



Product Data Sheet

TS9000 Series High Viscosity Jet Valve

The TS9000 Series Jet Tech is a piezoelectric driven, non contact dispense valve capable of handling fluid viscosities to 2 million Cps. Jet Tech offers a fast jetting action producing hundreds of accurate deposits in less than one second.

Every component of the valve was designed to the highest tolerances and manufactured to the strictest degree of precision insuring world class accuracy and repeatability in drop-to-drop dispensing volume.

Jet Tech's compact size and modular design aids integration into robotic systems. The valve features fully adjustable parameter settings, allowing the operator to change the jetting properties for different fluid types and optimize the process for repeatable dispensing.

A variety of nozzles shape and sizes along with different tappet configurations provides a wide spectrum of output jet deposits.

The Jet Tech system is shipped with the following items:

- Valve
- Controller
- Cables (sensor, actuator and power cable)
- Nozzle tools

TYPICAL APPLICATIONS

The TS9000 Jet Tech can be used in wide range of applications. Some examples of processes and applications are:

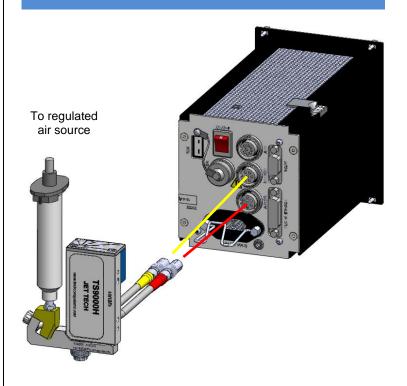
- Jetting silver epoxies for die bonding processes
- Jetting silicone phosphor in the LED assembly process
- Jetting under-fill in micro-electronic package applications on PCBA
- Jetting micro dots of UV adhesive in medical device applications

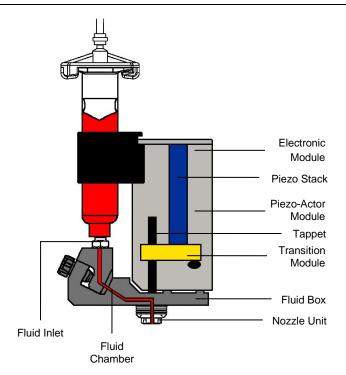
FEATURES AND BENEFITS

- Non contact Jetting technology
- Accurate and precise dispensing
- Extremely high speed, up to 1000 Hz
- Repeatable drop size as small as 2 nl
- Jet fluid from 7K to 2 million Cps
- Small modular design
- Easy and fast cleaning
- Field replaceable spare parts
- Low total cost of ownership



TYPICAL SETUP





JET VALVE SYSTEM SPECIFICATIONS

Size Valve (Imperial):	3.54" x 2.98" x 0.86"
Size Valve (Metric):	90.0mm x 75.7mm x 22.0mm
Size Controller (Imperial):	4" x 11.61" x 5.06"
Size Controller (Metric):	101.6mm x 295mm x 128.4mm
Weight Valve:	258g
Weight Controller:	1600g
Minimum Shot Size:	2nl
Viscosity Range:	7K to 2000K Cps.
Fluid Pressure Range:	1 to116 psi (0.1 to 8.0bar)
Nozzle Orifice Diameter Range:	0.07 mm to 0.40mm
Max. Dispensing Frequency:	1000 Hz
Power Connection:	10 sets internally; unlimited ext.
Standard Interface:	RS232; 24V/5V PLC
Operating Temperature:	10 to 50°C

2 x M4 [22.0] 1.77 [45.0] Dimensions are in inches [mm] 2.16 [55.0] 2.98 [75.7]

ACCESSORIES

- Nozzle and tappets: A range of nozzles/tappets are made available to accommodate a variety of output jet deposits.
- Heater module: The valve's fluid box can be heated to reduce the viscosity of thicker fluids allowing an increase in flow rates.
- For the complete nozzle/tappet and heater offering please visit <u>www.techconsystems.com</u>



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