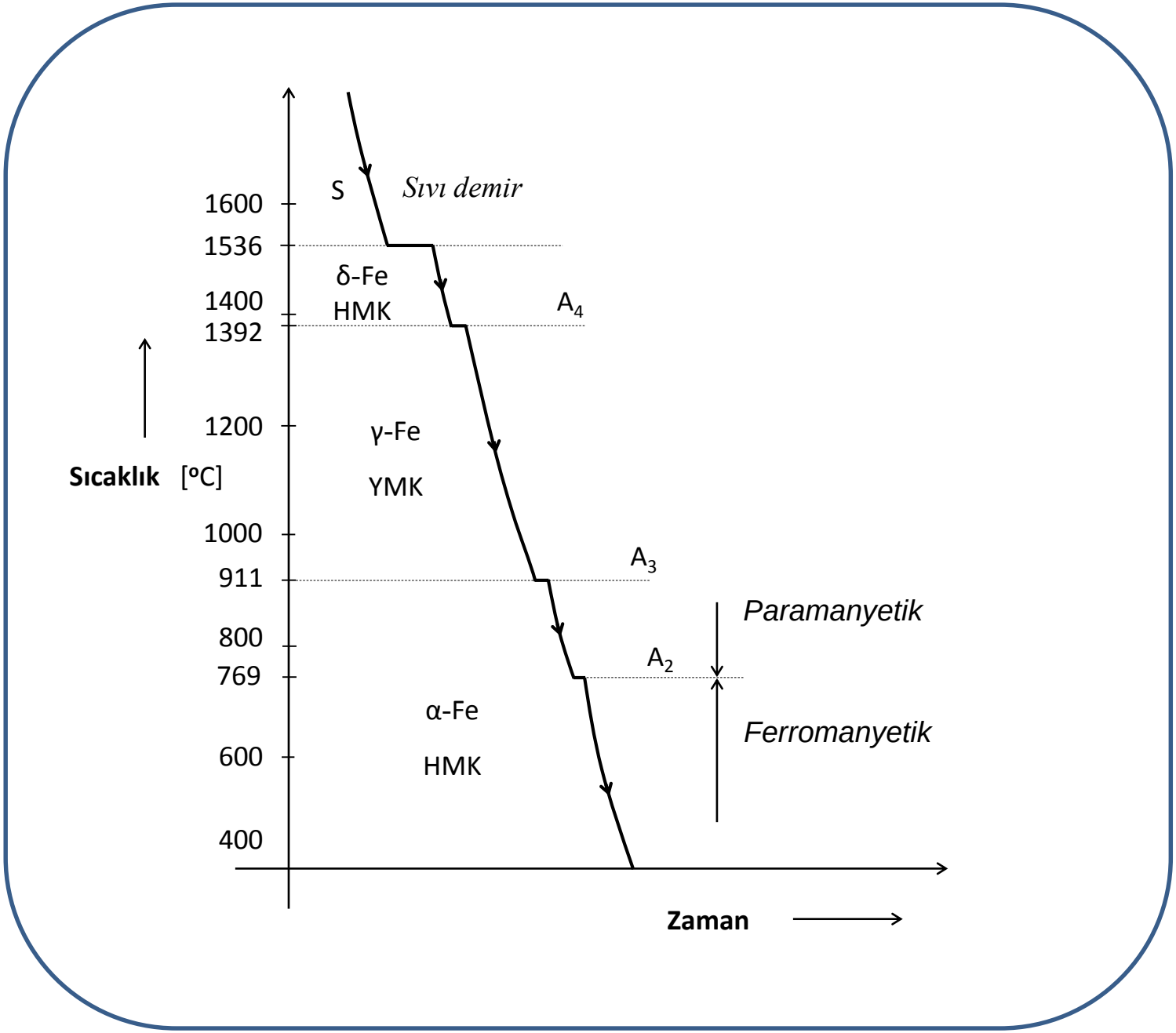
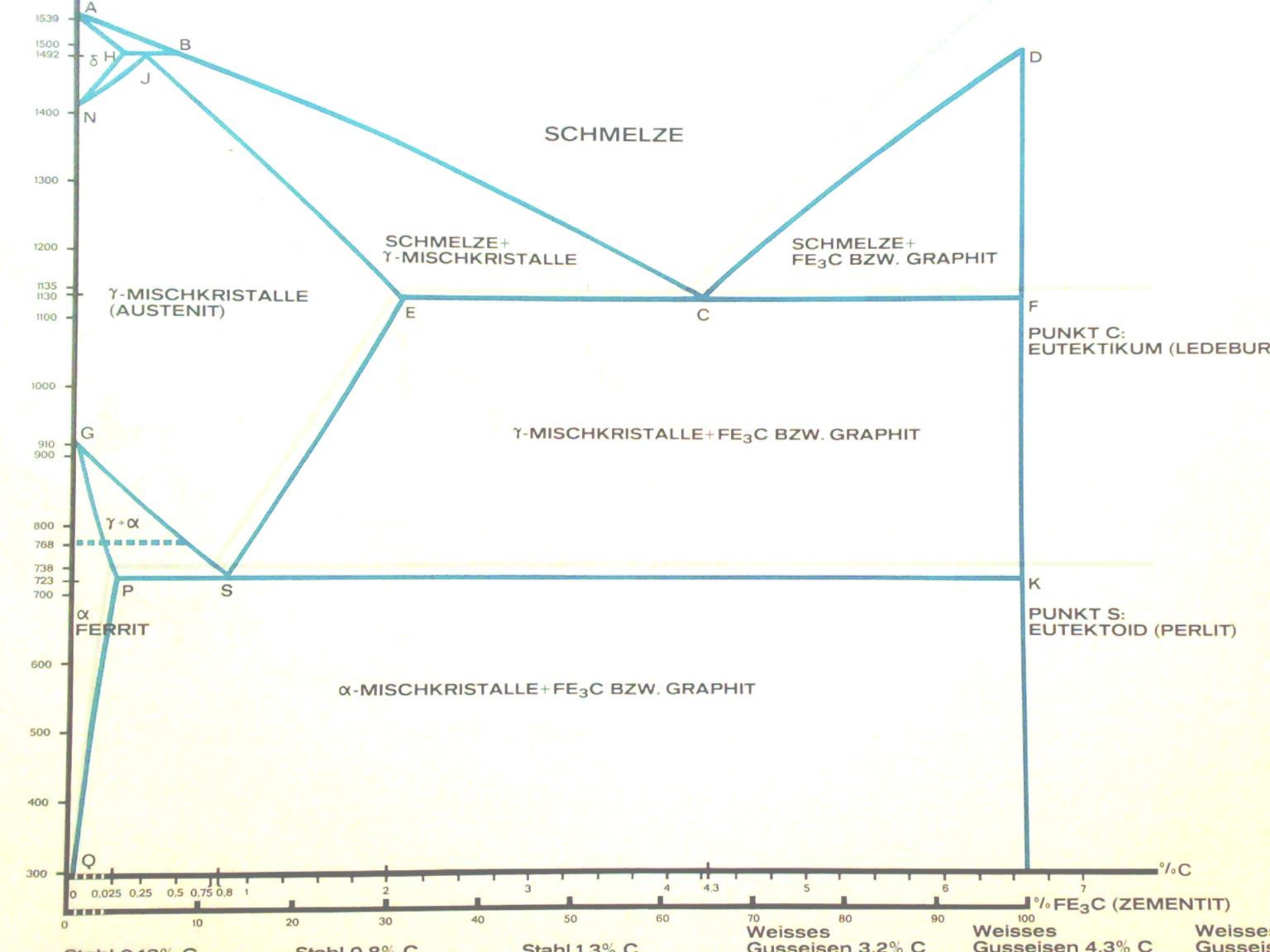
