

Problem 9-49

- (a) What is the distinction between hypoeutectoid and hypereutectoid steels?

Hypoeutectoid steels have below 0.77% C. Hypereutectoid steels have carbon above 0.77%.

- (b) In a hypoeutectoid steel both eutectoid ferrite and proeutectoid ferrite exist. Explain the difference between them. What is the carbon concentration in each?

The proeutectoid ferrite formed at a range of temperatures from austenite in the austenite plus ferrite region above 727°C. The eutectoid ferrite formed during the eutectoid transformation as we cool below 727°C. It is a part of the pearlite microconstituent.