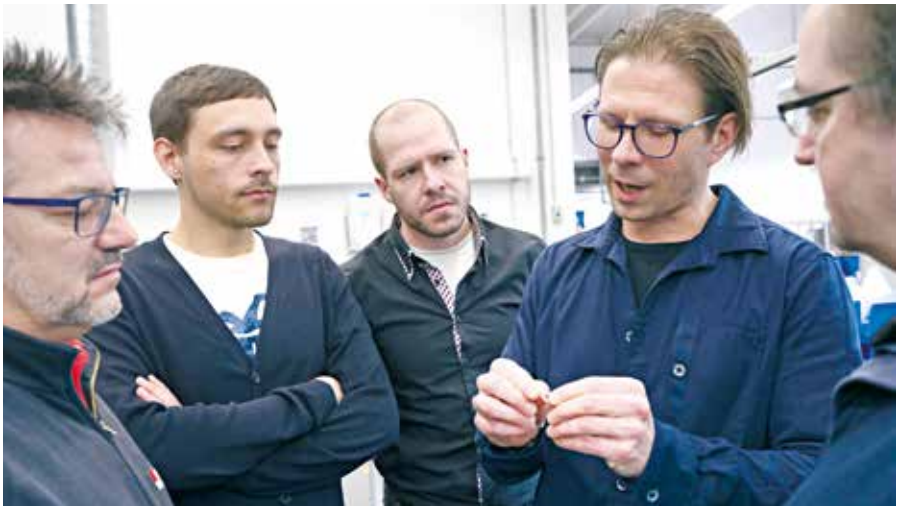
Thanks to MIRRORED PROCESSES AND PRODUCTION in the CemeCon coating centers THROUGHOUT THE WORLD, tool manufacturers everywhere receive the SAME COATING SOLUTION in the SAME QUALITY as in Germany.

TOOL EXPERTS FROM ARNO EXPAND THEIR KNOWLEDGE OF COATING TECHNOLOGY

KNOW-HOW GETS A BOOST

Only those who are aware of their capabilities can advise and support their customers well. This is why the application engineers from ARNO Werkzeuge spent a day at the coating center in Würselen to get to know the latest developments from CemeCon, including HiPIMS technology and the coating materials FerroCon®, InoxaCon® and AluCon®.

With one of the world's largest ranges of ground, highly positive cutting inserts for turning, innovative systems for grooving and parting as well as milling and drilling systems, ARNO Werkzeuge offers its customers an efficient range of tools for a wide variety of machining applications. Continuous improvement is an important building block for the success of the tools. ARNO Werkzeuge has been collaborating with CemeCon for many years now and has acquired its coating know-how via the coating service.



The experts from CemeCon answered numerous questions on the latest coating technology from the ARNO Werkzeuge application engineers.

Inka Harrand (leftmost), Marc Semder, Sales Manager, and Eric Knipprath (rightmost) showed the application engineers from ARNO Werkzeuge the latest developments in coating technology during their visit to the coating center in Würselen.

"As tool specialists, we are not unfamiliar with coatings, but we lack the in-depth expert knowledge. However, in order to train our own sales team and support and advise our customers as well as possible, for example in the event of a machining problem, we wanted to expand our knowledge of the latest coating technology and its potential. CemeCon offered us a very informative and helpful day for this," says Werner Meditz, Technical Manager at ARNO Werkzeuge.

The focus of the seminar was on the future-oriented HiPIMS technology: How does it work? What coating materials does CemeCon offer? And what are these particularly suitable for? The experts from CemeCon answered these and other questions in theoretical and practical sessions for interested application engineers.

"We are happy to offer our customers seminars on our coatings, either at our premises in Würselen or on site at the customer's premises. This strengthens our cooperation and creates a better understanding of our work. In addition, the tool experts familiarize themselves with the requirements that have to be considered for a premium coating. They can apply this knowledge directly to the manufacture of the tools. This makes work easier for everyone," adds Inka Harrand, Product Manager for Cutting Inserts at CemeCon.

