SPECIALIZED MULTIAXIS PROGRAMMING FOR MULTI-BLADED PARTS

Traditionally, one of the most complex 5-axis challenges is generating toolpaths for impellers, fans, marine screws, and other bladed parts widely used in power generation, energy transfer, and propulsion. Blade Expert is a powerful, easy-to-use, custom application designed to generate efficient, smooth, and gouge-free toolpaths for these complex parts. It minimizes unnecessary motion at the machine, delivering a highly-efficient toolpath with superior finish quality.

Self-Contained Processing

Multi-blade parts come in many configurations, but Blade Expert’s common-sense operation process turns these machining challenges into routine solutions:

- Remove the material from between the blades.
- Finish the blades/splitters.
- Finish the floor.
- Finish the fillets.

Additional Features and Benefits:

The interface follows the already well established Mastercam standard used by all other multiaxis toolpaths, ensuring a short learning curve.

Key Features:

- Precise, efficient, and smooth cut pattern.
- Supports straight, bull, and ball nose cutters.
- Automatic stock model awareness eliminates air-cuts.
- Automatic tool axis control for safe toolpaths.
- Accurate tool tip control for seamless blending and transformation.

Mastercam Blade Expert comes with unparalleled support from the World’s #1 CAD/CAM software.

“Precision turbines and fans are tricky to manufacture. We added Blade Expert to our shop’s ‘toolbox’ because it gives us complete control and doesn’t require a lot of training. It definitely keeps us ahead.”

Simon Griffiths-Hughes, 5-Axis Manager, FGP Precision Engineering, Weymouth, Dorset, England

Note: Mastercam Blade Expert is a Mastercam product that must be purchased separately. It runs on Mastercam Mill 3D, Mastercam® for SOLIDWORKS® 3D, or Router 3D.

Mastercam Multiaxis is not required for Mastercam Blade Expert.