

# R-005 Politecnico di Milano

- Flow solver: SU2
- Spatial discretization: finite volume, standard edge-based structure on a dual grid with control volumes constructed using a median-dual, vertex-based scheme.
- Turbulence model: SA
- Iteration method: Steady simulation with Fictitious Time-Stepping
- Convergence/stopping criteria: Relative variation of Cl over last 100 iterations lower than 1e-6
- Cases submitted: 1, 2.01, 2.02
- Grids: 1.R.01, 2.R.01
- Relevant publications related to solver and high-lift applications:

- [1] Palacios, F.; Alonso, J.; Duraisamy, K.; Colombo, M.; Hicken, J.; Aranake, A.; Campos, A.; Copeland, S.; Economou, T.; Lonkar, A.; Lukaczyk, T.; and Taylor, T., "Stanford University Unstructured (SU<sup>2</sup>): An open-source integrated computational environment for multi-physics simulation and design." In *51st AIAA Aerospace Sciences Meeting including the New Horizons Forum and Aerospace Exposition*. American Institute of Aeronautics and Astronautics, 2013.
- [2] Matiz-Chicacausa, A.; Escobar, J.; Velasco, D.; Rojas, N.; and Sedano, C., "RANS Simulations of the High Lift Common Research Model with Open-Source Code SU2." In *Numerical Simulation of the Aerodynamics of High-Lift Configurations*, pages 93–111. Springer, 2018.