

Volume flow rate and chamber pressure

$$\frac{dV}{dt} = \frac{\pi r^4 \Delta P}{8\eta L}$$

Flow rate = 5 cc/s

Volume exchange time = 4.4 hrs

Time to reduce O_2 to 0.1% = 24 hrs

Exhaust line pressure = 40 Pa

Chamber pressure = 42 Pa

 Bowing of ¼" x 2m x 2m aluminum plate at the center = 1.7 mm

- Bowing of ½" x 2m x 2m aluminum honey-comb plate at the center = 0.24 mm
- Bowing of ¼ " x 1.5m x 1.5m aluminum plate at the center = 0.53 mm

