R-016 Embraer S.A.

- Flow solver: CFD++ V21.1.0
- Spatial discretization: 2nd order, cell-centered finite volume, nodal polynomials.
- Time integration or iteration method: Point-Implicit with Multigrid
- Name of committee grids (or "self-prepared"):
  - TC 1) R.01 PointWise Mixed-Element Unstructured (Grid Convergence Study)
  - TC 2) R.01 HeldenMesh - Grid Convergence on 2.1 and F for 2.2, 2.3 and 2.4
  - TC 3) PointWise and HeldenMesh B and F refinement levels. All Reynolds
- Cases submitted: TC 1) (Grid Convergence)

  TC 2) 2.1, 2.2, 2.3, 2.4 (Grid F)

  TC 3) 3.1, 3.2, 3.3, 3.4
- Initialization method: Warm Start
- Turbulence model: SA and SA-RC-QCR2013
- Convergence/stopping criteria: Number of Iterations + evaluation of residuals and coefficients

- Relevant publications related to solver and/or high-lift applications:
  - E.D.V. Bigarella, P.A.G. Ciloni, L.C. Scalabrin "Effects of Some Numerical Formulation Aspects in High-lift Configuration Simulations", ICAS 2016, 30st Congress of the International Council of the Aeronautical Science
  - Leonardo C. Scalabrin, Pedro Ciloni, Alexandre Antunes, Gilberto G. Becker, Maximiliano A. Souza, and Rodrigo M. Granzoto. "EMBRAER Contribution to HiLiftPW-3", 2018 AIAA Aerospace Sciences Meeting, AIAA SciTech Forum, (AIAA 2018-1036)
  - R. M. Granzoto, L. A. Algodoal V., G. J. Zambrano, G. G. Becker. "Horizontal Tail LOCAL ANGLE-OF-ATTACK AND TOTAL PRESSURE MEASUREMENTS THROUGH STATIC PRESSURE PORTS AND KIEL PITOT", ICAS 2018, 31st Congress of the International Council of the Aeronautical Science
  - Pedro A G Ciloni, Maximiliano A F de Souza , Leonardo C Scalabrin , Alexandre P Antunes. "HLPW4 - Impact of Solution Strategy on CFD RANS Simulations of High Lift Configurations", 2022 AIAA Aerospace Sciences Meeting, AIAA Aviation Forum