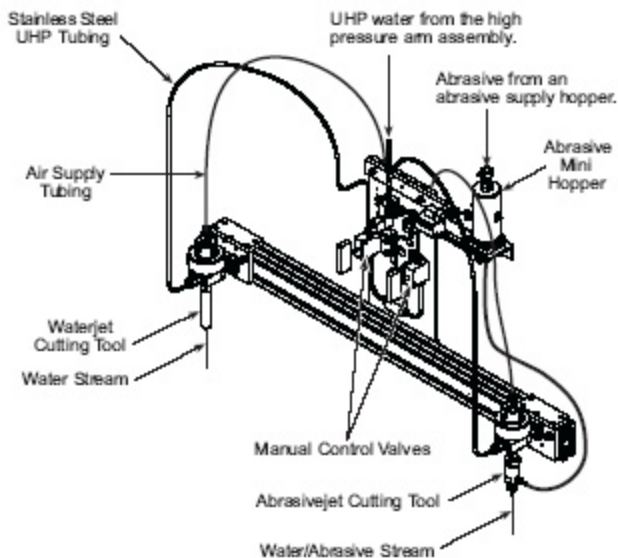


Ultra High Pressure Water

Ultra high pressure (UHP) water from an intensifier pump is input to the high pressure arm assembly. The UHP water is distributed to the cutting tools through stainless steel tubing rated for ultra high pressure (55,000 psi/3800 bar). Control valves located on the z-axis allow the water to each tool to be turned on or off manually. UHP water is normally turned on and off via pneumatic solenoids that operate the cutting tools.



High pressure supply arm

The high pressure arm routes UHP water tubing, pressurized air tubing, and abrasive tubing to the z-axis where it is distributed to the cutting tools and support equipment. One end of the high pressure arm is anchored at a corner of the high rail and the other end is attached to the z-axis assembly. UHP swivels allow the high pressure arm articulate while following the z-axis movement.

Catch tank

The catch tank collects the water, abrasive, and residue from cutting operations.

- The tank's x- and y-axis dimensions are sized 12 in (305 mm) larger than the high rail's work envelope.
- The catch tank has a water overflow and connections for optional abrasive recovery and water treatment systems.
- The water level in the catch tank is set to the top of the material support grid. When the bottom of the material is in contact with the water the amount of noise generated when cutting is reduced.
- An optional bladder system raises the water level to submerge the tip of the waterjet to further reduce noise. The bladder system lowers the water level for material installation and removal. The bladder system is offered with manual controls or electrical controls.