Temir – sementit (Fe- Fe_3C) holat diagrammasi.

Reja

§ 1. Temir-uglerod qotishmalarning turlari.

§ 2. Temir – sementit (Fe- Fe_3C) holat diagrammasi.

§ 3. Evtektika ōzgarish jarayoni

§ 4. Evtektoid ōzgarish jarayoni .

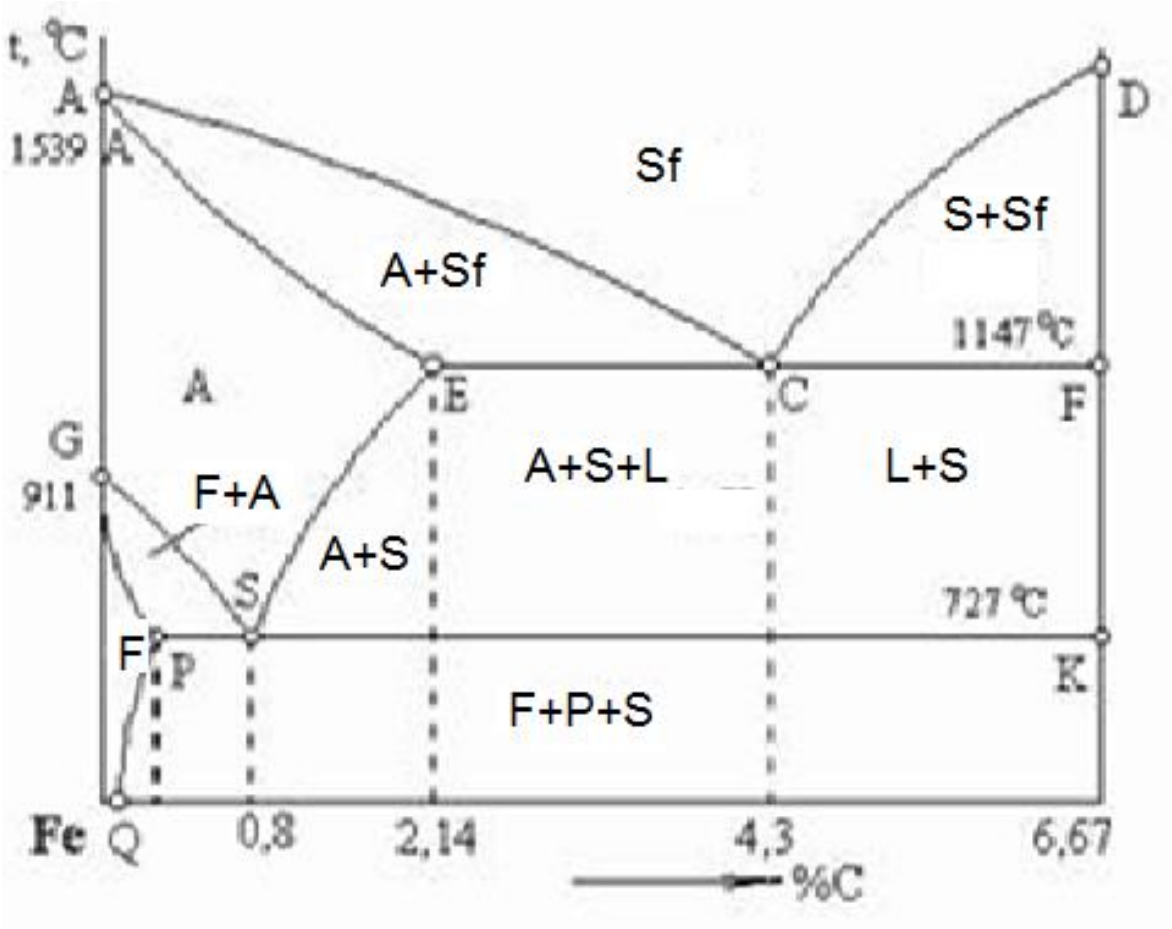
§ 1. Temir-uglerod qotishmalarning turlari.

Austenit - A	uglerodni γ-Fe dagi **qattiq eritmasi**.	0,1% < C < 2,14%

A-da 1147^{0}C da kōpi bilan 2,14 %C, 727^{0}C da kōpi bilan 0,8 %C eriydi, 727^{0}C da austenit perlitga aylanadi

Ferrit - F	uglerodni α-Fe dagi **qattiq eritmasi**	0,008% < C < 0,02%
Perlit- P	F va S ni **mexanikaviy aralashmasi**	C = 0,8%
Ledeburit- L	A va S ni **mexanikaviy aralashmasi**	C = 4,3%
Sementit- S	Temir va uglerod **qimyoviy birikmasi**	C = 6,67%

§ 2. Temir – sementit (Fe- Fe_3C) holat diagrammasi.



