PROCAM II Surface Machining

Advanced Surface Machining

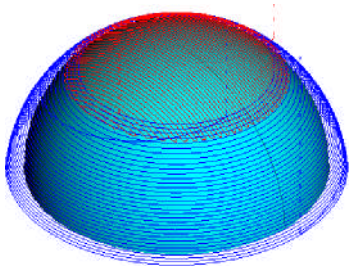
Selective toolpath controls provide options for efficient multi-surface code generation. Cut large, complex parts quickly and accurately with a high quality toolpath. OpenGL, simulation, interactive picking and a modern user interface further enhance programming.

Roughing

- Constant or variable with flats cut control.
- Cutting by area or by level.
- Zig, zigzag, pocket out, and pocket in –core patterns.
- Smooth and sharp links.
- Round or sharp corners.
- Small pocket cut or avoidance.
- Stock definition by 2 point pick, rectangular, cylindrical or extrusion.
- Ramp and spiral leadin.

Slice Cutting

- Strategies: planer, radial, spiral, double offset.
- Zig, zigzag, upward, downward patterns.
- Invert direction and stepover.
- Cross machining: standard, before, only.
- Smooth and sharp links.
- Definable constant cut amount.
- Avoid surfaces.
- Plunge and arc leadin; vertical and arc leadout.



Adv. Z-Level and Slice Toolpaths using Slope Containment

Rest Machining

- Rest machine areas for all finish cycles based on previous tools or work in process.
- Rest machine areas for roughing based on work in process.

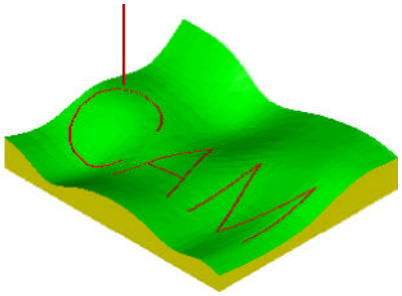
Z-Level Finishing

- Constant cut or variable cut amount.
- Zig or zigzag patterns.
- Round or sharp corners.
- Small pocket cut or avoidance.
- Slope containment.
- Plunge and spiral leadin; vertical and arc leadout.
- Cutting by area or by level.
- Straight or angled links.
- Arc splitting within a deviation.
- Avoid surfaces.

Curve Projection

Generates toolpaths by projecting entities onto surfaces.

- Single and multiple depth cutting strategies.
- TrueType font support for easy surface engraving.
- Invert direction and stepover.
- Smooth and sharp links.
- Plunge and arc leadin; vertical and arc leadout.



Curve Projection Toolpath Simulation

Finish Flats

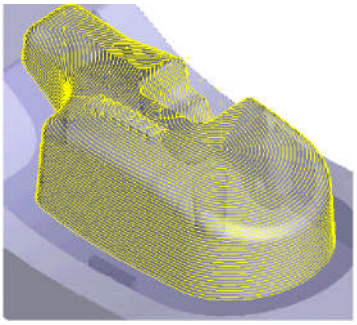
Generates a finish toolpath using a profile pocket pattern on flat areas.

- Cutting by area or by level.
- Small pocket cut or avoidance.
- Ramp and spiral leadin.
- Smooth and sharp links.
- Round or sharp corners.
- Arc splitting within a deviation.

Constant Offset Finishing

Generates a semi-finish or finish toolpath with a true constant stepover regardless of the slope being machined.

- Constant cut amount.
- Zig, zigzag, upward and downward patterns.
- Invert direction and stepover.
- Smooth and sharp links.
- Plunge and arc leadin; vertical and arc leadout.
- Avoid surfaces.



Constant Ofset Finishing

UV Finish Machining

- True UV toolpath generation.
- Avoid surfaces.
- Zig and zigzag patterns.
- Leadin/leadout: horizontal, normal, tangent, NURBS.
- UV patch cutting.
- Continuous UV fillet machining.

Pencil Mill

- Four cutting patterns for removing leftover material.
- Trace and lace parallel cut pattern types.
- Zig, upward and downward patterns.
- Plunge and arc leadin; vertical and arc leadout.
- Ball, hog nose, flat end mill and tapered tools are supported.