

# R-022 Flexcompute

- Flow solver: Flow360
- Spatial discretization: node centered, 2<sup>nd</sup> order (Roe inviscid, central viscous + MUSCL extrapolation)
- Time integration or iteration method: Implicit pseudo-time stepping with backward Euler
- Name of committee grids: ANSA grids from HRLES TFG.
- Cases submitted: Case 1 and 2
- Initialization method: Warm-start from previous alpha
- Turbulence model: SA-neg
- Convergence/stopping criteria: 1e-10 residual in NS/ 1e-08 in SA equations or variance of mean CL below 1e-03 and of CD below 1e-04 over last 500 iterations.
- Relevant publications related to solver and/or high-lift applications:

Thomas A. Fitzgibbon, Philippe Spalart, Qiqi Wang and Jim Bungener. "An Analysis of Modeling Sensitivity Effects for High Lift Predictions using the Flow 360 CFD Solver," AIAA 2022-3745. AIAA AVIATION 2022 Forum. June 2022.