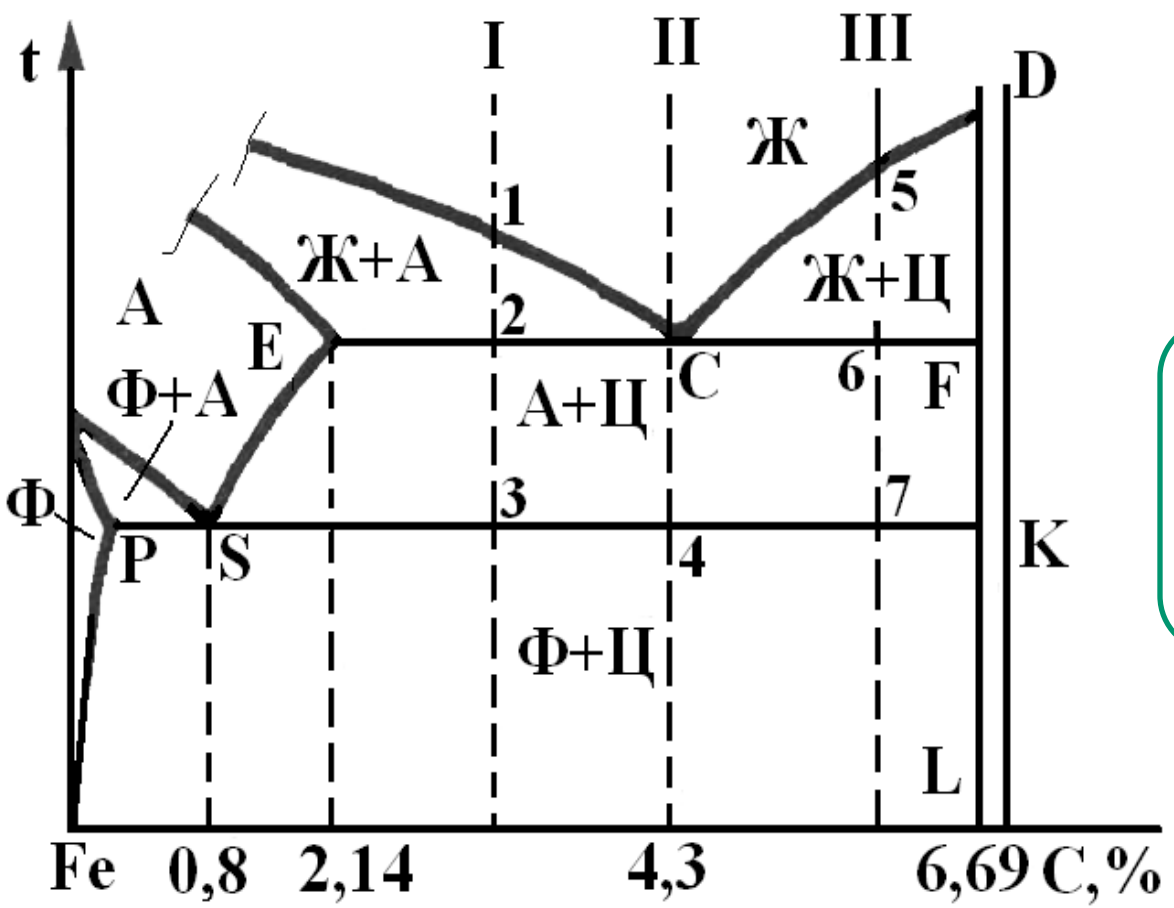
Sf – suyuq faza
A – austenit
F – ferrit
L – ledeburit
P – perlit
S – sementit

GS – A dan F ajraladi
SE – A dan S ajraladi
ECF – Sf➡ L ga o'tadi
PSK – A➡ P ga o'tadi

