

FLUID PERFORMANCE TEST

Fluid Test Report No.: FT-0039

Lubricant Name: DTI C1 Copper

Manufacturer: Henkel Surface Tech.

Customer: Ball Metal

Application: CHAIN

Contact Name: Jack Rohlfs

Contact Phone: 916-488-1998

Date: 3/8/2004

Test Date: 3/9/2004

Nozzle used: TFN/SFN

Item #: _____

Injector size: 1/2 Drop
 1 Drop
 2 Drops

** Two Double-Drop Injectors tied together

Injector configuration:
Cycle Time: Varied
Dwell Time: Varied
Delay Time: Varied

Tubing Length (Ft.): 20-FT NYLON

Regulator Pressure (PSI): 4-12 psi

Test Temperature
Ambient
Heated

Temperature (deg. F): _____

Test Objective: To determine proper spray gap to provide best spray pattern.

Nozzle Gap Size (In.): Varied from .004" to .010"

Nozzle Orifice Size (In.): NA

Spray Distance (In.): 5-1/2"

Spray Width Achieved: 6"

Spray Quality

	<u>None</u>	<u>Low</u>	<u>Medium</u>	<u>High</u>
Pulse	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Spits	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Splatters	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Atomizes	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Overspray	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

TEST NOTES

Started testing with .004" gap, varied the air pressure from 4-12 psi. Gap was too small for the amount of volume dispensed. Had to increase air pressure to 20 psi for a decent pattern, which in turn increased atomization. Tested .006", .008" and .010" gap width tips in a similar manner. Best results from .008" and .010" gap widths. Pattern was consistent and gradually improved with an increase in the nozzle air pressure. Best results were achieved at 12 psi, however there seemed to be a marginal increase in the atomization. Pattern width was measured as the width of the consistent pattern (6" at 5-1/2" away from surface). This did not take into account the lighter pattern on the edges. Summary: .008" gap width with 8-10 PSI seemed to provide the best overall coverage with minimal overspray and atomization. TFN Nozzle tested with lube. Performance was the same except for more evidence of pulsing, especially at 3-4 sec. cycle rate.

Tested By: Steve Clancy

Sales: _____

Engineering: _____