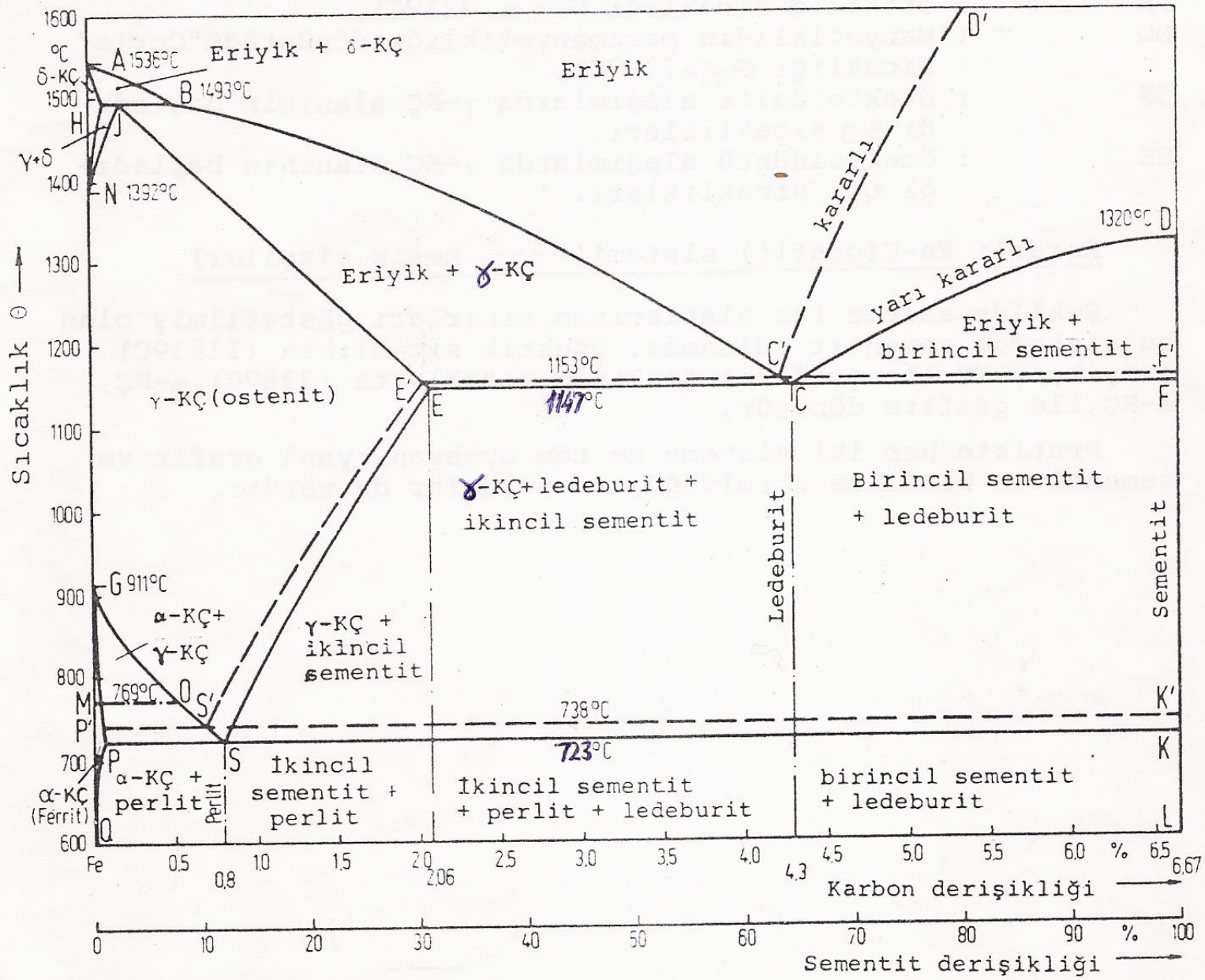
