

APPLICATION EXAMPLE

DRY MACHINING APPLICATION FIELD: ALUMINIUM WINDOWS MACHINING



MACHINING

Objective Remove the lubrication

Tool SINGLE TOOTH END MILLS FOR ALUMINIUM

DIXI 7561 SP Ø 5 / 7 / 8 / 10mm Z=1 + DLC coating

CUTTING CONDITIONS

Material Alu 6060 (Aluminium profile)

MachineBDM-DUBUSLubricantWithout lubrication

Cutting data n = 18'000 rev/min whatever the tool diameter

Vf = 500 to 2500 mm/min

RESULT

The addition of DLC coating on DIXI tools enabled to remove the micro-lubrication and to improve the following aspects:

- Removal of a degreasing operation lead by 4 full-time posts allowing improvements on productivity and delivery time, as well as the reduction of machining costs and risks due to the exposure to hazardous materials.
- Ease of machine cleaning thanks to non-sticking chips
- · Improvement of surface finish
- Increased tool life in comparison to uncoated tools