ARNO WERKZEUGE

ARNO Werkzeuge (Karl-Heinz Arnold GmbH) combines the latest machining production technology with worldwide sales structures. With numerous subsidiaries and sales partners on every continent, ARNO Werkzeuge is known throughout the world for the innovative power, reliability and performance of its tools. Many years of experience in machining technology coupled with the constant further development of existing tools, combined with research into new materials, enable ARNO Werkzeuge to introduce outstanding tools year after year.

www.arno.de

FANAR EXPANDS ITS TAP PRODUCTION WITH THE CC800® HiPIMS

TAP DRILLS: GROWTH THROUGH HiPIMS

Based in Ciechanów, Poland, Fabryka Narzędzi FANAR S.A. is continuing to grow steadily. The first step into in-house coatings for taps was a CemeCon sputter coating line two years ago. The company is now following this up with a CC800® HiPIMS. The system enables the production of the highest quality TiCN coatings over a much shorter cycle time. The latest HiPIMS technology perfectly complements the threading tool manufacturer's international growth strategy.

"How can we grow more quickly? What gives us the edge over the competition? What technology can help us to achieve this goal?" These are questions that motivate Marcin Kołodziej, President of FANAR. For the past two years, FANAR has been using a CC800®/9 ML from CemeCon for coating tap drills. "The sputtering system gave us a significant competitive advantage. With the support of CemeCon, we are able to control the entire process chain, from grinding, heat treatment and edge preparation to coating. Delivering a better product faster: that's what FANAR is all about."

HiPIMS COATINGS – PERFECT FOR THREADING TOOLS

To meet the increase in demand, FANAR invested in a CC800® HiPIMS to upgrade its production with a second CemeCon coating system. "Threading tools require coatings with very specific properties," states

"The CC800® HiPIMS greatly enhances THE PERFORMANCE of our TAP DRILLS enabling us to GROW OUR BUSINESS."

CTO Dariusz Ptaszkiewicz (left) and PVD Process Engineer Arkadiusz Urbanowicz (right) at FANAR. (Photo: FANAR)

FANAR's "Master" and "X" tap products are a huge market success thanks to novel HiPIMS coatings. (Photo: FANAR)

Dr. Biljana Mesic, who supervised CemeCon's development of dedicated coatings for FANAR. "The adhesion of the workpiece material to the tap is usually the cause of poor performance. Smooth, dense coatings are essential." In addition, only the first two to three threads cut when threading. This means that maximum coating adhesion and ductility are at the top of the list of specifications. "HiPIMS technology is perfect for this task: it results in extremely smooth, dense coatings that stay on the tap's threads due to outstanding ductility. The exceptionally high ionization adds optimal film adhesion to the positive properties. And it ensures the reliable deposition of coatings containing carbon," states Biljana Mesic.

Coating systems such as TiCN and WC/C, for example, are essential for low torque during tapping and reliable chip removal in stainless materials. However, the production of these coatings became the Achilles' heel in tap tool production due to the evaporator systems, which are several decades old. HiPIMS points the way of the future: latest technology equipment for a reliable production of high-performance TiCN coatings.

Dariusz Ptaszkiewicz, CTO at FANAR, summerize: "Thanks to the HiPIMS technology, standard TiCN has been successfully replaced with a novel nanostructure coating having a TiAlN and TiAlSiN base layer for greater versatility and increased durability of taps. HiPIMS coatings effectively support our strategy of 'one tool for all materials'. While putting together the know-how of the tap's macro and micro geometry with a dedicated HiPIMS coating, we have released a series of 'Master' and 'X' tap products that are a huge success on the market."

BEST PREREQUISITES FOR GROWTH

As well as greatly enhancing tap drill performance, the CC800® HiPIMS completes coating tasks in record time – thanks to deposition rates of up to 2 µm per hour. This ensures short production times and maximum productivity.

"HiPIMS technology offers us virtually boundless possibilities in the development of specific coating solutions. This enables us to achieve growth through new materials," states Marcin Kołodziej with pride about FANAR's latest investment.

