Fusion 360 CAM/Manufacture Procedures

Cheat Sheet

1st Pick inches!!!!!!!   Pick Inches!!!!!!!!!!!   Pick Inches!!!!!!!!!!!!!!!!

Setup

1) Choose: Cutting
2) Choose: Model orientation
3) Choose: Stock Box Point
4) Click: Box Point (Pick a point on the sketch. This point is where the table will zero too when you start the cut.
5) Choose: Sketch

STOCK

1) Choose: Relative Size Box
2) Stock Offset (adds material to sketch) Choose Add Stock To Sides Top Bottom. Then enter the offset in Stock Side Offset (about 1/8th inch) Stock top and stock bottom set to 0.

Post Process
1) Name Project (if you want)
2) Hit OK

Tool Path (Is located under Fabrication)

1) Choose: Cutting
2) Choose: 2D Profile

Under Tool
3) Pick your plasma cutter from the Local Tool Library
4) Set Cutting Mode to Through-auto
5) Set Feed, Lead-in, and Lead-out rate

Under Geometry

1) Contour selection: pick all lines to be cut on the table, pick outside lines first
2) Choose: <u>All loops</u>
3) Choose: <u>Start outside</u>
4) Pick Tabs if you want any tabs to hold pieces together

Under Heights

1) Set all to 0 (there is no height control on the crossfire)

Under Passes

1) Tolerance- the tighter they are the bigger the file size
2) Always Compensate: <u>Left</u>
3) Compensation Type: <u>In Computer</u>
4) Click: <u>preserve order</u> if you want lines cut out in the same order you picked them under contour selection
5) Stock to leave: unchecked unless you want some material left to grind away
6) Smoothing: not sure about this

Under Linking

1) Click <u>keep Nozzle Down</u>
2) Max stay down distance 24" (table size)
3) Cut stock clearance: .1"
4) No Force Retract
5) Stay down feed rate: 300 inches per minute
6) Click Lead in (if you want them)
7) Lead-in radius: .06
8) Lead- in Sweep Angle: 90 degrees
9) Lead-in distance: minimal
10) Lead-out: not necessary
11) Pierce clearance: .06"
12) Entry position: pick where in the sketch you want the cut to start
13) Hit OK

At this point you can run a simulation (if you want to)

Finally click the <u>G1/G2</u> box at the top to post process into gcode.

The only thing you need to check/change before posting is the <u>Pierce Delay</u>