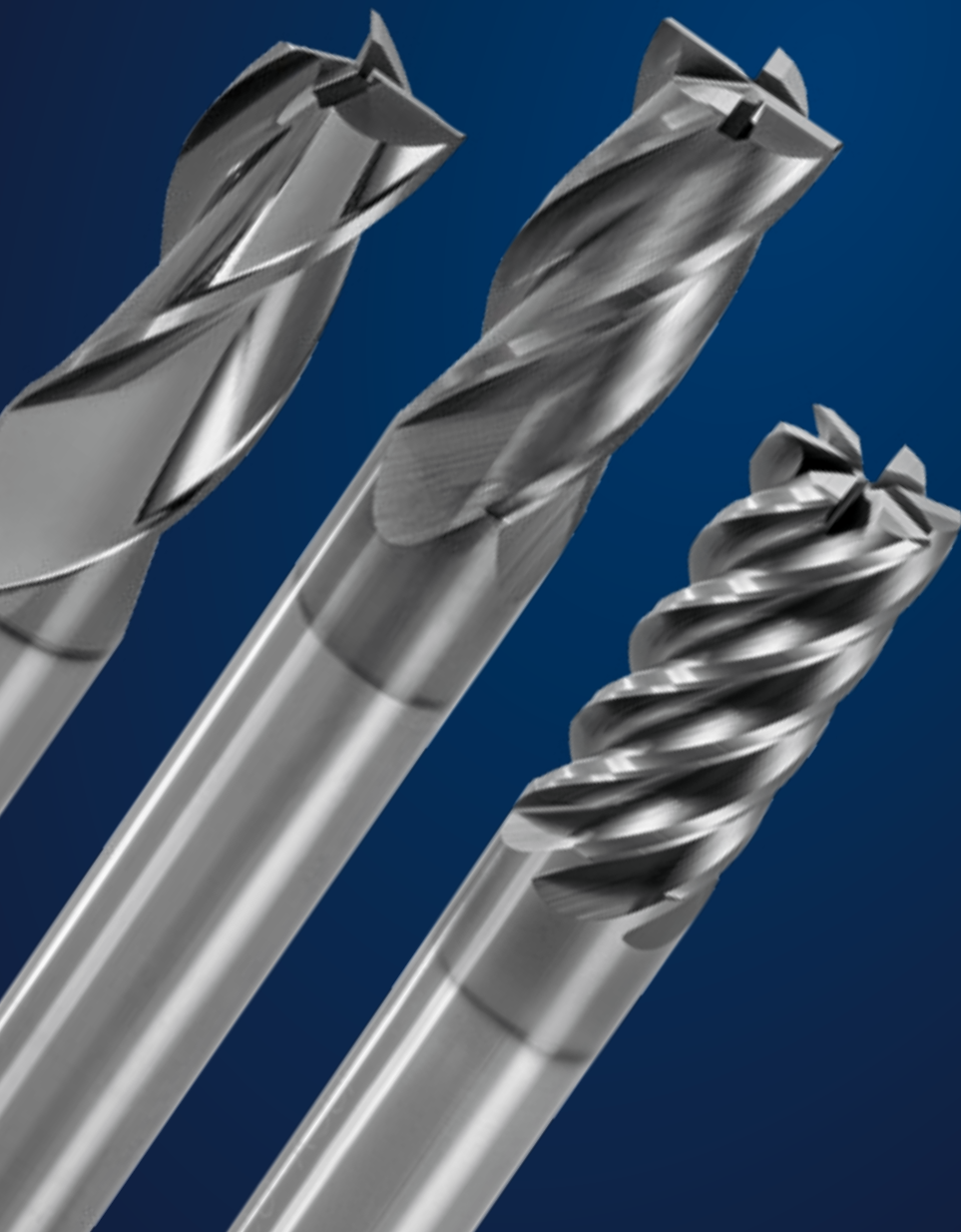


MultiCon[®]

