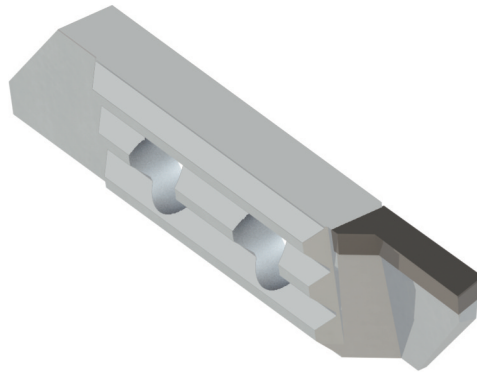


APPLICATION EXAMPLE

BALANCE FACE FINISHING

APPLICATION FIELD:
SWISS TURNING FOR WATCH INDUSTRY



MACHINING

Goal	Finishing operation with a flatness below than 5 μ m
Tool	PARTING OFF INSERT DIXI 26460 PCD SP E = 1.5 mm / L = 6 mm

CUTTING CONDITIONS

Material	Brass
Machine	Swiss type lathe
Lubricant	Cutting oil
Cutting data	n = 4'500 rev/min Vf = 0.003 mm/rev Vc = 50 m/min

RESULTS

The parting off is done in two steps.

First step: roughing pass is done with a cemented carbide tool by letting a stock for the final cut off.

2nd step: finishing operation with a depth of 0.05 mm with PCD insert DIXI 26460.

This tool enables to reach a flatness of 5 μ m for 2'000 balances with an optimal surfaces roughness.

Thank to our superior quality PCD tool, the productivity has been increased of 40% compared to the previous tool.