Summary
The NX™ CAM 3-Axis Milling Add-on provides extensive fixed axis cutting capabilities for complex surfaces. The add-on enables you to achieve the smoothest tool path results in steep areas by specifying a projection vector different from the tool axis. You can output the smoothest raster, or zig-zag, cuts with special stepover moves and optimized point distribution to maintain high feed rates and fine finishes.

Smooth offset cutting
NX provides smooth offset pattern cuts with special stepover moves and corner treatments to maintain high feed rates and fine finishes. You can cut inside out or outside in.

Smooth transitions
Stepover and traverse motions are smoothed to minimize machine jerk and keep feedrates maximized throughout the entire operation.

Optimized cut regions
NX improves cutting and extends tool life by managing steep and nonsteep cutting regions according to the best cutting strategy. Automatic region determinations and manual control let you apply the preferred patterns to various regions of area milling and rest milling operations. Improve both finish quality and tool life by matching cutting patterns to geometry.

Benefits
• Smooth cutting capabilities keep feed rates high and provide fine finishes
• Streamline patterns fit cutting strokes to the surfaces so that the passes flow along the part naturally
• Intelligent rest milling options facilitate associative multi-stage roughing techniques
• Cutting performance and tool life enhanced with steep/nonsteep
NX CAM 3-Axis Milling Add-on

Interpolated passes
NX provides tool paths that flow organically with your part faces. With these streamline patterns, you can interpolate cutting passes between boundaries for the smoothest finishes. You can even cut true 3D spiral patterns with no stepover marks.

Automatic rest milling
NX discovers uncut valley material remaining from larger diameter tools, including bull-nose tools. You can then cut the remaining material in the corners and valleys. NX intelligently organizes valleys and fits patterns appropriate to the steep and nonsteep areas.

NURBS output
You can output NURBS records for the smoothest machine motion and take advantage of high-level controller capabilities.

Facet machining
With NX CAM, you can use scanned data or other faceted representations, such as STL and JT™ format for NC programming.

Benefits continued
• Faster programming and higher quality surface finish with cut region control
• Safe cutting by automatically dividing toolpath that enables use of longer tools for deep reach

Features
• Raster and offset patterns
• Interpolated patterns
• Automatic valley cutting
• Flexible cut region management for pattern optimization
• Smooth and safe toolpath transition moves