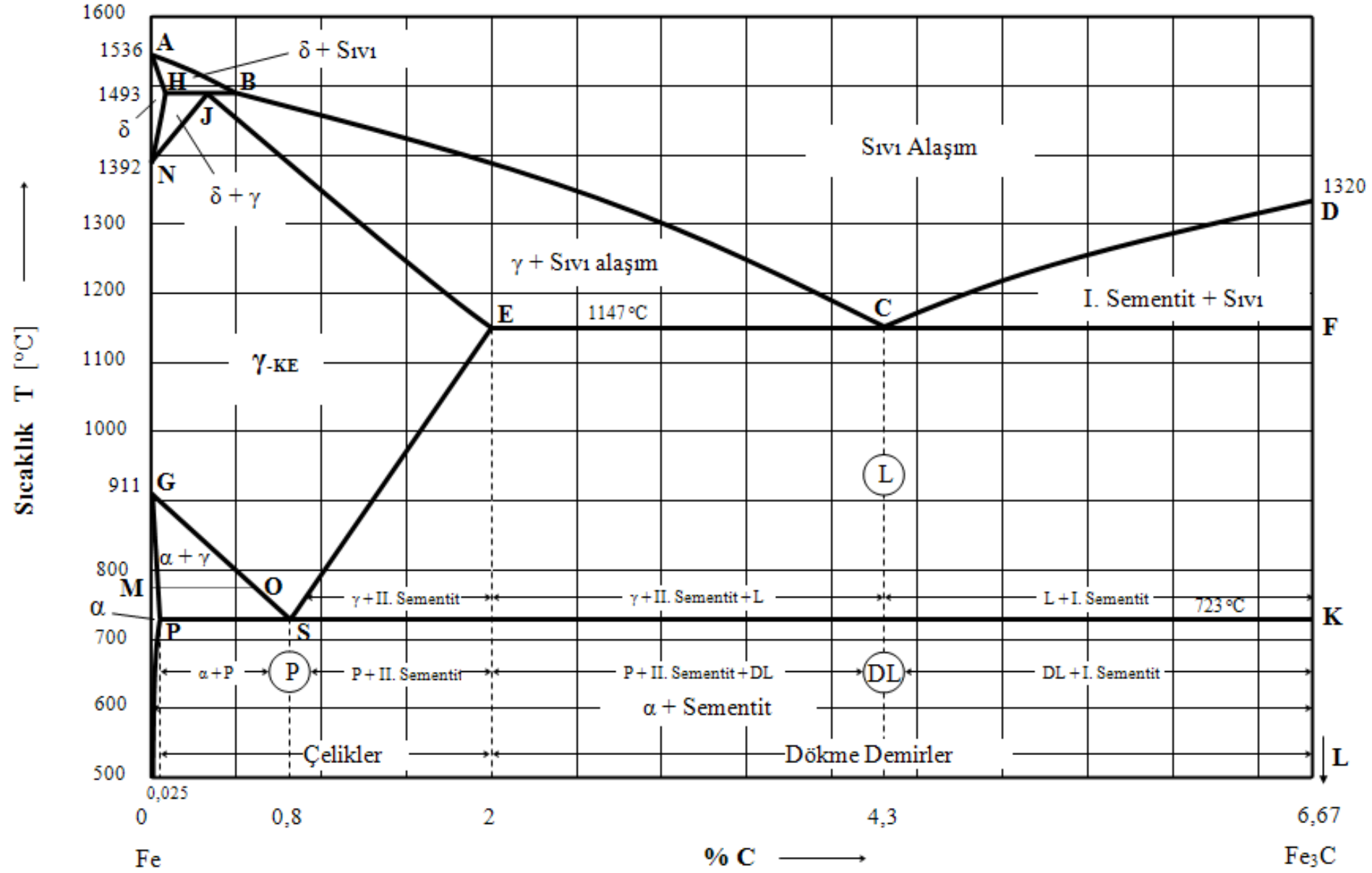
Demir-Karbon
Denge Diyagramı


