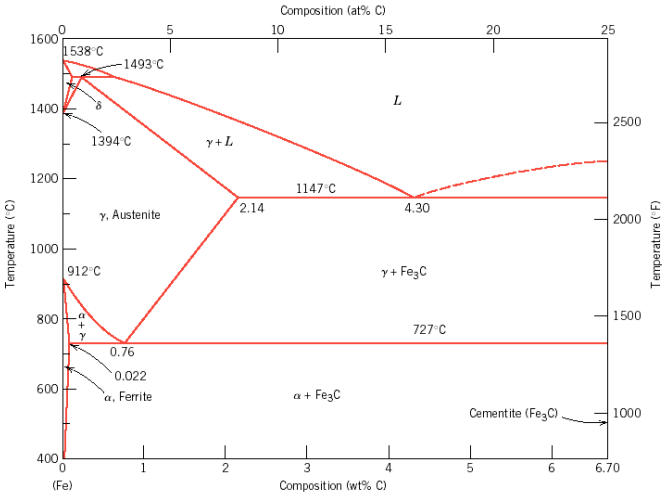
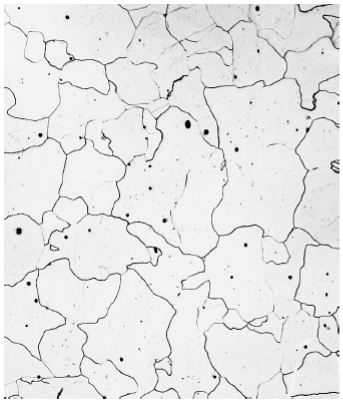
The iron-iron carbide (Fe-Fe_3C) phase diagram

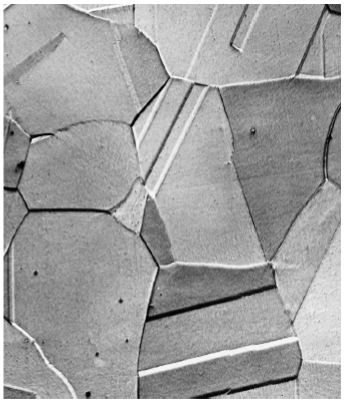


Microstructures of iron



(a)

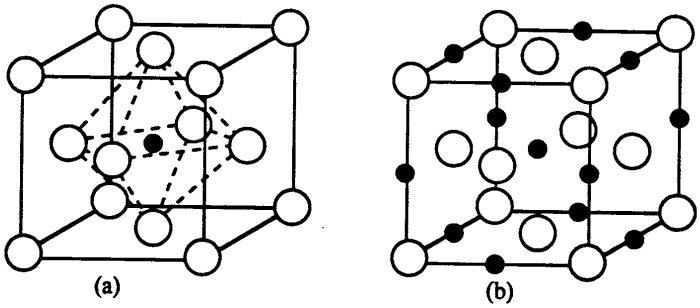
α- ferrite



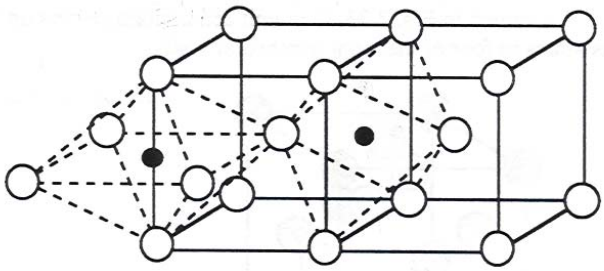
(b)

