

● 01. COOLANT VITALITY

Concentration Rule

8% - 12%

ValidTi Grade 23 is ductile. Standard 5% mix is insufficient for lubrication.
Increase oil content to prevent galling.

Nozzle Position Direct at tool tip

Filtration Check < 50µm

● 02. VERIFIED PARAMETERS (WET)

STRATEGY PHASE	RPM (S)	FEED (F) MM/MIN	Z-STEP
Roughing (Ø2.0/3.0)	18,000 - 22,000	1,200 - 1,500	0.3 mm
Semi-Finish (Ø1.5)	24,000	1,000	0.15 mm
Finishing (Ø1.0)	30,000+	600 - 800	0.05 mm
Screw Channel	15,000	300 (Peck)	0.02 mm

* Parameters validated on VHF S5 / Roland DWX-52D with coated carbide burs.

● 03. "SOFT-TOUCH" TACTICS

ENTRY METHOD

Helical / Ramp

Never plunge vertically. Use 2-3° ramp angle to protect tool tip.

MARGIN LINE

0.1mm Radial Stock

Leave enough stock for the final pass to "bite", preventing rubbing.