

WEEK 11: PROBLEM SOLUTION CONTINUES

- **Problem Solution (Continues)**

- Qualitative results

- 2 different blade geometries are examined to study the effects of blade geometry on the velocity vector fields and static pressure fields at different planes.

- Pressure distributions:

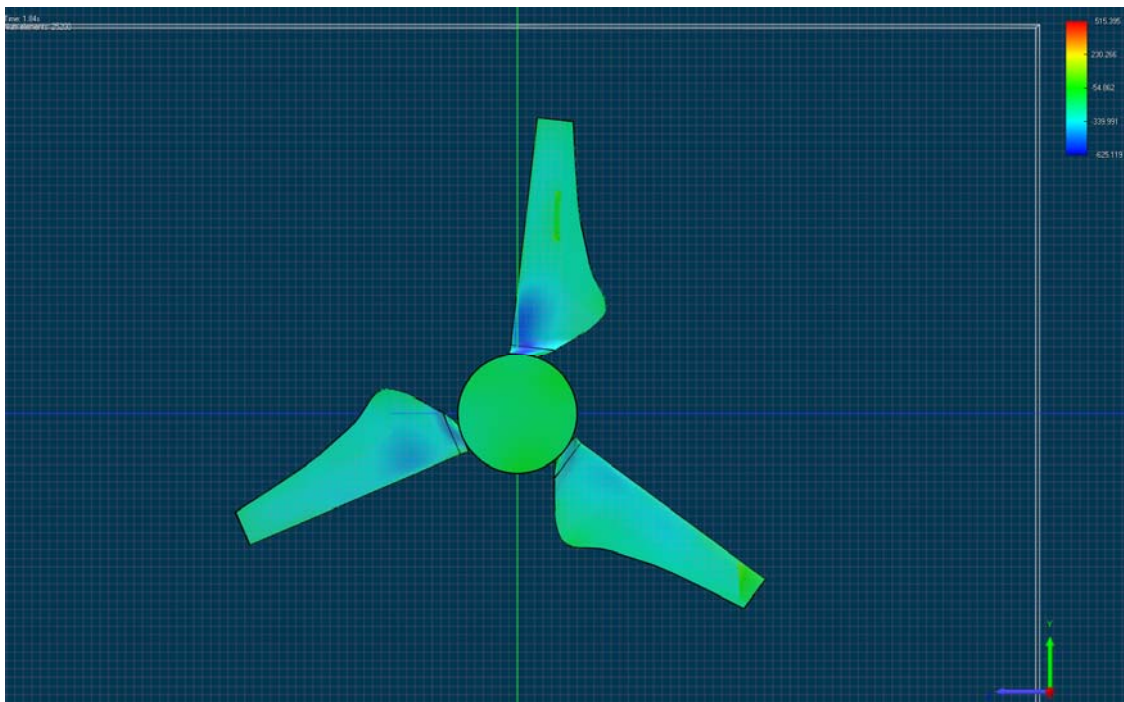


Figure 7. Static pressure distribution on the blade geometry (back surface) for Model 2 at 600 rpm

