

Appendix 1

1. **Incomplete list of turbulence models and references**

Incomplete list of turbulence models

- The following is an incomplete list of RANS/URANS/RSM turbulence models.
- Have in mind that some of the models have many variants.
 - Cebeci-Smith.
 - Baldwin-Lomax.
 - Johnson-King.
 - Bradshaw-Ferris-Atwell.
 - L-VEL.
 - Prandtl mixing length.
 - Van-driest mixing length.
 - Prandtl one equation.
 - Nee-Kovasznay.
 - Baldwin-Barth.
 - Spalart-Allmaras.
 - Secundov Nut-92.
 - Wolfshtein.

Incomplete list of turbulence models

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 - Norris-Reynolds.
 - Wray-Agarwal.
 - Rotta k- κ .
 - Standard K-Epsilon.
 - RNG K-Epsilon.
 - Realizable K-Epsilon.
 - Myong-Kasagi K-Epsilon.
 - Launder-Sharma K-Epsilon.
 - Lam-Bremhorst K-Epsilon.
 - Jones-Launder K-Epsilon.
 - Chien K-Epsilon.
 - Lien-Leschziner K-Epsilon.

Incomplete list of turbulence models

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- Have in mind that some of the models have many variants.
 - Speziale K-Epsilon.
 - Rubinstein-Barton.
 - Gatski-Speziale.
 - Lien-Chien-Leschziner.
 - Apsley-Leschziner.
 - Saffman-Spalding k-Omega.
 - Kolmogorov 1942 K-Omega.
 - Wilcox 1988 K-Omega.
 - Wilcox 1998 K-Omega.
 - Wilcox 2006 K-Omega.
 - Menter 2003 K-Omega SST.
 - Langtry-Menter K-Omega.

Incomplete list of turbulence models

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- Have in mind that some of the models have many variants.
 - K-e-Rt.
 - K-e-zeta-F.
 - Q-Zeta.
 - Pope EARSM.
 - Walin-Johansson EARSM.
 - Mishra-Girimaji.
 - Wilcox RSM.
 - LRR RSM.
 - SSG RSM.
 - GLVY RSM.
 - Craft cubic model.

Incomplete list of turbulence models

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- Have in mind that some of the models have many variants.
 - Gibson-Launder.
 - Craft-Launder.
 - Shima.
 - V2-f
 - Gamma-Re-Theta.
 - LCTM.
 - K-KI-Omega.
 - Transition SST.
 - GEKO.