

VCGT-ML

ZANHO Cutting Tools



VCGT-ML

Finishing Inserts

Feature

ZANHO **VCGT-ML series**: Advanced **semi-finishing and finishing** inserts featuring a dual-structure alloy substrate and ultra-fine grain γ -Al₂O₃ coating. Engineered for exceptional edge

strength and **plastic deformation resistance**, these inserts are optimized for high-performance machining of 200/300/400 series, Martensitic, and Duplex stainless steels (20-35 HRC).

Descriptions

Technical Features

- **Dual-Structure Substrate:** Advanced core-surface differentiated alloy for balanced toughness and hardness.
- **Al2O3 Coating:** Ultra-fine grain coating provides superior thermal stability and wear resistance.
- **Semi-Finishing Expert:** Optimized for workpiece hardness between 20 HRC and 35 HRC.
- **Material Versatility:** High performance on 201, 304, 316, 420, Martensitic, and Duplex Stainless Steels.
- **Deformation Resistance:** Enhanced edge geometry prevents tip collapsing under high-temperature loads.

VCGT-ML Dimensions (mm)

Designation	L	øI.C	S	D1	RE
VCGT110301-ML	11	6.35	3.18	2.8	0.1
VCGT110302-ML					0.2
VCGT110304-ML					0.4
VCGT160401-ML	16.5	9.525	4.76	3.81	0.1
VCGT160402-ML					0.2
VCGT160404-ML					0.4

Recommended Cutting Parameters

Depth of Cut (ap)	Cutting Speed (Vc)	Feed Rate (f)
1.0 mm	70 - 120 m/min	0.25 (0.20 - 0.30) mm/rev