Summary

Drag measurements and flow visualization were used to document the effect of a SDBD plasma actuator mounted at the separation point of a 35^o wedge on the Ahmed body. Drag measurements showed that steady actuation greatly reduced the overall drag on the model. However, flow visualization indicated that unsteady actuation at a Strouhal number, S_t , of approximately 0.5 achieved the greatest separation control.

Results

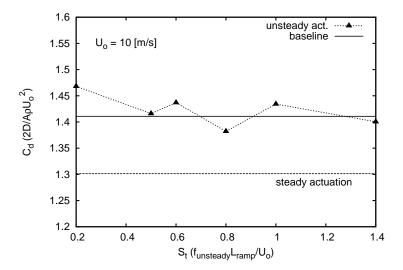


Figure 1: 10 [m/s]

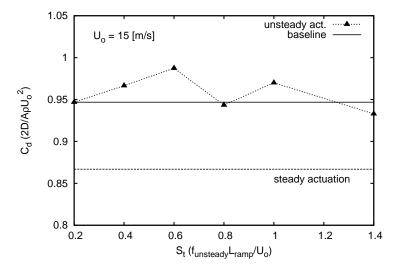


Figure 2: 15 [m/s]

Table 1: Flow visualization results, 10[m/s]

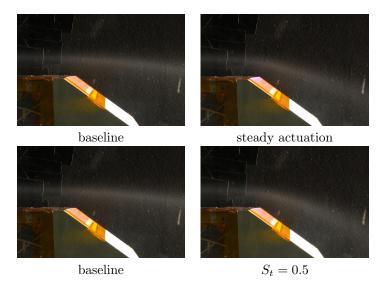


Table 2: Flow visualization results, $15[\mathrm{m/s}]$

