

TCGT-AK

ZANHO Cutting Tools



TCGT-AK

Aluminum Inserts

Feature

ZANHO **TCGT-AK series**: High-precision **triangular positive inserts** specifically engineered for aluminum and non-ferrous metals. Featuring **3 effective cutting edges**, these inserts are designed

with a **large positive rake geometry** and a **buffed mirror-polished rake face**. They effectively minimize cutting resistance and prevent chip adhesion (BUE), making them ideal for high-speed external turning, internal boring, and profiling with exceptional surface brightness.

Descriptions

Technical Advantages

- **Mirror-Polished Rake Face:** Reduces cutting friction and prevents built-up edge (BUE) and chip welding on the insert surface.
- **Large Positive Rake Geometry:** Ensures sharp and light cutting action, significantly reducing power consumption and tool vibration.
- **Segmented Open Chipbreaker:** Provides stable and mandatory chip curling for smooth evacuation in both internal and external machining.
- **High Precision Ground:** Delivers optical-grade surface smoothness and maintains excellent dimensional stability.
- **3 Cutting Edges Economy:** The triangular geometry offers 3 sharp edges, providing a great balance between performance and cost-per-edge.
- **Versatile Machining:** Ideal for external turning, internal boring, face machining, and precision profiling of all non-ferrous workpieces.

TCGT-AK Dimensions (ISO Standard)

Model	Edge Length L (mm)	Thickness S (mm)	Bore D (mm)	Radius R (mm)
TCGT090202-AK	9.525	2.38	2.8	0.2
TCGT090204-AK	9.525	2.38	2.8	0.4
TCGT090208-AK	9.525	2.38	2.8	0.8
TCGT110202-AK	11.0	2.38	3.2	0.2
TCGT110204-AK	11.0	2.38	3.2	0.4
TCGT110208-AK	11.0	2.38	3.2	0.8
TCGT16T302-AK	16.0	3.97	4.4	0.2
TCGT16T304-AK	16.0	3.97	4.4	0.4
TCGT16T308-AK	16.0	3.97	4.4	0.8