09

MATERIAIS DE CONSTRUÇÃO MECÂNICA

Engenharia de Produção Mecânica
Prof. Luis Fernando Maffeis

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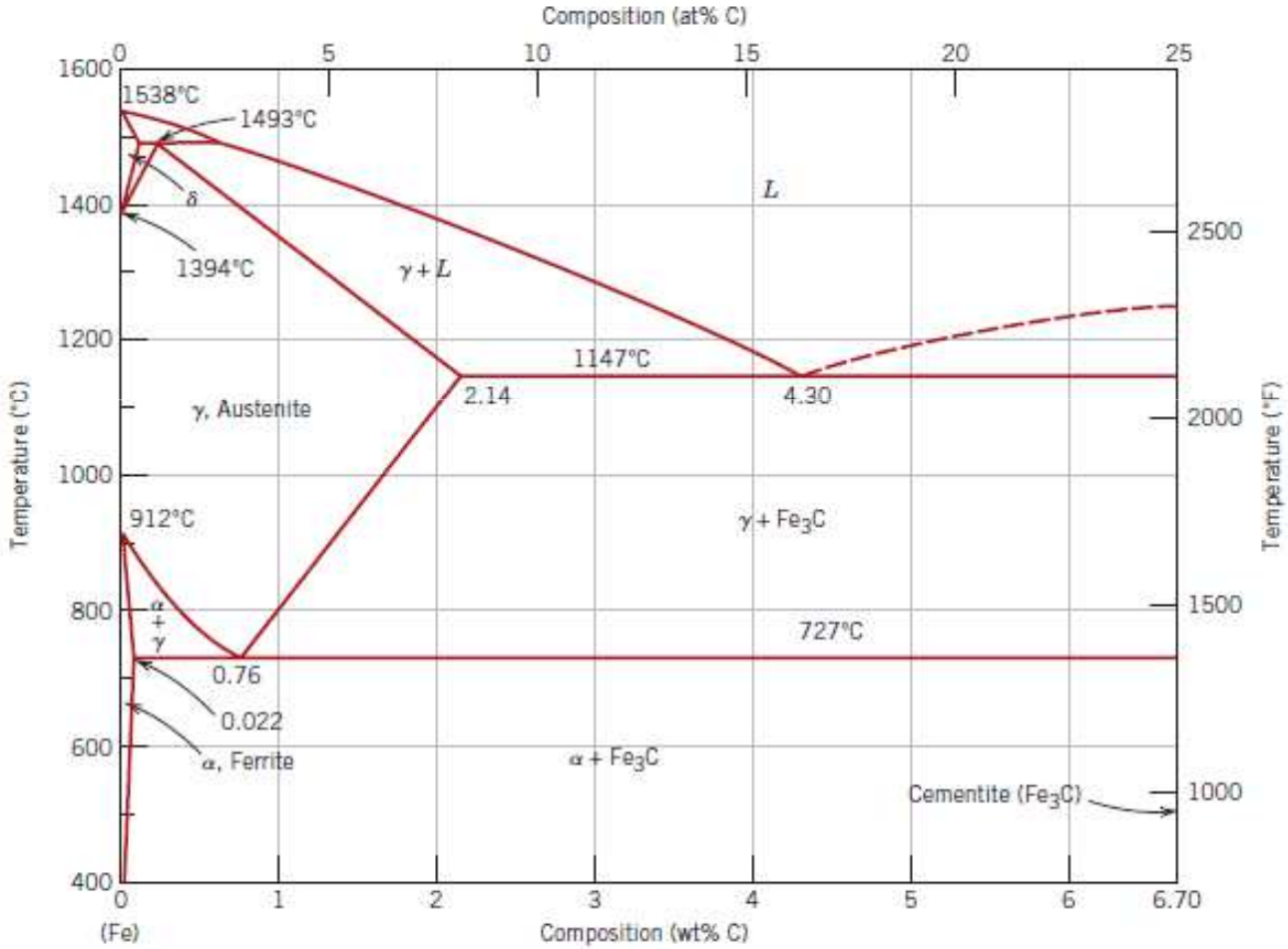
Diagramas Fe-Fe_3C



