

Chapter11_example3

The inside surface area is 0.314 sq.ft

The area of a 1/8 inch hole is 8.522e-05 sq.ft

The fraction of area removed is 2.717e-04

Solution to Part (a)

The emissivity of the hole is 0.9933

Solution to Part (b)

The heat lost per unit area of the hole is 235 BTU/hr

The heat lost by the hole is 2.01e-02 BTU/hr