AlCrN goes HiPIMS: The new
all-rounder for steel machining



GEMECON
The Tool Coating

AlCrN goes HiPIMS: The new all-rounder for steel machining

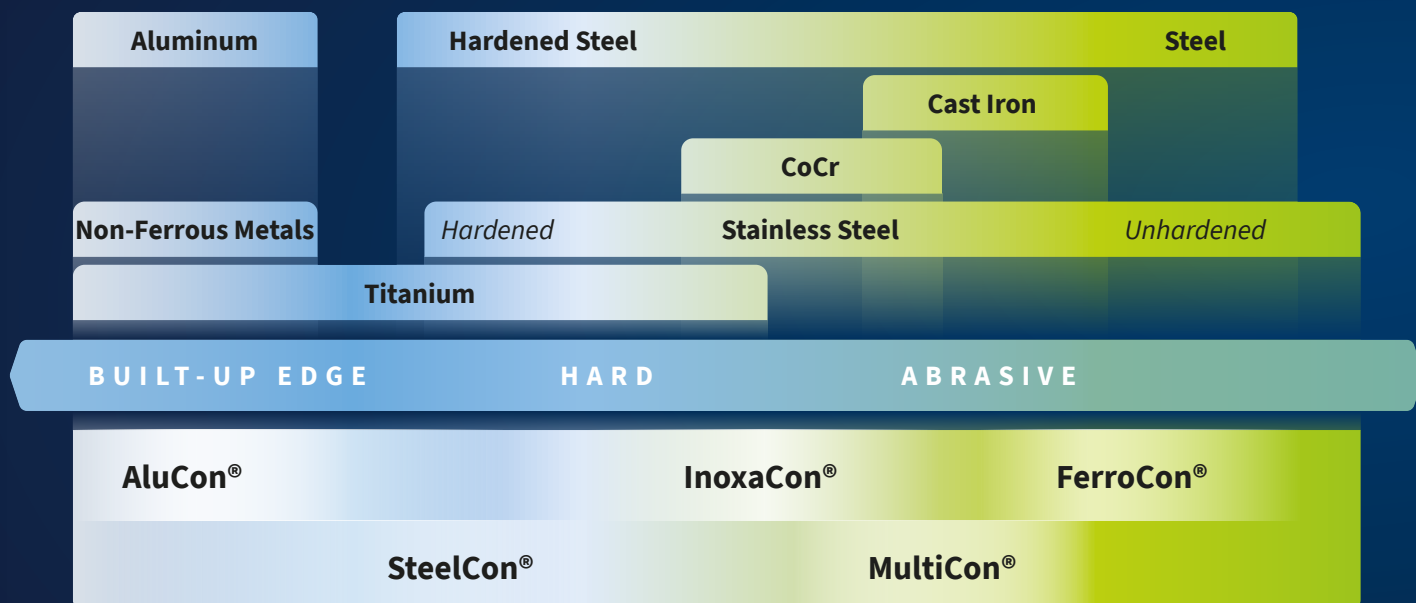
NEW: For wet and dry processing of steel and cast iron

AlCrN coatings have been established for a long time in steel processing, mostly using the arc process. Despite proven efficiency, performance gains have recently stagnated—until now: the HiPIMS technology is providing new impetus. It enables extremely smooth, dense, and adhesive coatings. With MultiCon®, CemeCon presents the next evolutionary stage of its HiPIMS-based AlCrN coating—significantly more powerful than arc alternatives.

Steel is ubiquitous in industrial manufacturing and demands maximum performance from tools and coatings. With its latest HiPIMS coating material MultiCon®, CemeCon offers a high-performance solution specifically for milling and drilling cast iron and steels between 30 and 50 HRC.

MultiCon® combines excellent adhesion, an extremely smooth surface, and optimized wear behavior to take machining quality and tool life to a new level—both in wet and dry machining.

Hardened steel, stainless steel, or cast iron—CemeCon always offers the right solution. MultiCon® perfectly complements the steel processing portfolio beside FerroCon® and InoxaCon®.



