$$m_{\text{fuel[cycle]}} = \frac{M_{\text{C}}}{w_{\text{Cmeas}}} \cdot \left(\frac{\overline{x}_{\text{Ccombdry}}}{1 + \overline{x}_{\text{H2Oexhdry}}} \cdot \sum_{\text{i}=1}^{N} \left(\dot{n}_{\text{exh}_{\text{i}}} \cdot \Delta t \right) - \frac{1}{M_{\text{CO2}}} \sum_{\text{i}=1}^{N} \left(\dot{m}_{\text{CO2DEF}_{\text{i}}} \cdot \Delta t \right) \right)$$

Eq. 1036.540-4