The TS9200D Jet Tech is a non-contact dispense valve capable of jetting fluid viscosities to 400,000 Cps. Jet Tech offers a fast jetting action producing hundreds of precise droplets in less than one second.

The main feature of the valve is a single, easily replaceable diaphragm to eliminate dynamic fluid seals found in other jet valves. No longer is it necessary to disassemble, clean and replace worn seals, which translates into saving time and money. The diaphragm also allows fast cycle rates because of its very small mass. There is no large sliding valve stem that slows down the process. With this novel diaphragm design, the energy needed to eject a drop can be adjusted providing a wider process window.

It's Fast – 300 drops/sec continuous duty. 50% increase in throughput over conventional Jet valves.

It's Simple to Clean – only 2 parts contact the fluid. Conventional Jet valves can have as many as 8 parts requiring cleaning. With only two parts to clean, cleaning the TS9200D takes only minutes and there is no need to remove the Jet valve from the robot. A diaphragm and nozzle plate can be installed immediately without the need to carefully calibrate the Jet valve saving valuable production time and no special off-line cleaner is required.

It's Capable – the TS9200D generates a very high drop velocity allowing a wide range of fluids and applications. In addition, the drop velocity can be easily changed to help fine tune the process and achieve a high process capability and wide process window.

It’s Cool – the advanced electronic drive provides power when required and reduces power when idle. The internal air flow cools the Jet body so it runs cool even during high-speed, continuous operation. The integral nozzle heater heats only the fluid in the nozzle plate and is thermally isolated from the jet body.

It’s Easy to Integrate – In combination with the standalone TS920 controller, a single trigger line is all that is needed to be dispensing complex dispensing programs.

FEATURES AND BENEFITS

- Non contact Jetting technology
- Accurate and precise dispensing
- High speed, up 300 drops/sec
- Repeatable drop size as small as 10 nl
- Jet fluid up to 400K Cps.
- No fluid seals to clean or replace
- Integral heater with minimal fluid heated
- Quick and simple setup
- Low total cost of ownership
The TS9000 Jet Tech can be used in a wide range of applications. Some examples of processes and applications are:

- Jetting silver epoxies for die bonding processes
- Jetting silicone phosphor in the LED assembly process
- Jetting under-fill in micro-electronic package applications on PCBA
- Jetting micro dots of UV adhesive in medical device applications