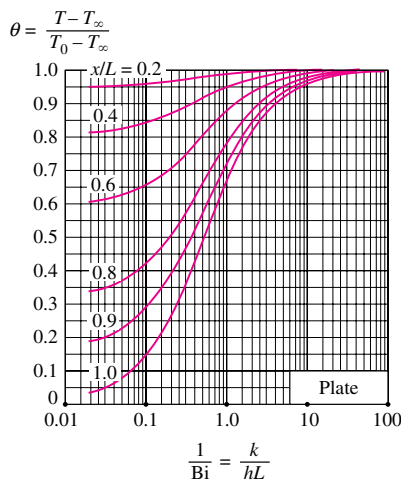
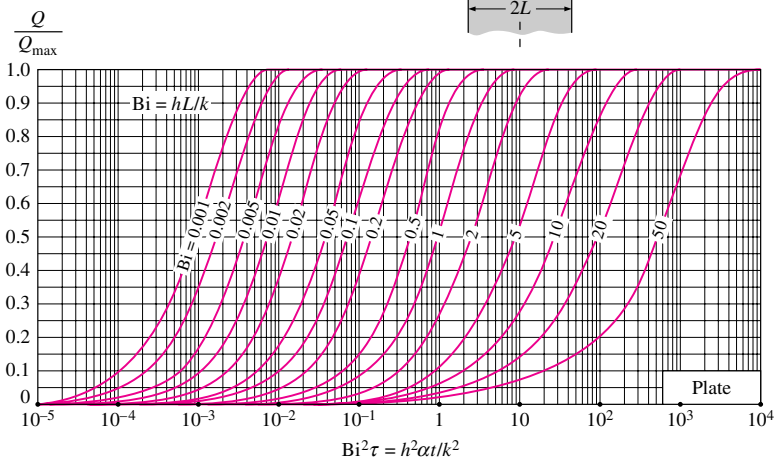


(a) Midplane temperature (from M. P. Heisler, "Temperature Charts for Induction and Constant Temperature Heating," *Trans. ASME* 69, 1947, pp. 227–36. Reprinted by permission of ASME International.)



(b) Temperature distribution (from M. P. Heisler, "Temperature Charts for Induction and Constant Temperature Heating," *Trans. ASME* 69, 1947, pp. 227–36. Reprinted by permission of ASME International.)

