



Application example

ALESA TWIST END MILL AO15 Ø 25 MM, 2 TEETH

Customer: Company CNC Mechanik in Altstätten (Switzerland)

Material: INOX parts 1.4301

Process: roughing of open pocket W 75 mm x L 60 mm x D 23 mm

Problem: excessive tool wear with the inserts APKT 10 plus extensive machining time.

Competitors solution:

Tool	Milling head APKT 10, Ø 40 mm, 5 teeth
Vc	75 m/min (machining with coolant)
F	300 mm/min
Ap	2.875 mm (8 cuts in depth)
Ae	30 mm

Result: (competitor)

16 cuts per part / machining time 6.15 min per part / tool life time 6-8 parts

ALESA solution:

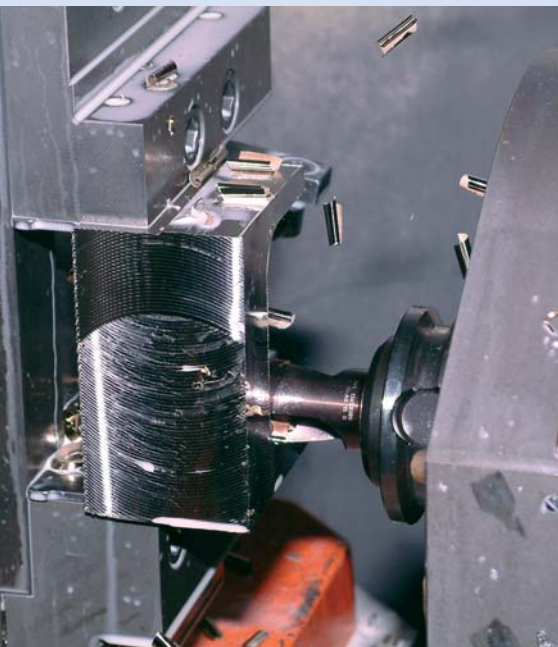
Tool	End mill AO15, Ø 25 mm, 2 teeth, inserts with AlCrN-coating
Vc	150 m/min (machining w/o coolant)
F	320 mm/min
Ap	11.5 mm (only 2 cuts in depth)
Ae	20 mm

Result: (ALESA)

6 cuts per part / machining time 1.875 min per part / tool life time 16 parts

Outcome:

- Reduction of the machining time by 70%
- Duplication of the tool life time.
- Cost cutback by 62.5%.
- Capacity improvement of approx. 50 hours (batch size: 700 parts)



End mill TWIST AO15



Workpiece: steel 1.4301