S
Sıvı demir
1600
1536
δ-Fe
HMK
1400
A4
1392
1200
γ-Fe
YMK
Sıcaklık [ºC]
1000
A3
911
Paramanyetik
800
A2
769
α-Fe
Ferromanyetik
600
HMK
400
Zaman

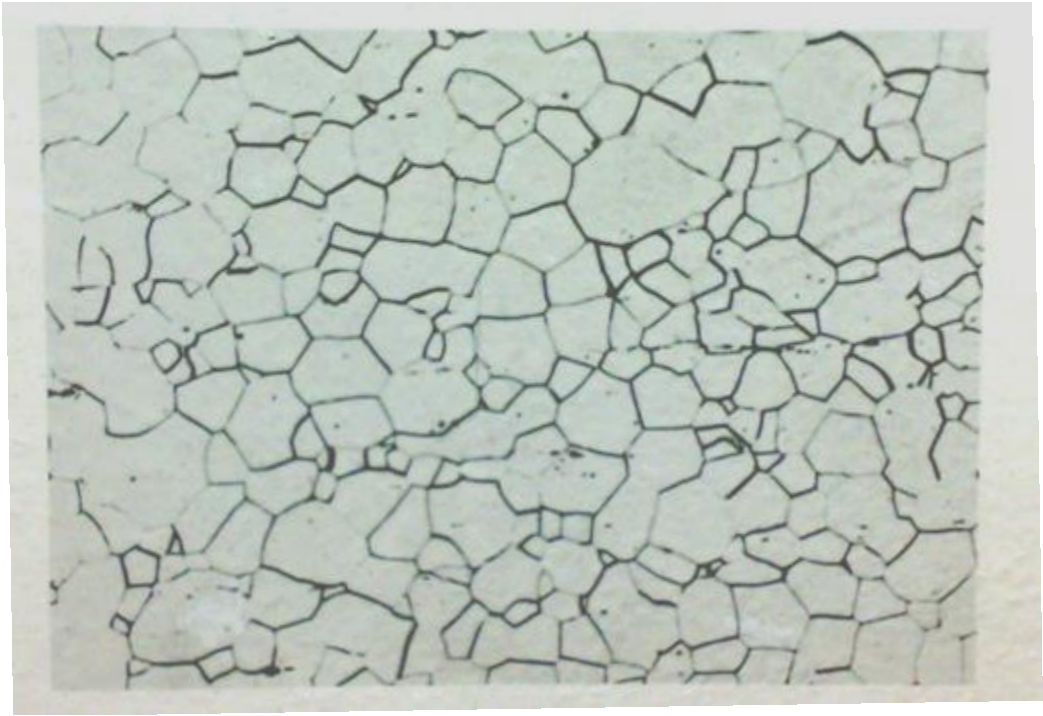

A
B
D
H
J
N
SCHMELZE
SCHMELZE+
γ-MISCHKRISTALLE
SCHMELZE+
FE3C BZW. GRAPHIT
γ-MISCHKRISTALLE
(AUSTENIT)
E
C
F
PUNKT C:
EUTEKTIKUM (LEDEBUR
G
γ-MISCHKRISTALLE+FE3C BZW. GRAPHIT
γ+α
P
S
K
PUNKT S:
EUTEKTOID (PERLIT)
α
FERRIT
α-MISCHKRISTALLE+FE3C BZW. GRAPHIT
Q
1539
1500
1492
1400
1300
1200
1135
1130
1100
1000
910
900
800
768
738
723
700
600
500
400
300
%C
0 0,025 0,25 0,5 0,75 0,8 1 2 3 4 4,3 5 6 7
% FE3C (ZEMENTIT)
0 10 20 30 40 50 60 70 80 90 100
Weisses
Gusseisen 3,2% C
Weisses
Gusseisen 4,3% C
Weisse
Gusseis



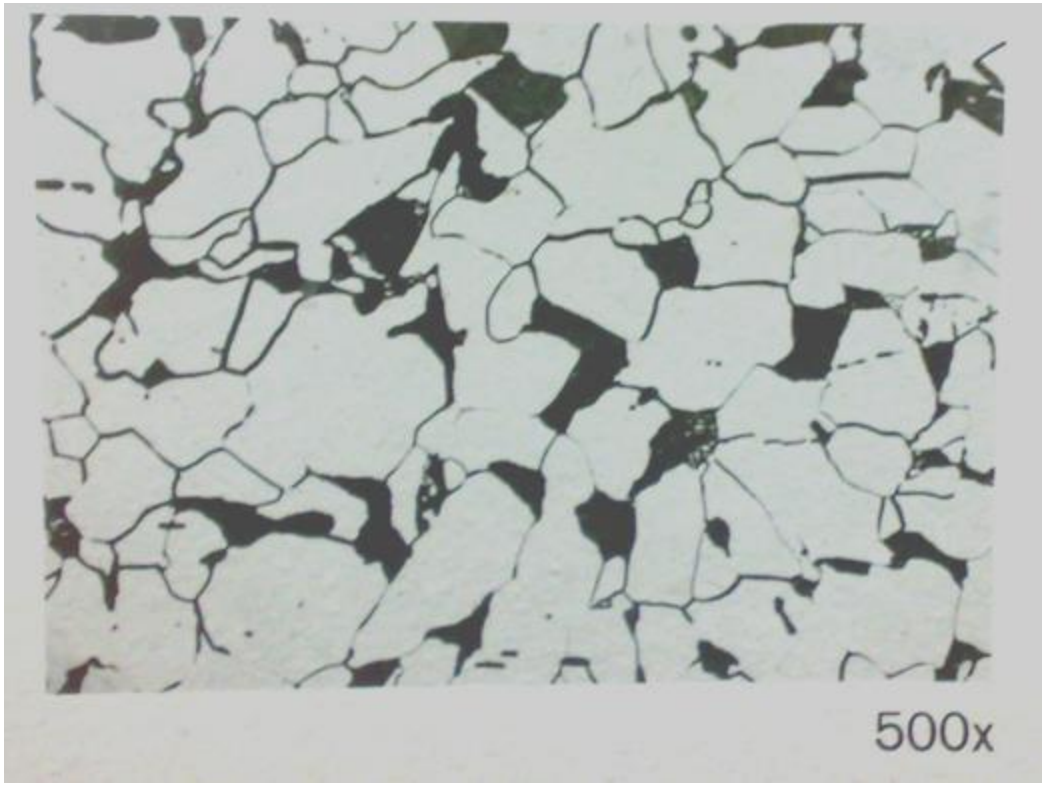
Yarı kararlı $Fe\text{-}Fe_3C$ sistemi (—— sürekli çizgiler)