FABRYKA NARZĘDZI FANAR S.A.

Fabryka Narzędzi FANAR S.A. is a leading manufacturer of machining tools for metal processing, based in Ciechanów, Poland. State-of-the-art technology, qualified people and many years of experience make it possible for FANAR to offer a wide range of tools of the highest quality. Innovative solutions and continuous development are central priorities in the company's philosophy. Its global customers include companies from the automotive industry, aerospace, medical technology and other industries. FANAR tools are sold in more than 40 countries.

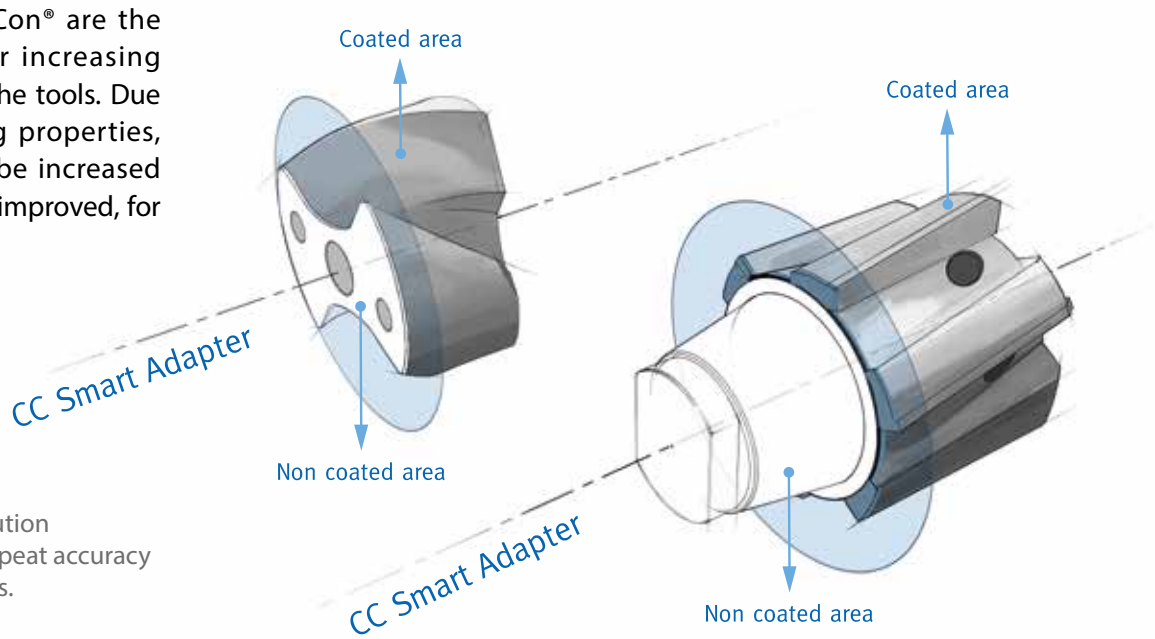
www.fanar.eu

OPTIMAL PROTECTION FOR HEADS WITH HiPIMS

Replaceable head systems are an increasingly popular alternative to conventional shank tools in machining. They score with high repeat accuracy and short non-productive times, as the base frame can remain in the spindle and only the cutting head is replaced. Users can further increase productivity with the high-performance HiPIMS coating layers. CemeCon adapts all types of interfaces with a smart batching solution for maximum repeat accuracy.

The foresighted use of resources is important – all the more so, as carbide is increasingly becoming a scarce commodity. As a result, more and more tool manufacturers are relying on replaceable head systems to keep material usage as low as possible. "These replaceable heads must be able to withstand the same high loads in the machining process as their shank counterparts. For this, modern coating solutions based on our HiPIMS coating materials FerroCon®, InoxaCon® and AluCon® are the media of choice for increasing the performance of the tools. Due to their outstanding properties, cutting speeds can be increased and surface qualities improved, for example. This makes replaceable head systems even more economical," says Manfred Weigand, Product Manager Round Tools at CemeCon.

