$$M_{CH3OH} = V_n \times \left(\left[\frac{\left(C_{MS1f} \times AV_{1f}\right) + \left(C_{MS2f} \times AV_{2f}\right)}{V_{Ef}} \right] - \left[\frac{\left(C_{MS1i} \times AV_{1i}\right) + \left(C_{MS2i} \times AV_{2i}\right)}{V_{Ei}} \right] \right) + \left(M_{CH3OH,out} - M_{CH3OH,in}\right)$$