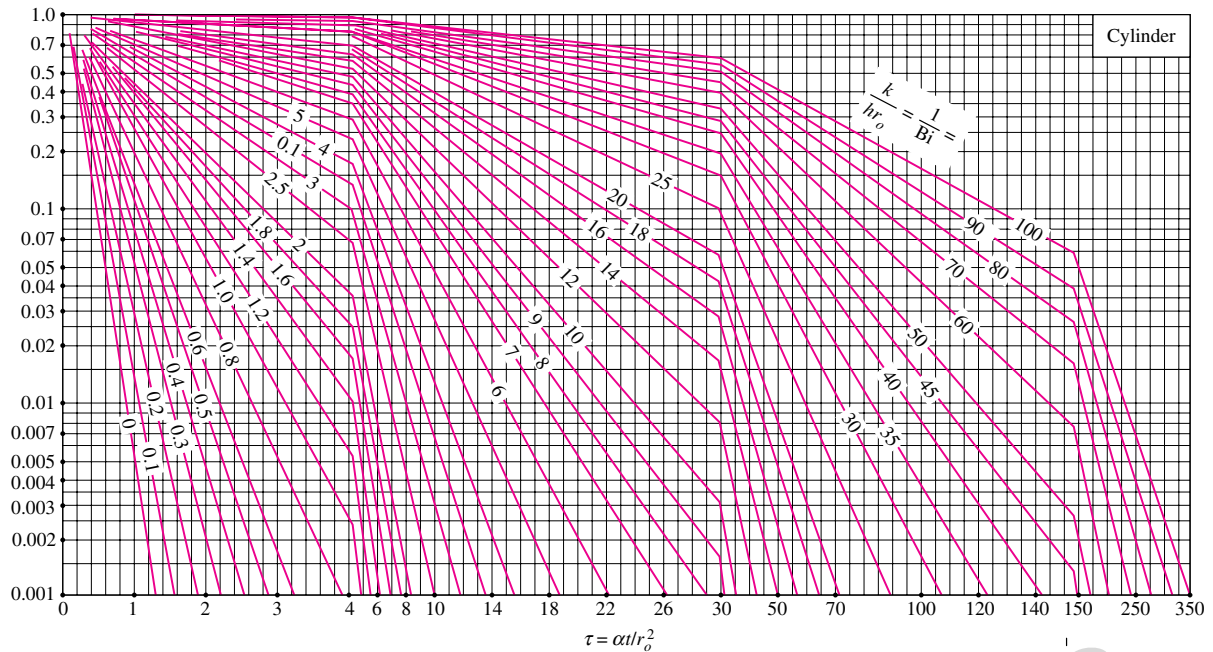


(c) Heat transfer (from H. Gröber et al.)

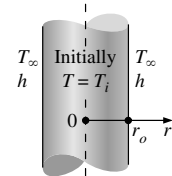
FIGURE 4-15

Transient temperature and heat transfer charts for a plane wall of thickness $2L$ initially at a uniform temperature T_i subjected to convection from both sides to an environment at temperature T_∞ with a convection coefficient of h .

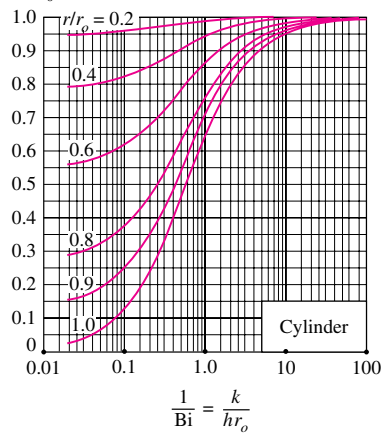
$$\theta_0 = \frac{T_0 - T_\infty}{T_i - T_\infty}$$



(a) Centerline temperature (from M. P. Heisler, "Temperature Charts for Induction and Constant Temperature Heating," *Trans. ASME* 69, 1947, pp. 227–36. Reprinted by permission of ASME International.)

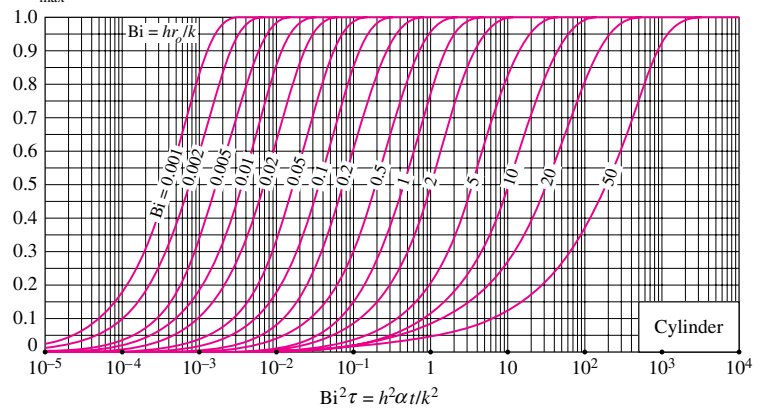


$$\theta = \frac{T - T_\infty}{T_0 - T_\infty}$$



(b) Temperature distribution (from M. P. Heisler, "Temperature Charts for Induction and Constant Temperature Heating," *Trans. ASME* 69, 1947, pp. 227–36. Reprinted by permission of ASME International.)