Optimal for steel from 30 to 50 HRC

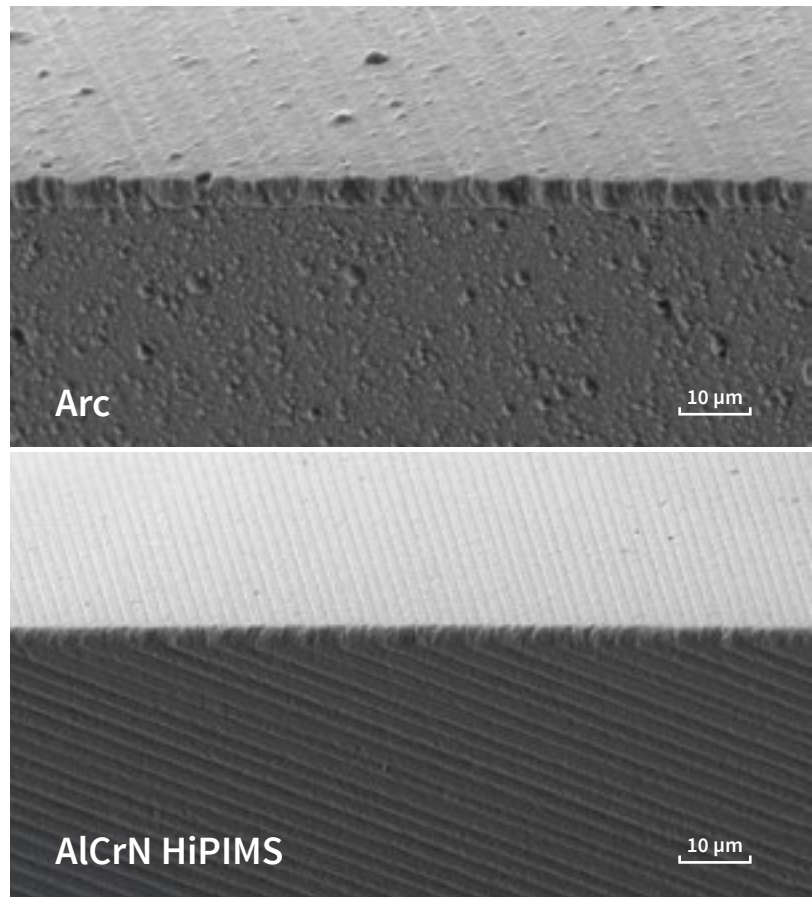
MultiCon® rounds off the HiPIMS portfolio between FerroCon® (for soft steels) and InoxaCon® (for medium-hard steels and stainless steel). The new coating material was developed specifically for steel from 30 to 50 HRC.

Proven longer, reproducible tool life

Reports from practice prove that MultiCon® increases tool life when milling tempered steel by around 30%, and in some cases even up to 80%. This is the result of optimal coordination between tool geometry and coating, developed jointly with tool manufacturers.

AlCrN at the highest level

MultiCon® combines HiPIMS technology with the strengths of AlCrN—for maximum process reliability and performance in steel processing. A future-proof solution for modern manufacturing requirements.



MultiCon®: The HiPIMS advantage over conventional arc coatings

MultiCon® in detail

Coating technology:
HiPIMS

Properties:
optimal wear behavior, excellent adhesion, extremely smooth

Coating material: **AlCrN-based**

Max. operating temperature: **1,100 °C**

Color: **dark gray**

Coating thickness: **3 µm**
(for shank tools)

Application example: milling

Material: **tempered steel 1,400 N/mm²**

Tool: **solid carbide mill Ø 8 mm**

$v_c = 150 \text{ m/min}$

$n = 6,460 \text{ min}^{-1}$

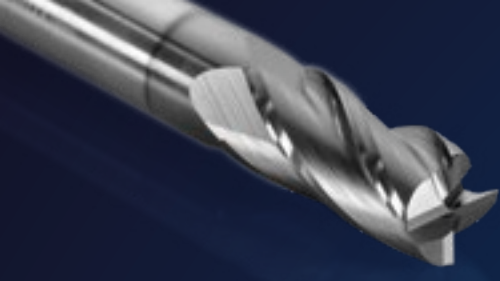
$f_z = 0.085 \text{ mm}$

$a_p = 0.028 \text{ mm}$

$a_e = 0.5 \text{ mm}$

Cooling: **emulsion**





Our experts are just a phone call away!

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