

## Appendix F

# Summary of Results Obtained Using Modeled Thrust Force

Table F.1. Summary of results obtained using modeled thrust force

| Configuration | Motor<br>Speed (rpm) | $\sigma_{RPM}$ | Formation<br>Time, $t^*$ | Vortex Velocity, $W$<br>(cm/s) | $Q_{avg}/Q_o$ | $Q_{avg}$ (cm <sup>3</sup> /s) | $I$ (Ns) | Modeled<br>$\eta_{hydro}$ (%) | Experimental<br>$\eta_{hydro}$ (%) | $\sigma_{\eta_{hydro}}$ (%) |
|---------------|----------------------|----------------|--------------------------|--------------------------------|---------------|--------------------------------|----------|-------------------------------|------------------------------------|-----------------------------|
| Pulsed Jet    | 3200                 | 29             | 2.70                     | 95.25                          | 0.379         | 1082.98                        | 0.609    | 47.93                         | 43.16                              | 7.28                        |
|               | 2970                 | 28             | 2.74                     | 85.46                          | 0.410         | 1102.75                        | 0.566    | 36.00                         | 31.42                              | 6.71                        |
|               | 2750                 | 29             | 2.83                     | 77.88                          | 0.455         | 1168.23                        | 0.547    | 24.17                         | 20.04                              | 6.73                        |