Diamond coatings on cutting inserts



With state-of-the-art machinery, Alsameca ensures the high quality of precision tools.

Alsameca special tools only with premium coatings

Automotive, aerospace, medical technology – high-tech industries depend on first-class precision tools for the process-reliable, high-precision and, last but not least, economical production of their components from materials that are often difficult to machine. Alsameca from the French town of Lutterbach (Haut-Rhin) has made a name for itself in these industries with high-quality cutting tools. When it comes to finding solutions for special application, the company works closely with the coating expert CemeCon – for example in the field of diamond-coated cutting inserts.

Anyone who enters Alsameca's production facility in Lutterbach is immediately struck by the ultra-modern machinery, in addition to the cleanliness and obvious love of order. Automated grinding centers, robot-controlled test benches, optimized production management – the manufacturer of precision tools and regrinding service spares no expense or effort to ensure the quality of its products and at the same time a rapid responsiveness. The goal is to "increase our productivity, gain market share and remain competitive," says Pascal Guichard, founder and director of the ASP group, which includes Alsameca. To achieve this, he is constantly investing in automation and digital technologies.

Alsameca has been grinding precision tools for 42 years and has already designed many sophisticated

solutions for a wide range of industries. Thus, the experts know exactly how important the interaction of substrate, cutting-edge geometry and coating is. That is why ASP also has its own PVD coating expertise inhouse and uses it successfully, mainly for standard tools. For precision tools for special applications, when first-class premium coatings are required, Alsameca additionally relies on the experience of CemeCon.

"With DIAMOND COATINGS, for example, we have been able to significantly increase the PERFORMANCE of our CUTTING INSERTS – both in terms of TOOL LIFE and MACHINING QUALITY."



Stéphane Kalt, Director of Alsameca

Thanks to automated measurement technology, Alsameca can meet the tight tolerances of the complex tools for special applications without compromise

Machining lightweight materials with diamond-coated cutting inserts

Alsameca cutting inserts score with exceptional cutting-edge geometries, multi blade configuration and high feed rates. "With their nanocrystalline, extremely smooth and hard surfaces, our CCDia® coatings are superior to other coating solutions in terms of performance, quality and precision and contribute significantly to even higher efficiency. Especially on cutting inserts for machining CFRP and GFRP, graphite, non-ferrous metals or plastics, CCDia® coatings open up enormous potentials," says Jean Cariolini, Sales Europe at CemeCon. The powerful combination of Alsameca's cutting inserts and CemeCon's diamond coatings achieves excellent results when machining lightweight materials for the automotive and aerospace industries.



Whether shank tools or indexable inserts - diamond coatings from CemeCon open up potential in the machining of composites, graphite and non-ferrous metals.

Matching all the parameters in a joint engineering approach of CemeCon and Alsameca made this happen. The experts coordinate the coating precisely with the requirements and application in a close dialogue. Substrate, geometry and coating all together form an optimal machining solution for the respective application – perfect for Alsameca's sophisticated tool concepts and special applications.

Service life significantly increased

Stéphane Kalt, Director of Alsameca: "Whether dedicated diamond coatings for our cutting inserts or highperformance HiPIMS coatings for special applications – we have already worked with CemeCon in many successful engineering projects and are always very satisfied with the results and with the speed of implementation. With CemeCon's diamond coatings, for example, we have been able to significantly increase the performance of our cutting inserts – both in terms of tool life and machining quality."

Alsameca / ASP-Group

Alsameca, founded 42 years ago, produces around 140,000 precision tools annually in Lutterbach (France) with 19 employees. State-of-the-art machinery with loading robots for all grinding machines and automated measuring technology ensures the high quality standards and response times. The French company is certified as an official partner of the manufacturer Kennametal in France.

In 2008, Alsameca joined the ASP (Affûtage Service Performance) group with a total of 49 employees.

ASP is known for its versatility in grinding and in the production of cutting tools and wear parts (solid carbide, brazed carbide or high-speed steel). To secure competitive advantages, the group is constantly investing in new technologies.

www.asp-affutage.fr

Aerospace Lightweight construction Medical technology Cutting inserts Diamond Automotive industry HiPIMS Premium Coating Engineering Precision