ACD – **l**ikvidus chizig'I – birlamchi kristallanish boshlanadi

AECF – solidus chizig'I – birlamchi kristallanish tugaydi

§ 3. Evtektika ōzgarish jarayoni



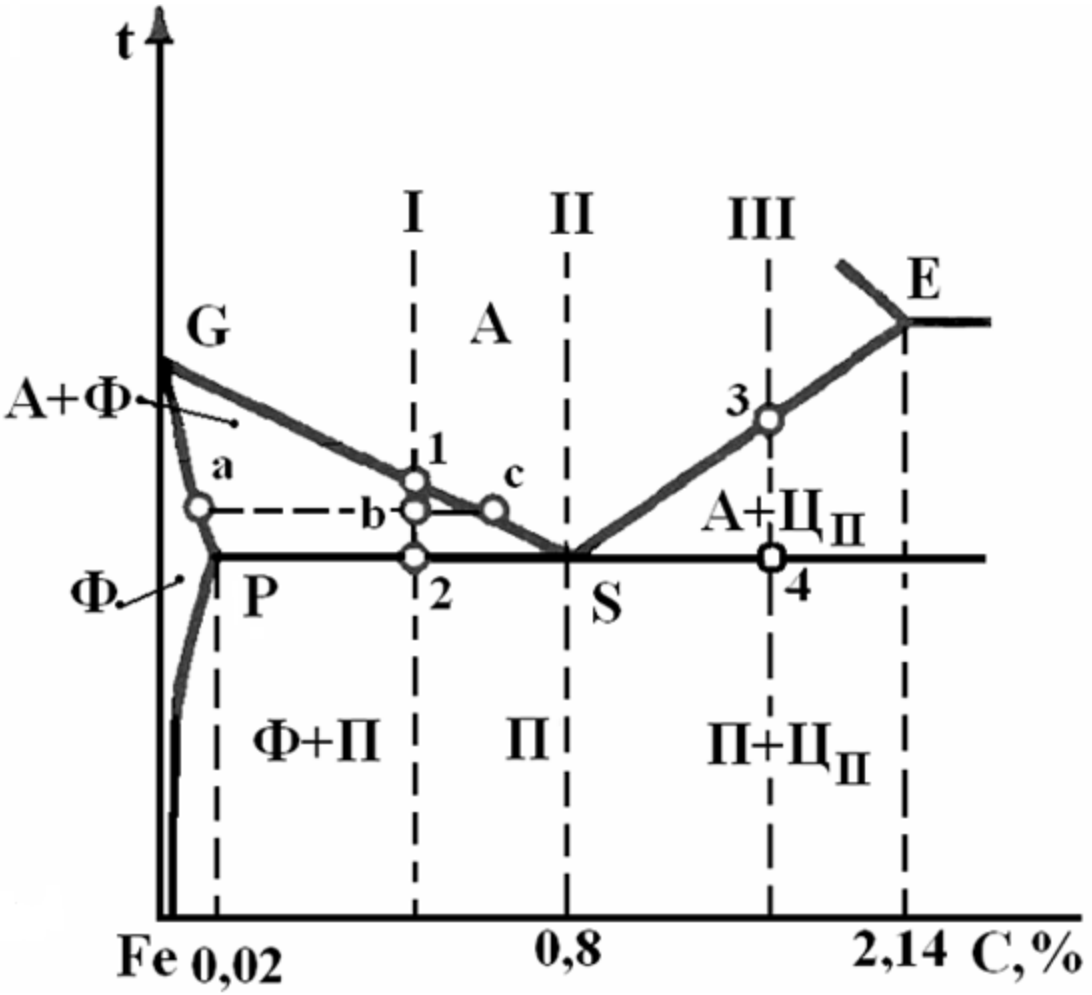
ECF chizigi - evtektika chizigi

evtektika ōzgarish jarayoni – birlamchi kristallanish jarayoni

1147^{0}C da

Suyuq faza (4,3% C) → Ledeburit (A+S) (4,3% C)

§ 4. Evtektoid ōzgarish jarayoni



PSK chizigi - evtektoid chizigi

evtektoid ōzgarish jarayoni – ikkilamchi kristallanish jarayoni

727^0C da
Austenit (0,8% C) → Perlit (F+S) (0,8% C)

Nazorat savollar

1. Austenit va ferritni ta’riflang. Ularda qancha uglerod erishi mumkin?
2. Perlit va ledeburitni ta’riflang. Ular qanday jarayonlar natijada paydo bo’ladi?
3. Likvidus va solidus chiziqlarda qanday jarayonlar kechadi?
4. Evtektika o’zgarish jarayonini ta’riflab bering.
5. Evtektoid o’zgarish jarayonini ta’riflab bering.