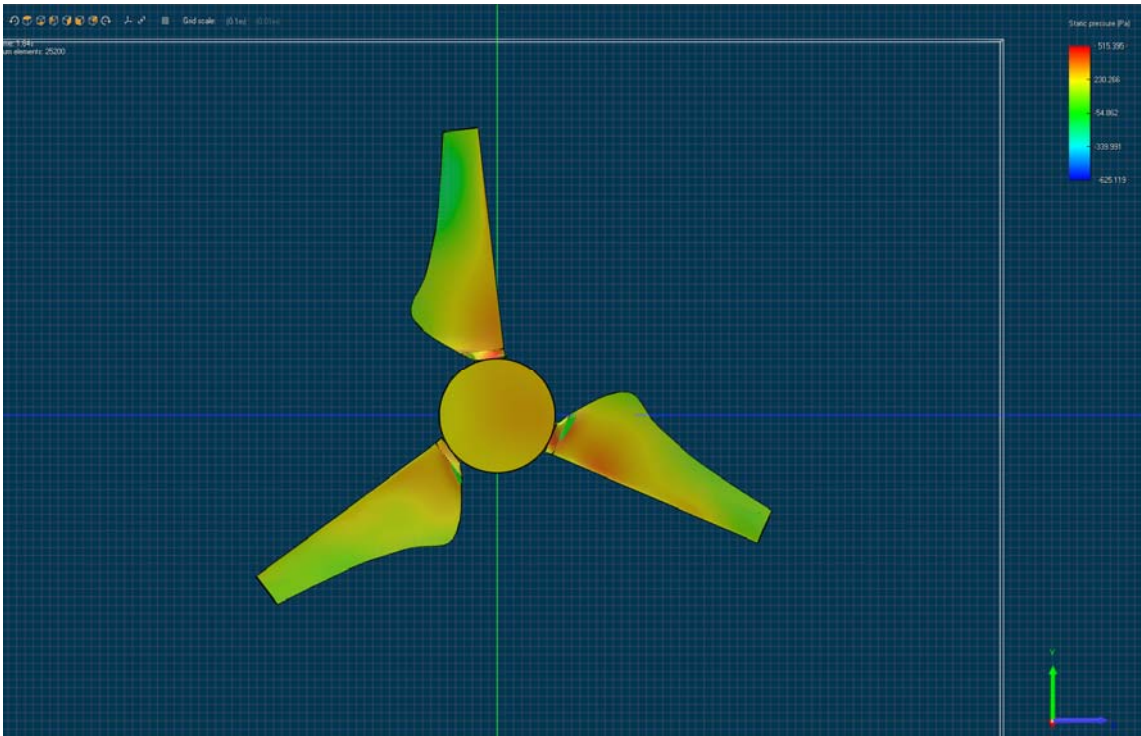


Figure 8. Static pressure distribution on the blade geometry (front surface) for Model 2 at 600 rpm

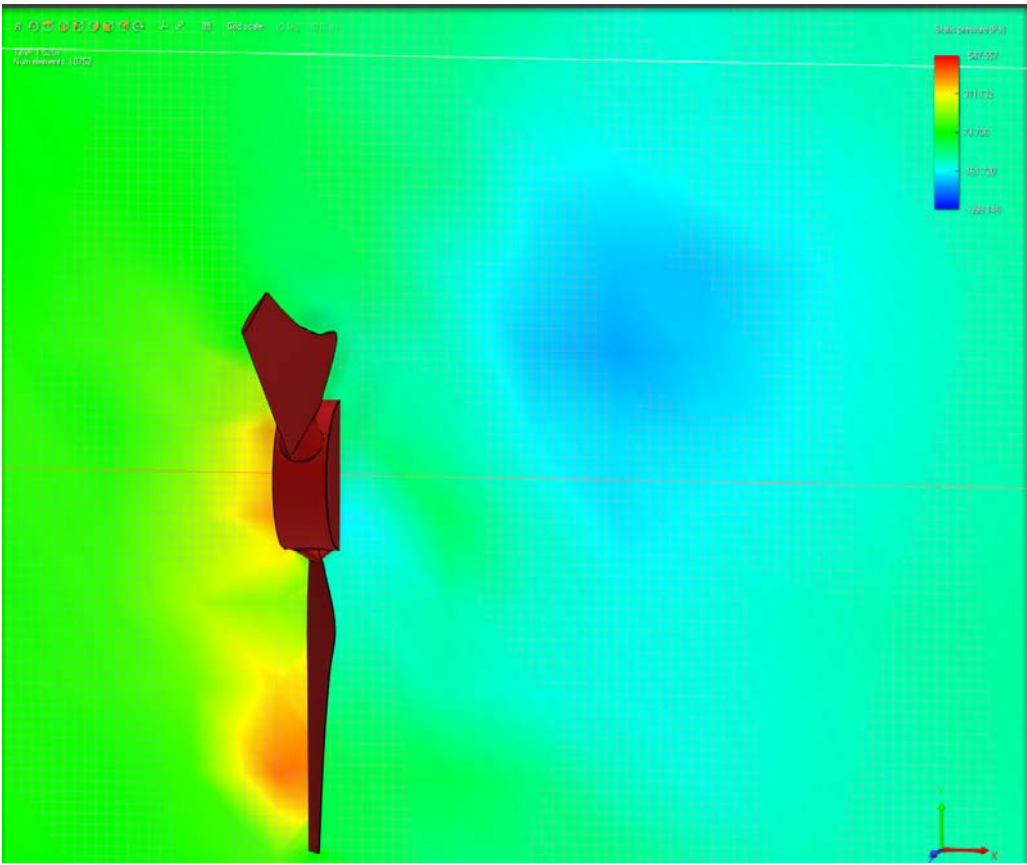


Figure 9. Pressure field around the blades for Model 1 at 600 rpm

- Velocity vectors:

