
P.E.P. TECHNOLOGY[©] for WATER JET

In addition to all the standard P.E.P. Application software modules such as the CAD Converter, Dimensioning, Automatic Nesting and CPT (Crash Protection Technology), the WATER JET software has a unique database of attribute features designed to enhance and improve water jet performance. The following is an overview of the features unique to water jet cutting.

Multi-head Water jet Automatic Nesting

- Maximize the productivity of your Multi-head Water jet
- At the same time optimize material utilization

The Water jet Database

The Water jet database allows the user to set unique cutting parameters for each material type and each machine defined in the database. Entering the parameters into the database will assure repeatable part quality from part to part and nest to nest, and allow newly hired personnel to attain the same high quality results you would expect from an experienced operator.

Water jet On and Off routines with Dwell Time

Setup water jet commands and dwell sequence specific to the material type and thickness.

Abrasive On and Off routines with Dwell Time

Set Abrasive commands and dwell sequence specific to the material type and thickness.

Control Arc Feed Rates

Set arc feed rates based on radius and material type & thickness.
Arc feed rates can be setup by formula or by radius ranges.

Control Linear Feed Rates

Set linear feed rates based on linear distance and material type & thickness.
Linear feed rates can be setup by formula or by linear distance ranges.

Quality Corner Control – Automatic Corner Radius or Tear Drops options

Set the program database to deliver the desired part quality.

- Set rules for automatic corner radius.
- Set minimum and maximum corner angles.
- Set minimum line length.
- Utilize Corner Ramping (listed below)

Feed Rate Ramping Features

One of the features that can assure the best quality parts and maximum productivity is feed rate ramping. The ability to only slow down where necessary and to slow down gradually will not leave blemishes on the part.

Lead-in Ramping

Assure quicker and consistent material penetration with the gradual ramping of lead-in feed rates controllable by setting the

- Number of breaks
- Starting Lead-in Feed rate
- Ending Lead-in Feed rate

Start Cut Ramping

The gradual ramping of feed rates on the start of the part geometry improve the entry location and the cutting performance by controlling the

- Distance to breakup
- Number of breaks
- Starting feed rate
- Ending feed rate on the first geometry of a profile

Corner Ramping

Achieve the best corners and cutting times by the gradual slowing into a corner and accelerating out of a corner by setting the

- Distance to corner to breakup
- Number of breaks
- Slow down Feed rate

End Cut Ramping

Improve the exit location by controlling the

- Distance to breakup
- Number of breaks
- Starting feed rate
- Ending Feed rate

Lead-out Ramping

Control the gradual slow down before turning the water jet off by setting the

- Distance to breakup
- Number of breaks
- Starting feed rate
- Ending feed rate

Special Cutting Mode

Set up special cutting modes such as controlling water jet pressure for glass cutting.

With P.E.P. TECHNOLOGY® for water jet you are in control. Improve production and cut quality.