

# Asymtek Applications Hotsheet

## Jetting Silicone, Wacker Semicosil 926

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The goal of this application was to test the jettability of the silicone fluid, Wacker Semicosil 926, and measure the resulting dot sizes. The customer wanted to use the silicone as a glob top encapsulant. Two tests were run, using two different nozzle sizes.

### Settings Summary

<b>Platform</b>	Spectrum™ S-820
<b>Jet/Pump/Valve</b>	DispenseJet® DJ-9000
<b>Fluid Type</b>	Silicone
<b>Fluid Manufacturer &amp; Product number</b>	Wacker® Semicosil® 926
<b>Jet Needle</b>	3.2 mm
<b>Nozzle</b>	Test A: 1 mm (40 mil); Test B: 0.254 mm (10 mil)
<b>Seat</b>	1.5 mm (60 mil)
<b>Fluid Pressure</b>	0.014 MPa (2 psi)
<b>Stroke/Preload</b>	15
<b>Nozzle Temperature</b>	35 °C
<b>Dispense Height</b>	1.5 mm
<b>Valve on / off</b>	3 ms / 3 ms
<b>Substrate Temp</b>	Room temperature
<b>Substrate</b>	Test vehicle
<b>Applications Development</b>	Jan Wijgaerts

### Results Summary

Two tests were completed to show two dot sizes.

In Test A, 5 grids of 10,000 dots were dispensed using a 1 mm (40 mil) nozzle. No issues were encountered and no purge to clean was required.

In Test B, 5 grids of 10,000 dots were dispensed using a 0.254 mm (10 mil) nozzle. No issues were encountered and no purge to clean was required.

Since both tests were completed in 6 hours, there is a small risk that the material is not jettable over a longer time-frame; however, confidence is high for a long jetting period with this material.

	Test A	Test B
Dot weight	1.089mg	0.052mg
Settling time	0	0
Dispense Gap	1.5mm	1.5mm
Number of Shots	1	1
Dwell Time	0.003	0.003