1600
1536
1493
1392
1320
1300
1200
1100
1000
911
800
723 °C
500
A
H
B
J
N
D
E
C
F
G
M
O
S
P
K
L
δ + Sıvı
δ
δ + γ
Sıvı Alaşım
γ + Sıvı alaşım
I. Sementit + Sıvı
1147 °C
γ-KE
α + γ
α
γ + II. Sementit
γ + II. Sementit + L
L + I. Sementit
α + P
P + II. Sementit
P + II. Sementit + DL
DL + I. Sementit
DL
α + Sementit
Çelikler
Dökme Demirler
Sıcaklık T [°C]
0,025
0
0,8
2
4,3
6,67
Fe
% C
Fe3C

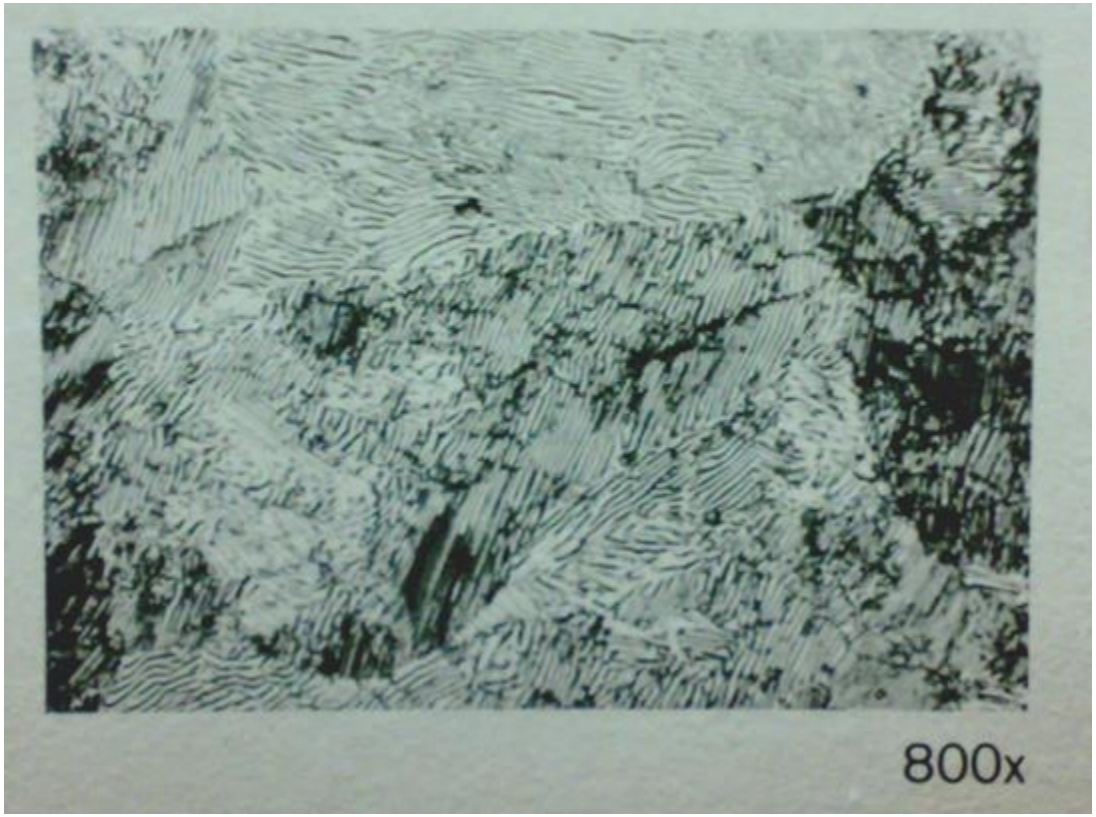
% 100 Ferrit



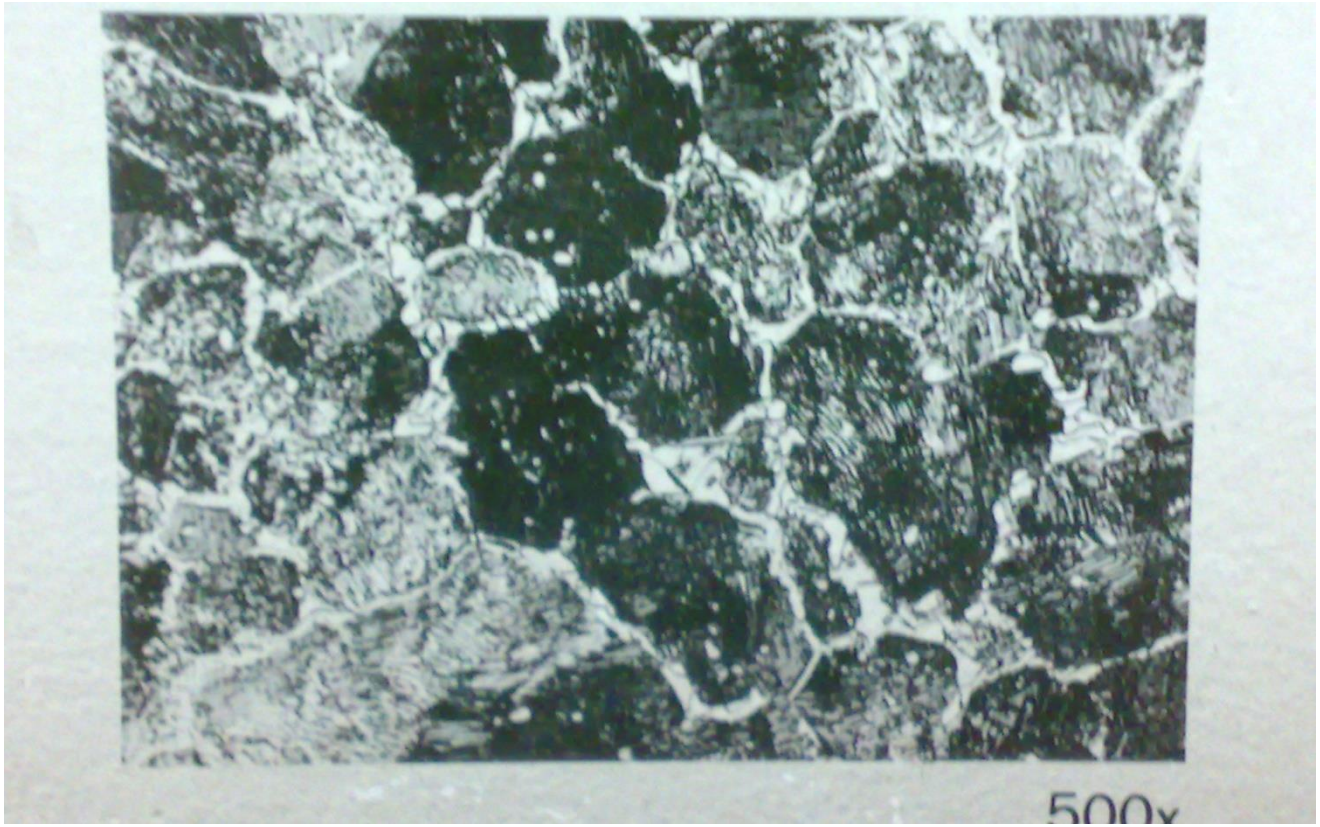
Ötektoid altı bölge
Ferrit ve Perlit



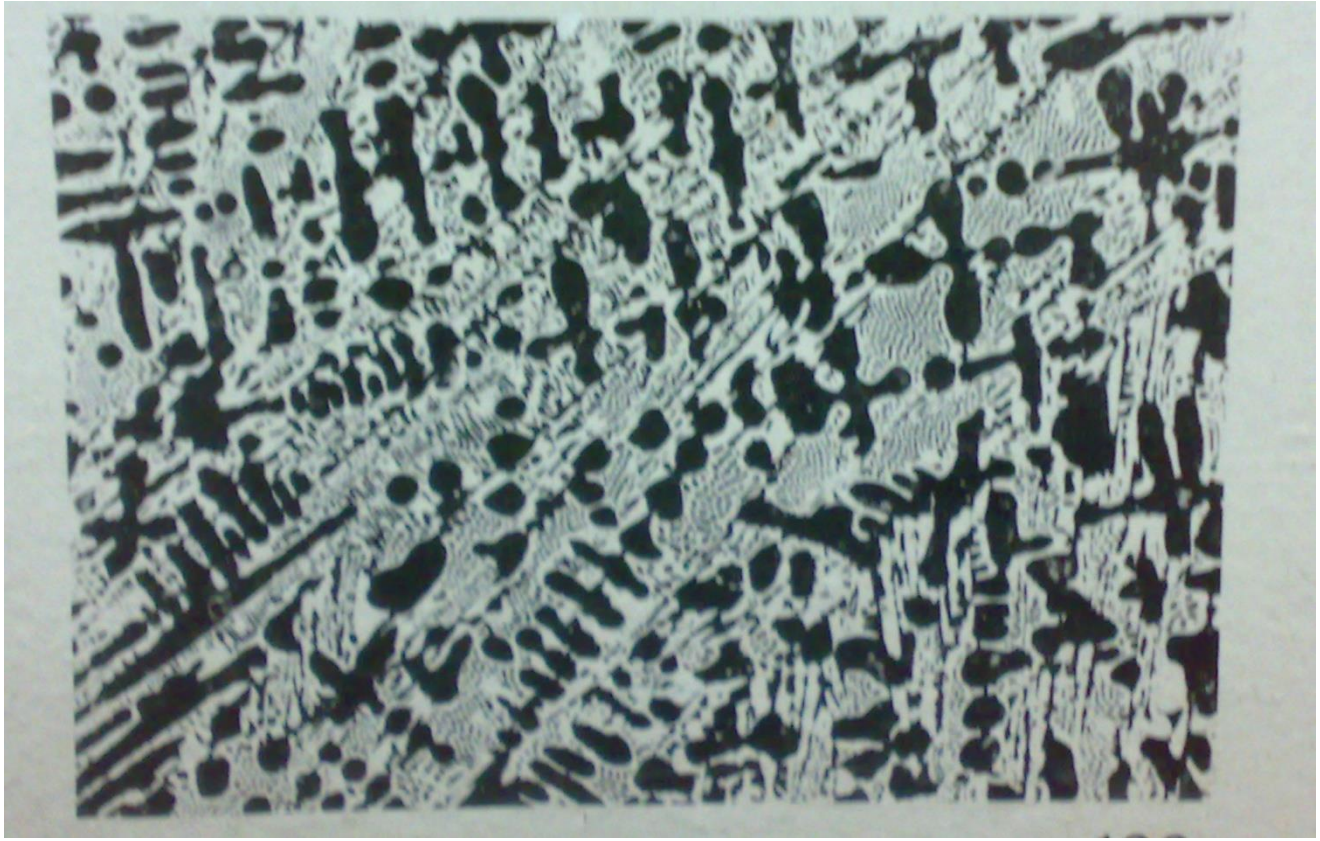
% 100 Ötektoid yapı (Perlit)