austenite

Interstitial sites of FCC

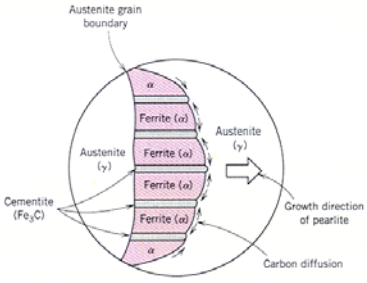


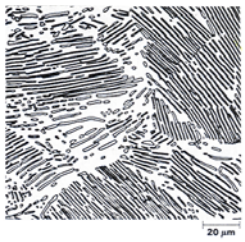
Interstitial sites of BCC

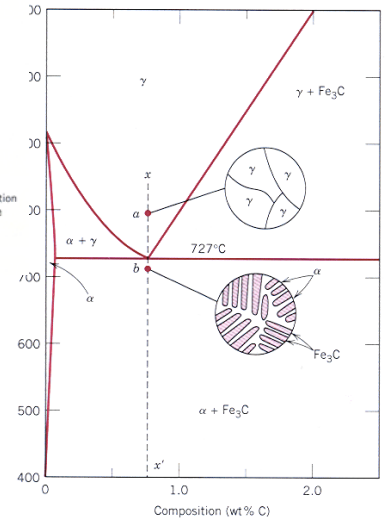


Microstructure in iron-carbon alloys

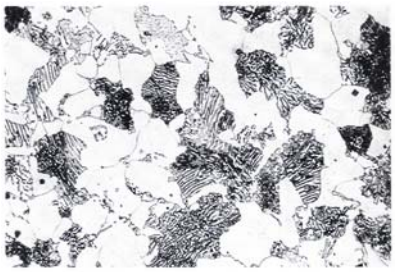
- Eutectic--pearlite

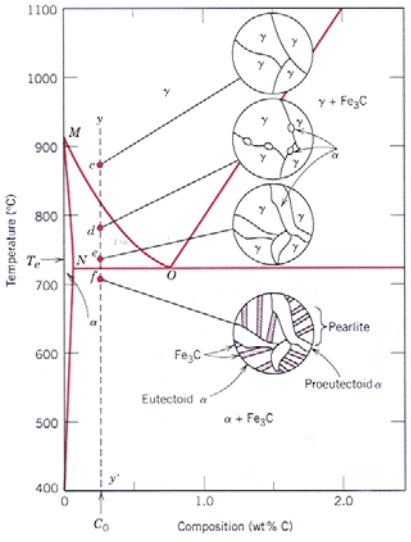




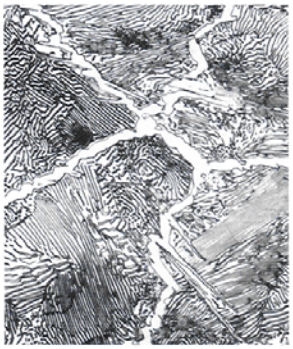


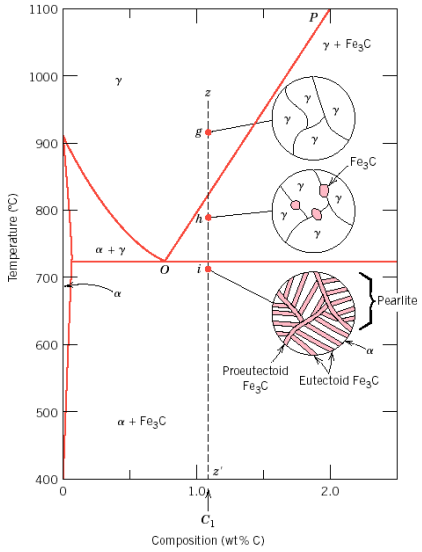
Hypoeutectoid alloys





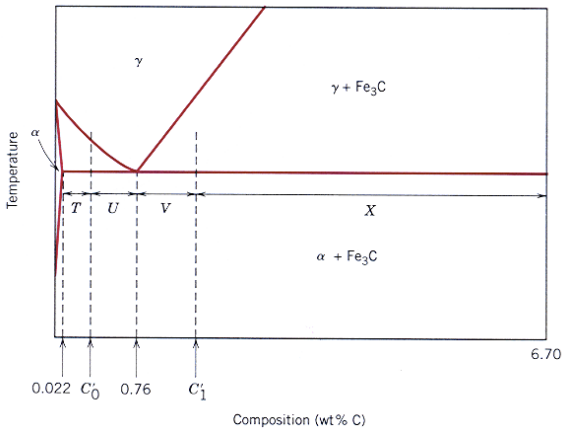
Hypereutectoid alloys



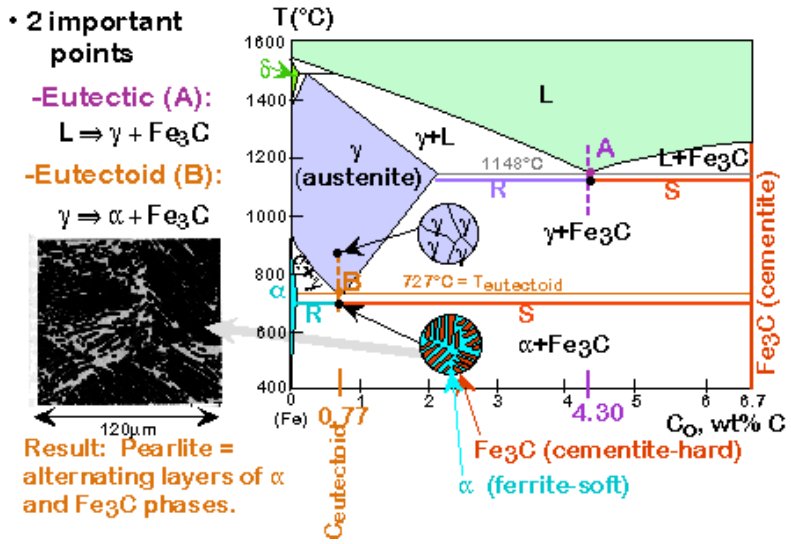


Equilibrium diagrams having intermediate phases or compounds

- The fraction of pearlite
- The fraction of proeutectoid α

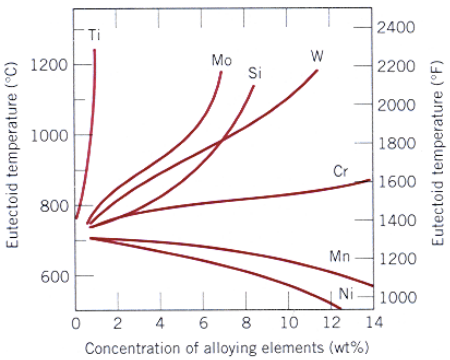


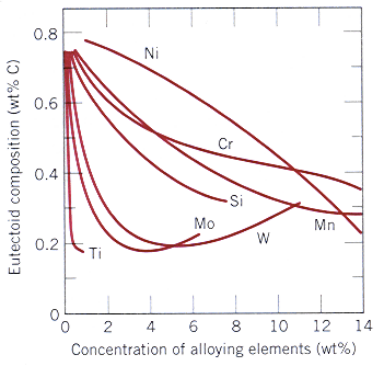
Review Fe-C phase diagram



The influence of other alloying elements

- Eutectoid changes





Summary