FLUID PERFORMANCE TEST

Fluid Test Report No.: FT-0043-1

Lubricant Name Endraw HDC-94WS | **Manufacturer:** Engineered Lubricants

Customer: JH Robotics | **Application:** Part O.D.

Contact Name: Ken Walker-Hydrotech | **Contact Phone:** 513-881-7000

Date: 4/27/2004 | **Test Date:** 5/3/2004

Nozzle used: TPN-IL-NY-90-3 | **Item # :**

Injector size:

- 1/2 Drop ☐
- 1 Drop ☐
- 2 Drops ■

Injector configuration:

- Cycle Time: 1 seconds
- Dwell Time: 0.5 seconds
- Delay Time: 0.5 seconds

Tubing Length (Ft.): 2-FT NYLON

Regulator Pressure (PSI): Varied from 12-17 psig.

Test Temperature

- Ambient ■
- Heated ☐

Temperature (deg. F):

Test Objective: To determine proper spray gap to provide best spray pattern.
Proper coverage and number of nozzles required for O.D. of 0.35" and 0.5'

Nozzle Gap Size (In.): NA

Nozzle Orifice Size (In.): 0.046"

Spray Distance (In.): 0.5"

Spray Width Achieved: 0.5"

Spray Quality

	None	Low	Medium	High
Pulse	☐	■	☐	☐
Spits	☐	☐	☐	■
Splatters	☐	☐	■	☐
Atomizes	☐	■	☐	☐
Overspray	☐	■	☐	☐

TEST NOTES

Original concept was to use a TFN nozzle. Coverage and amount of overspray was to great for the part size required. Changed to 90 degree pin nozzle. Coverage was sufficient for the part. Consistent spray pattern achieved with the nozzle air pressure regulated to 17 psi. However, this w a customer's perception adjustment. The part can be covered at lower pressures (12-14 psig) with the air assisting in the movement of the lubrica around the O.D. of the part. Ample cycle time needs to be available for the 1-1/2" length required (I.e. stroke cycle time for the spray application s be in the neighborhood of 4-6 seconds).

Adjustment from 0.35 - 0.5" in O.D. would at most be an increase in the nozzle air pressure by approx. 2 psig.

Tested By: Steve Clancy

Sales:

Engineering: Steve Clancy