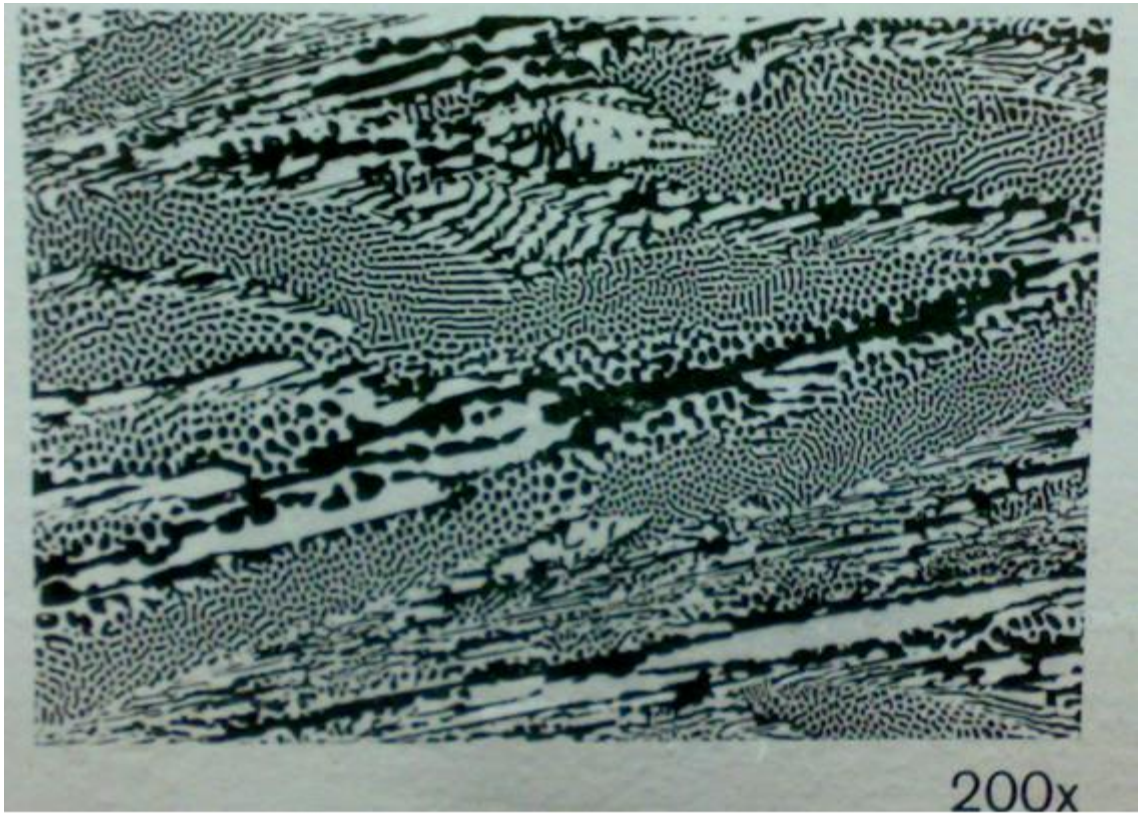
Ötektoid üstü yapı
Perlit ve II. Sementit



