

Benefits and Applications:

The Semyx tilting head allows the cutting head to cut at different angles. This eliminates the tapered cutting on higher quality cutting. It also allows for beveling and angled cuts. Also, this allows for beveling and angled cuts faster and with more accuracy. It works by having the mechanical sensor make a reference point in the sheet to get the exact distance then another capacitor sensor will function. The machine will move the sensor on high speed along the cutting path. As a result, a full sheet shape will be pre-defined on the CNC memory. When the cutting process starts, both sensors will not function, and the path of the head will be in a very precise, fixed distance away from the sheet.

There are several reasons why you might want to tilt the cutting head which contains the nozzle. These include:

- Creating beveled edges for artistic purposes
- Increasing product precision by removing taper
- Creating sharp edges to use for knives or cutters
- Preparation of welding seams



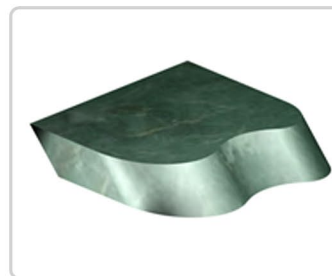
Chamfering Edges for V Groove Shape



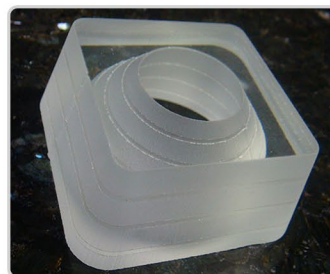
Chamfering Edges for X Groove Shape



Chamfering Edges for Y Groove Shape

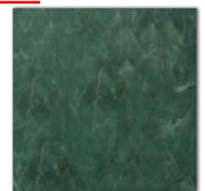


Bevel



Glass

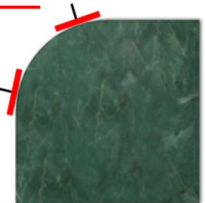
Original Marble Shape



Cutting Marble Edge with tilting head



Finishing the filled by machining the remaining small edges with other machining methods



Advantages:

- Can be used with various cutting heads.
- Compatible with all of our machine series (Creative, Optima, Infinity, Scorpion, Phantom...).
- Provided by crash sensor.
- Provided by splash shield.
- Can be provided by auto height sensor.
- Its kinematic principle does not need a complex control algorithm, so the position error will be decreased.
- The C-Axis has no stroke limits.(1)

Basic components:

- C-Axis
- B-Axis
- Crash Sensor Block
- High Pressure Accessories

Fig-1: Basic Components

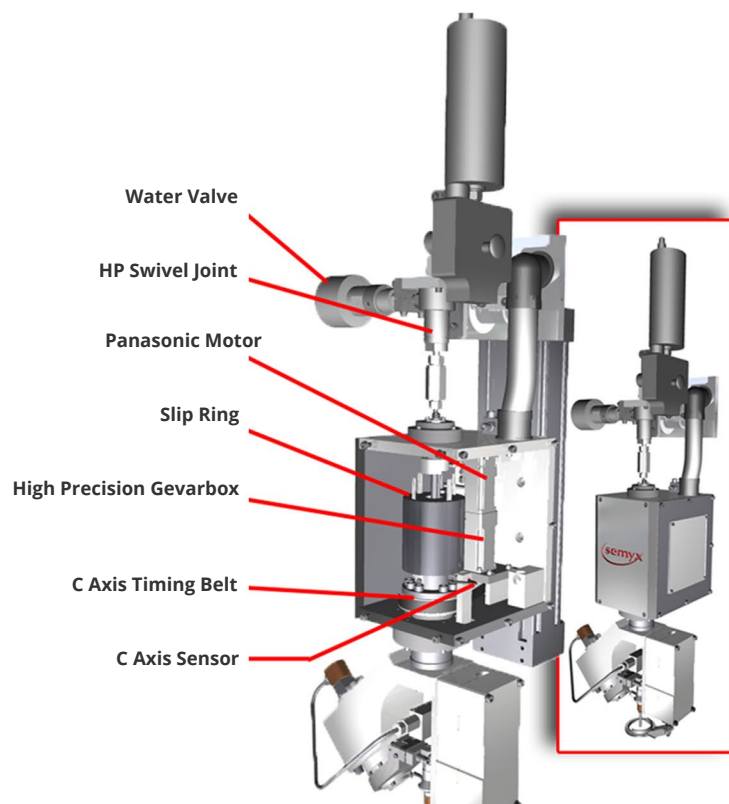
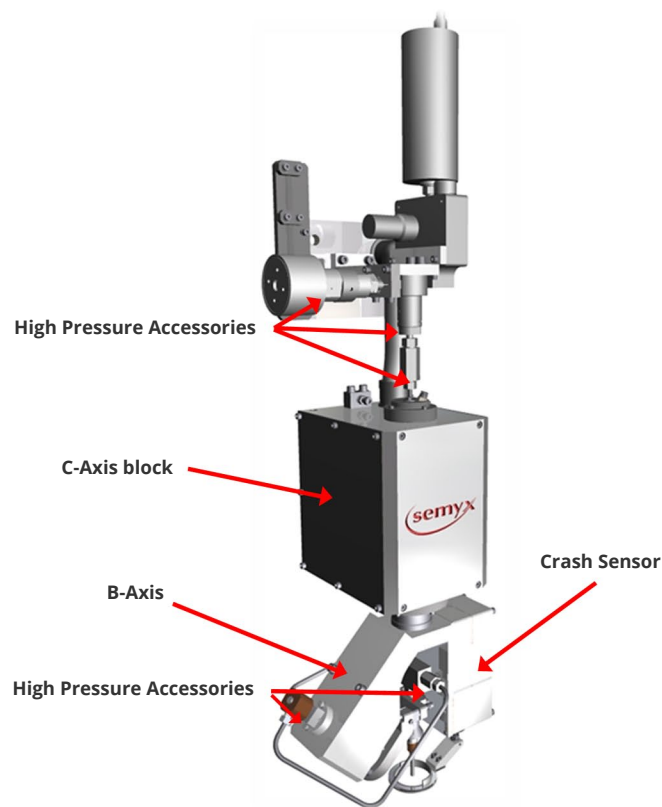


Fig-2: C-Axis



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