## Modelo de Mistura Reativa Ideal

## C.02.01.A1 – Modelo de Mistura Reativa Ideal

Aplicação em FTAF - Finite Time Air-Fuel Otto Engine Model

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https://github.com/CNThermSci/ApplThermSc. Compiled on 2020-09-10 17h27m56s UTC

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## Padrões nos Cálculos:

$$\bar{c}_{p}(T) = a_{1} + a_{2}T + a_{3}T^{2} + a_{4}T^{3}, \qquad T_{min} \leqslant T \leqslant T_{max} \qquad \neg \\ \bar{c}_{v}(T) = b_{1} + b_{2}T + b_{3}T^{2} + b_{4}T^{3}, \qquad T_{min} \leqslant T \leqslant T_{max} \qquad \neg \\ \bar{u}(T) = \left(b_{1}T + \frac{b_{2}T^{2}}{2} + \frac{b_{3}T^{3}}{3} + \frac{b_{4}T^{4}}{4}\right)_{T_{ref}}^{T}, \qquad T_{min} \leqslant T \leqslant T_{max} \qquad \neg \\ \bar{h}(T) = \left(a_{1}T + \frac{a_{2}T^{2}}{2} + \frac{a_{3}T^{3}}{3} + \frac{a_{4}T^{4}}{4}\right)_{T_{ref}}^{T} + \bar{R}T_{ref}, \qquad T_{min} \leqslant T \leqslant T_{max} \qquad \neg \\ \bar{s}^{\circ}(T) = \left(a_{1}\ln(T) + a_{2}T + \frac{a_{3}T^{2}}{2} + \frac{a_{4}T^{3}}{3}\right)_{T_{ref}}^{T} + \bar{s}_{ref}^{\circ}, \qquad T_{min} \leqslant T \leqslant T_{max} \qquad \therefore$$

Verificação de limites;

• Coef./func. próprios; e

• Produtos matriciais.





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