

### Generalized Creep Behavior

8.26 Creep becomes important at about  $0.4T_m$ ,  $T_m$  being the absolute melting temperature of the metal.

(The melting temperatures in degrees Celsius are found inside the front cover of the book.)

For Sn,  $0.4T_m = (0.4)(232 + 273) = 202 \text{ K}$  or  $-71^\circ\text{C}$  ( $-96^\circ\text{F}$ )

For Mo,  $0.4T_m = (0.4)(2617 + 273) = 1156 \text{ K}$  or  $883^\circ\text{C}$  ( $1621^\circ\text{F}$ )

For Fe,  $0.4T_m = (0.4)(1538 + 273) = 724 \text{ K}$  or  $451^\circ\text{C}$  ( $845^\circ\text{F}$ )

For Au,  $0.4T_m = (0.4)(1064 + 273) = 535 \text{ K}$  or  $262^\circ\text{C}$  ( $504^\circ\text{F}$ )

For Zn,  $0.4T_m = (0.4)(420 + 273) = 277 \text{ K}$  or  $4^\circ\text{C}$  ( $39^\circ\text{F}$ )

For Cr,  $0.4T_m = (0.4)(1875 + 273) = 859 \text{ K}$  or  $586^\circ\text{C}$  ( $1087^\circ\text{F}$ )