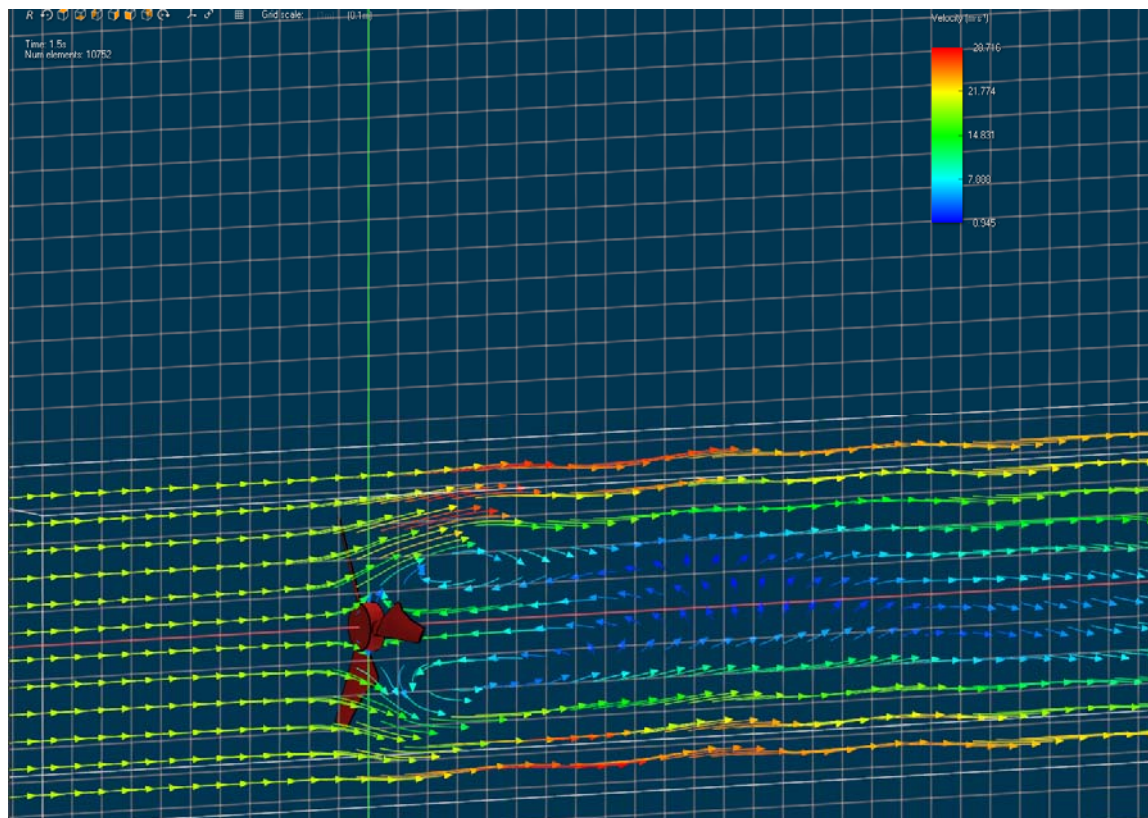


Figure 10. Velocity vector field at 600 rpm with a cutting plane through the center of turbine for Model 1

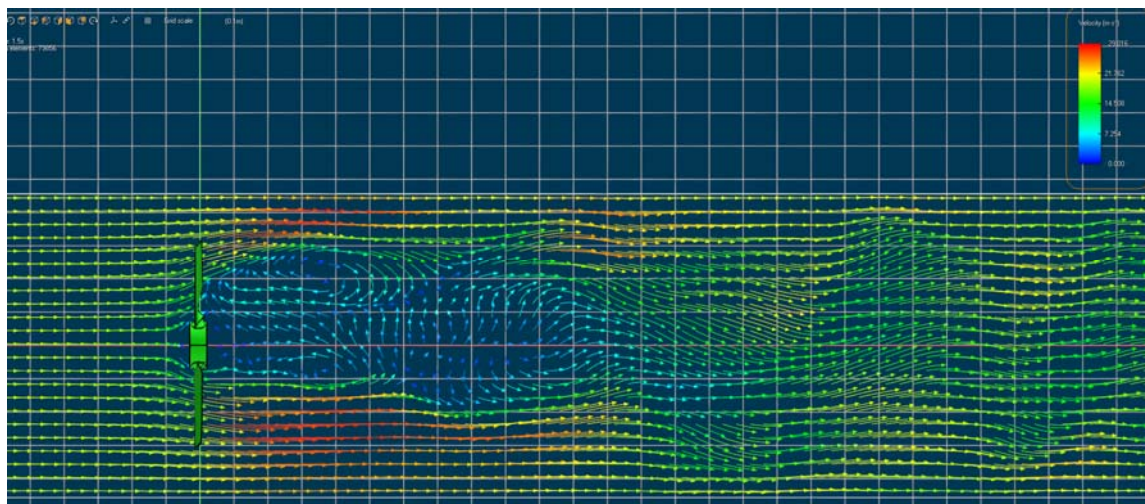


Figure 11. Velocity vector field at 600 rpm with a cutting plane through the center of turbine for Model 2