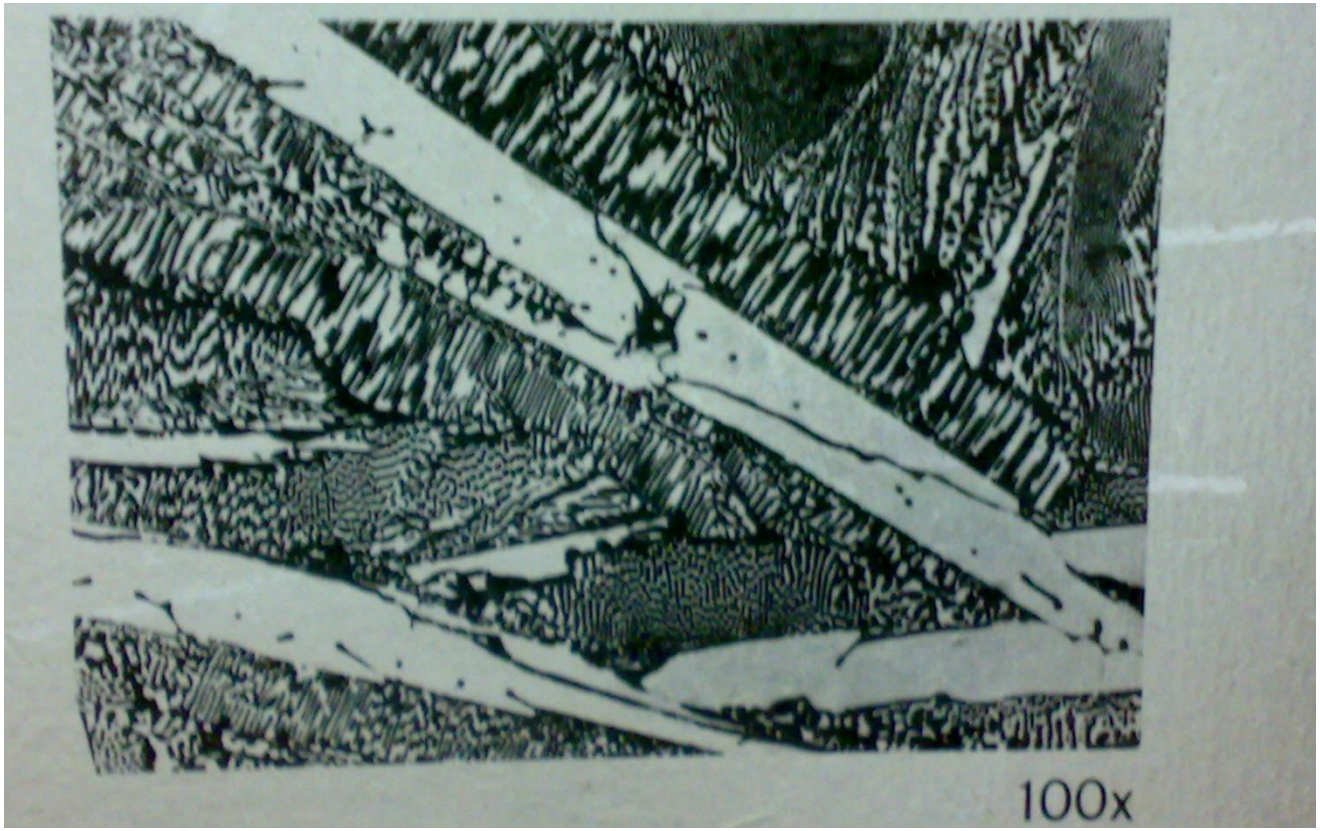
Ötektik altı bölge
Ledeburit ve Perlit



% 100 Ötektik yapı (Ledeburit)

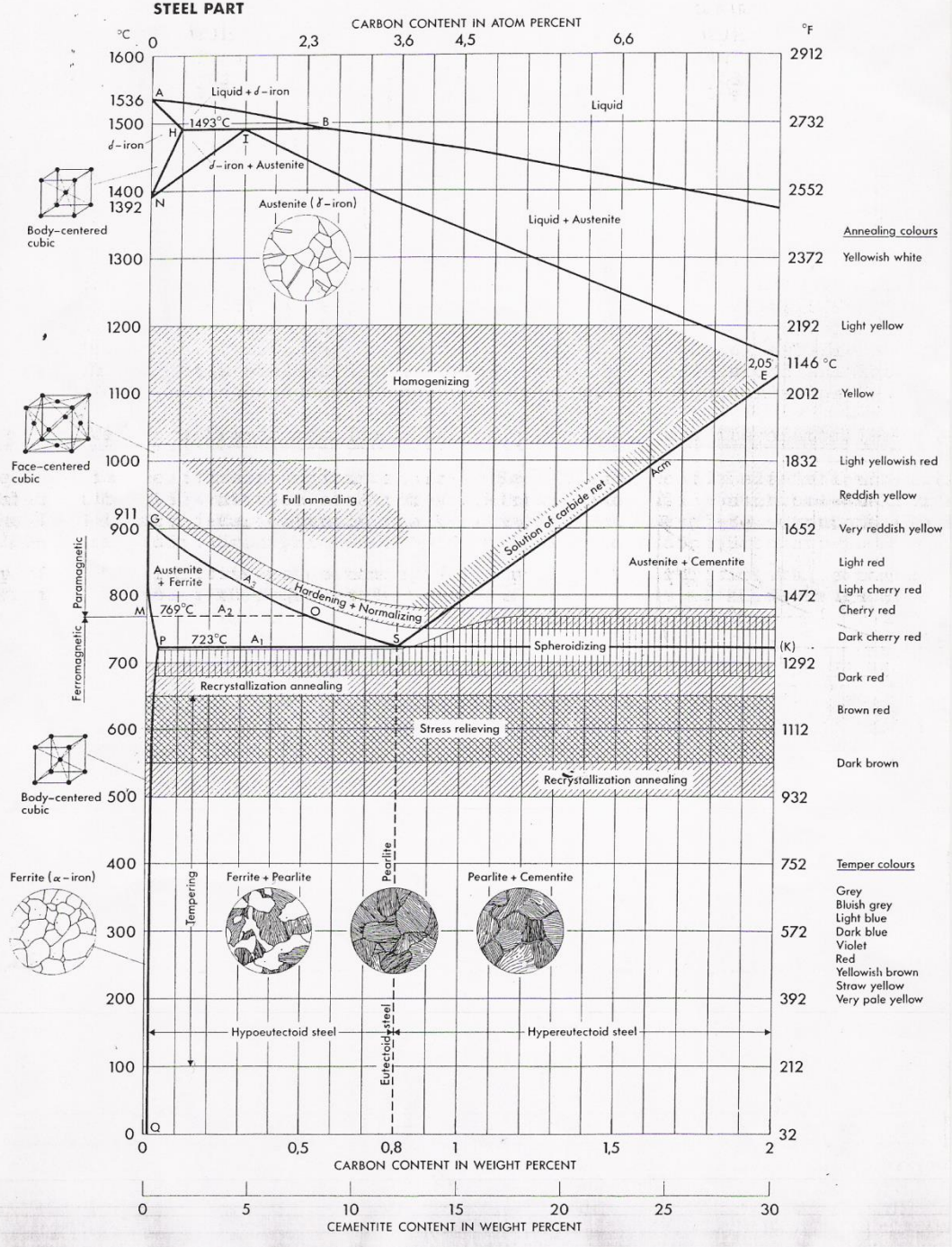


Ötektik üstü bölge
I. Sementit ve Ledeburit



IRON-CARBON EQUILIBRIUM DIAGRAM

STEEL PART



IRON-CARBON EQUILIBRIUM DIAGRAM

