

Round Tool Materials

CTS24Z – new carbide grade for the machining of difficult materials



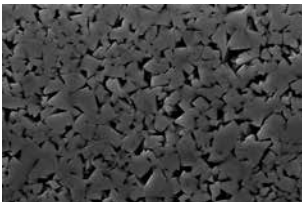
CERATIZIT is a high-tech engineering group specialized in tooling and hard material technologies.

Solid carbide rods and end mill blanks now available in new high-performance grade CTS24Z

Our wide and innovative grade range satisfies the exacting demands of the modern precision tooling industry. For all materials and machining tasks, you can find grades specially developed for the given application.

With CTS24Z we are launching a new high-performance grade for the machining of difficult materials like titanium or Inconel. Applications in the aerospace industry, in particular, make high demands

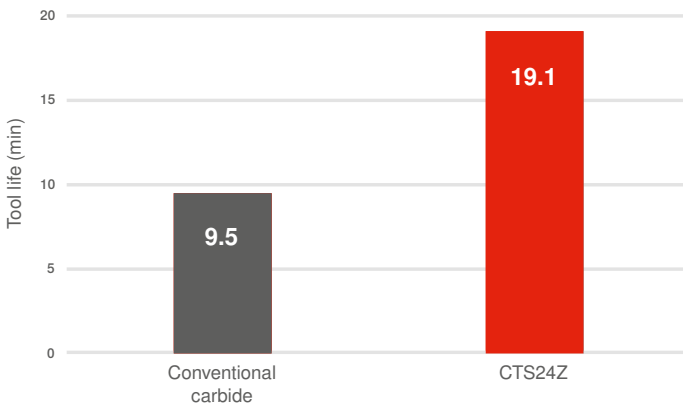
on tooling systems. Having virtually the same hardness, CTS24Z is however even tougher than our proven grades CTS18D and CTS20D! This extreme toughness offers maximum protection against chipping and ensures consistent performance of your tools.



CERATIZIT code	ISO code	US code	Grain size	Binder %	Density g/cm ³	Hardness HV30	Hardness HRA	Transverse rupture strength MPa	KIC MPa*m
CTS24Z	K20 - K40	C-2	submicron	12.0	14.1	1570	91.7	4000	11.3

CTS24Z is available from stock as solid carbide rod or end mill blank in various dimensions and lengths.

Tool life comparison CTS24Z



Cutting parameters:

Side milling of Ti-6Al-4V

Solid carbide end mill D = 25 mm z = 4 uncoated

$V_c = 63$ m/min $f_z = 0.1$ mm
 $a_p = 10$ mm $a_e = 8$ mm