However, coating the cutting heads is a challenge due to the large number of different adapter systems. CemeCon has a smart solution for this: "We use a special adaptation system that is both suitable for the manufacturer's individual interfaces and universal enough for an efficient coating process. The adapter points on the replaceable heads, which must not be coated, are covered, as the system enables clearly delimited coating areas. Our solution guarantees a high level of process reliability, which ensures that our customers always receive their tools with the same coating specification and the consistent quality. This has been successful, as proven by many thousands of coated replaceable heads," explains Manfred Weigand.



The smart batching solution guarantee maximum repeat accuracy for all types of interfaces.

CEMECON IS EXPANDING ITS DIAMOND CAPACITIES THROUGHOUT THE WORLD

DIAMOND ON THE RISE

Diamond coatings are indispensable for the economical machining of graphite, green sintered carbide, composites, high-silicon aluminum and metal matrix composites. Demand is rising internationally with lightweight construction in sectors such as the aerospace and the automotive industries. CemeCon, world market leader and pioneer in the field of diamond coatings, is responding to this market development and expanding its diamond capacities in coating centers around the globe.

The CCDia® series diamond coating materials are clearly superior to other solutions. They combine the advantages of crystalline and nanocrystalline layers: The alternating application of both variants produces a coating with excellent adhesion and a very smooth surface. In combination with their extreme hardness and high thermal conductivity, coated tools achieve long service lives and optimum machining results, even for the special requirements of high-tech materials. The crack-prevention properties also ensure high process reliability.

"This unique combination of properties is in great demand among tool manufacturers worldwide. And the demand is constantly growing as well, since we guarantee the same quality everywhere. Because of this, we have greatly expanded the production of diamond coatings in Europe, the USA and China," says Bernd Hermeler, CMO of CemeCon AG.

In Würselen alone, the world's largest diamond coating center for machining tools, production was expanded by approximately 420 m^2, but Diamond is also on the rise at the other locations. Coating with CCDia® products has been available in the USA since 2014. A diamond coating center was also opened in China at the beginning of 2019. And another one will follow in Japan during the course of the year.

Diamond coating materials

PROPERTIES

Coating material:
Diamond, sp^3

Microhardness:
10,000 $HV_{0,05}$

Max. operations temperature:
650°C

Color:
Grey

USES

CCDia®AeroSpeed® for CFRP, CFRP/Al-Stacks, CFRP/Ti-Stacks

CCDia®CarbonSpeed for Graphite and ceramics, alloyed green sintered carbide

CCDia®FiberSpeed and **CCDia®MultiSpeed** for CFRP, GFRP and ceramics

PREMIUM COATING CENTER FOR HiPIMS AND DIAMOND IN SUZHOU

SUZHOU COATING TECHNOLOGY CO. LTD. CAPACITY DOUBLED

The consistent quality thinking of CemeCon convinces the chinese market: "Our premium coatings for cutting tools are very much respected at the chinese precision tool manufacturers. This forced us to expand our capacities of premium coating technology" says Tian Xian, General Manager of CemeCon China.

Tian Xian, General Manager of CemeCon China.

The product range of coatings available in the Chinese market has been extended by the coating service. Now the most advanced HiPIMS and Diamond coatings are available in China in CemeCon's standard premium quality.

Because of the big success the area for production, offices and customer training has been doubled. Last but not least the name has been officially changed to "CemeCon Suzhou Coating Technology Co. Ltd."

CemeCon has doubled the capacity of the premium coating center in Suzhou, China.

OUR NEXT EVENTS 2019

21ST - 22ND MAY 2019
ICMCTF Int. Conference on Metallurgical Coatings
San Diego (USA)

27TH - 31ST MAY 2019
Metaloobrabotka
Moscow (Russia)

19TH - 20TH JUNE 2019
10th HIPIMS-Conference 2019
Braunschweig (Germany)

16TH - 21ST SEPTEMBER 2019
EMO
Hanover (Germany)

01ST - 03RD OCTOBER 2019
Toolex
Sosnowiec (Poland)