The nesting and programming software for waterjet cutting

Particularly suitable for continuous cutting whether you manage large-scale nesting or unit cutting projects, Almacam Cut can meet any types of waterjet-cutting requirements in terms of tool trajectory, cutting speed or lead-ins/outs control.

With its ability to easily adjust parameter setting to any kind of material that can be waterjet-cut, Almacam Cut is the programming solution for your waterjet cutting machines.

Advantages and benefits

✓ One mouse click to perform the nesting, the tool path and CNC program generation.
✓ Ability to convert any logo, font or picture in cutting profile thanks to Sign module (optional).
✓ Nesting capabilities in remnant sheets or off-cuts of any shape.
✓ Automatic configuration of cutting parameters and lead-ins/outs according to the material to cut (with or without abrasive).
✓ Automatic calculation of speed decrease in angles (corners).
✓ Optimized pre-pierced hole management.

Support of cutting machines equipped with multiple heads.
Almacam Cut advantages in waterjet cutting

- **Significant material savings**
  - Significant reduction of loss rates thanks to automatic nesting performance, resulting from several available strategies.
  - Optimized use of remnant sheets or off-cuts of any shape.
  - Optimized nesting in case of common cut.

- **Programming time reduced to the minimum**
  - Automatic configuration of cutting parameters and lead-ins/outs.
  - Possibility to operate in full automatic mode (for nesting and tool path generation).

- **Improved quality of manufactured parts**
  - Optimal adjustment of cutting conditions (speed, abrasive dosage), according to various parameters (material, thickness, surface, perimeter, part geometry).
  - Automatic speed decrease in corners to ensure the quality of the cutting results and avoid waterjet diffraction (according to the expected cutting quality and the used material and material thickness).
  - Management of pre-pierced holes at the very beginning of the process or during the whole process.

- **Optimized cycle times**
  - Optimized and automatic calculation of tool path, including in case of common cut.
  - Automatic or interactive control of fast trajectories in head-up or head-down modes.
  - Automatic or interactive control of multi-head cutting.

- **Savings on consumables**
  - Reduced piercing thanks to the addition of bridges between parts that enable continuous cutting.
  - Automatic control of cutting parameters (abrasive dosage, water pressure) according to the material to cut.

- **Ability to pilot complex or special machines**
  - Support of programmable beveling heads.
  - Support of 5 axis waterjet cutting machines (with Almacam Space Cut).

- **Enhanced safety around the machine and eased handling in the workshop**
  - Availability of several strategies to prevent collisions between the cutting head and cut parts (or parts already cut) that may have toppled over: head lifting up, parabolic trajectory, cut part by-pass, or use of specific sequences minimizing risky passing over cut parts.
  - Skeleton cutting management with various possible parameter settings to ease cut-off removal.