$$\frac{Q}{Q_{\max}}$$

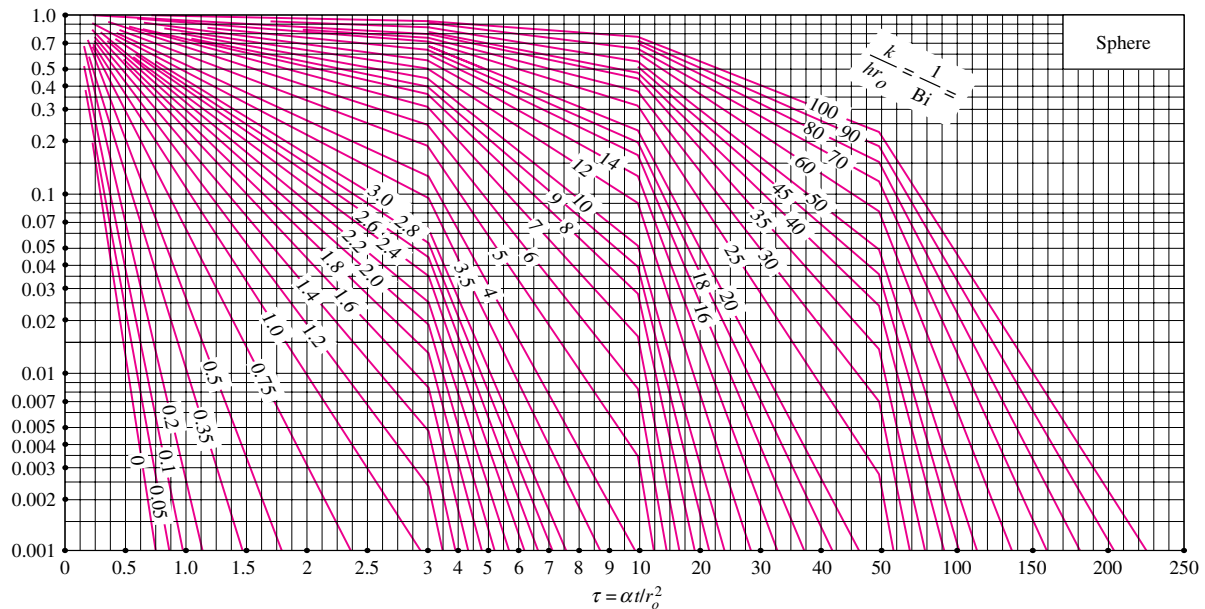


(c) Heat transfer (from H. Gröber et al.)

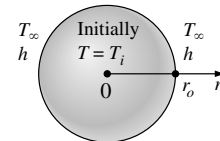
FIGURE 4-16

Transient temperature and heat transfer charts for a long cylinder of radius r_o initially at a uniform temperature T_i subjected to convection from all sides to an environment at temperature T_∞ with a convection coefficient of h .

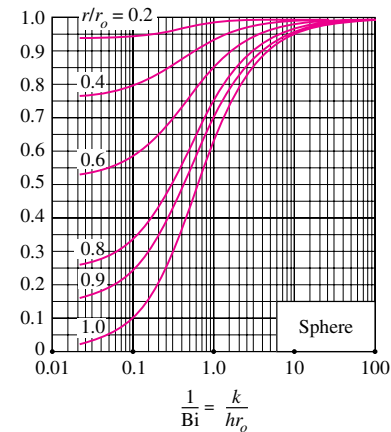
$$\theta_0 = \frac{T_0 - T_\infty}{T_i - T_\infty}$$



(a) Midpoint temperature (from M. P. Heisler, "Temperature Charts for Induction and Constant Temperature Heating," *Trans. ASME* 69, 1947, pp. 227–36. Reprinted by permission of ASME International.)

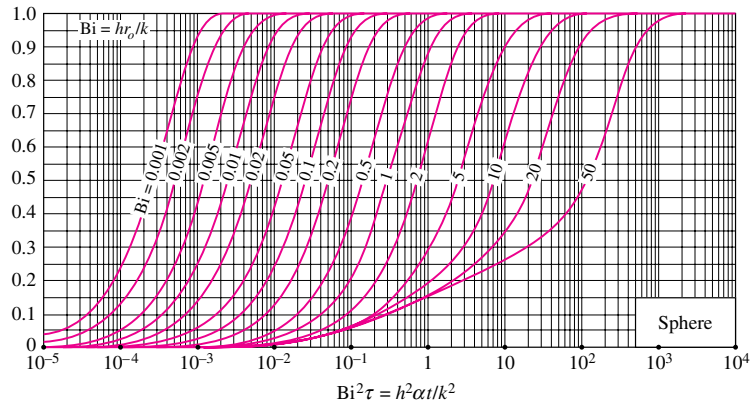


$$\theta = \frac{T - T_\infty}{T_0 - T_\infty}$$



(b) Temperature distribution (from M. P. Heisler, "Temperature Charts for Induction and Constant Temperature Heating," *Trans. ASME* 69, 1947,

$$\frac{Q}{Q_{\max}}$$



(c) Heat transfer (from H. Gröber et al.)

FIGURE 4-17

Transient temperature and heat transfer charts for a sphere of radius r_o initially at a uniform temperature T_i subjected to convection from all sides to an environment at temperature T_∞ with a convection coefficient of h .