Ferro

- T < 912 °C -- cúbica de corpo centrado (CCC)
- 912 < T < 1394 °C -- cúbica de faces centradas (CFC)
- 1394 < T < 1538 °C -- cúbica de corpo centrado (CCC)
- T > 1538 °C -- líquido

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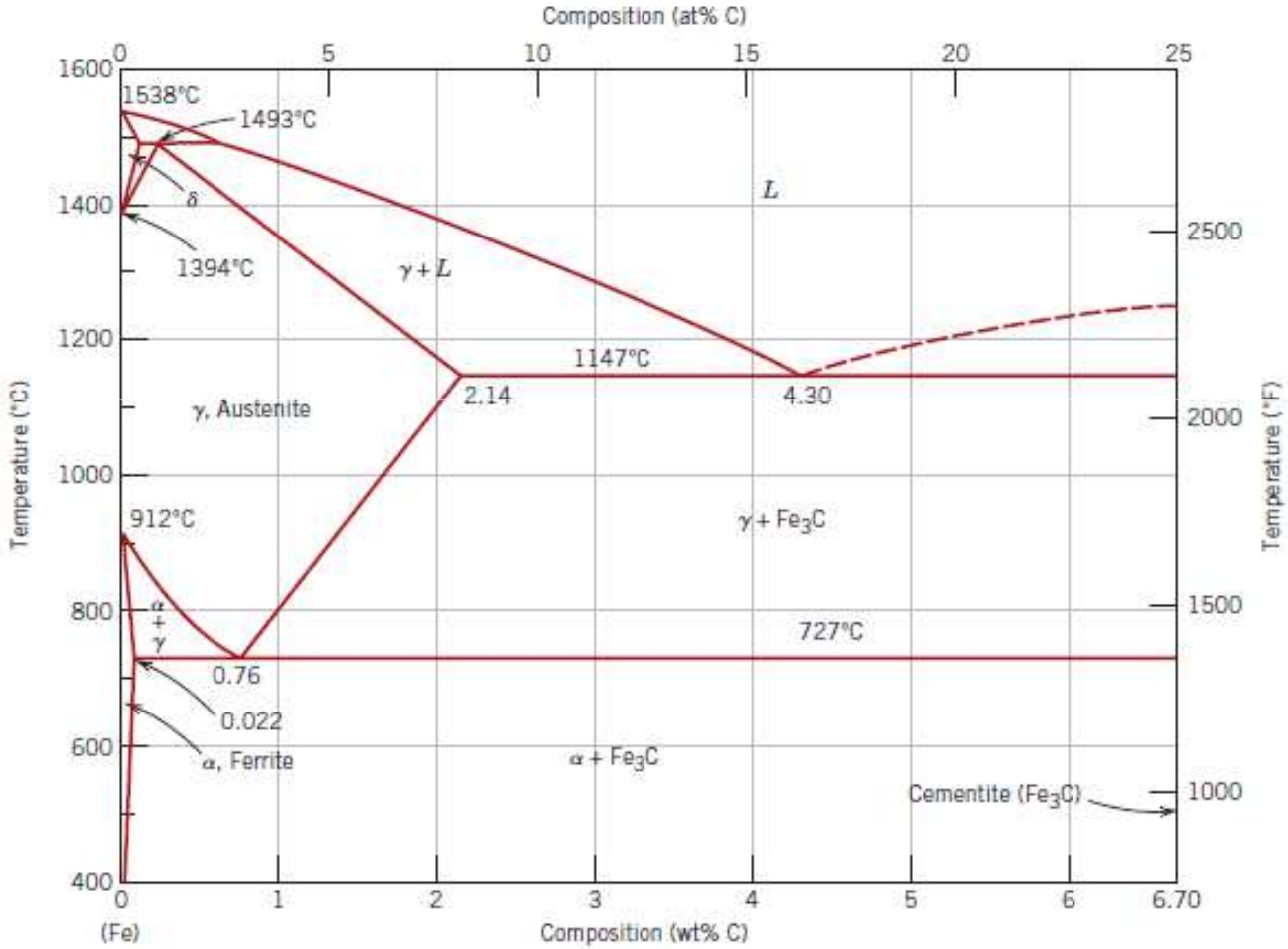
Diagramas Fe-Fe_3C



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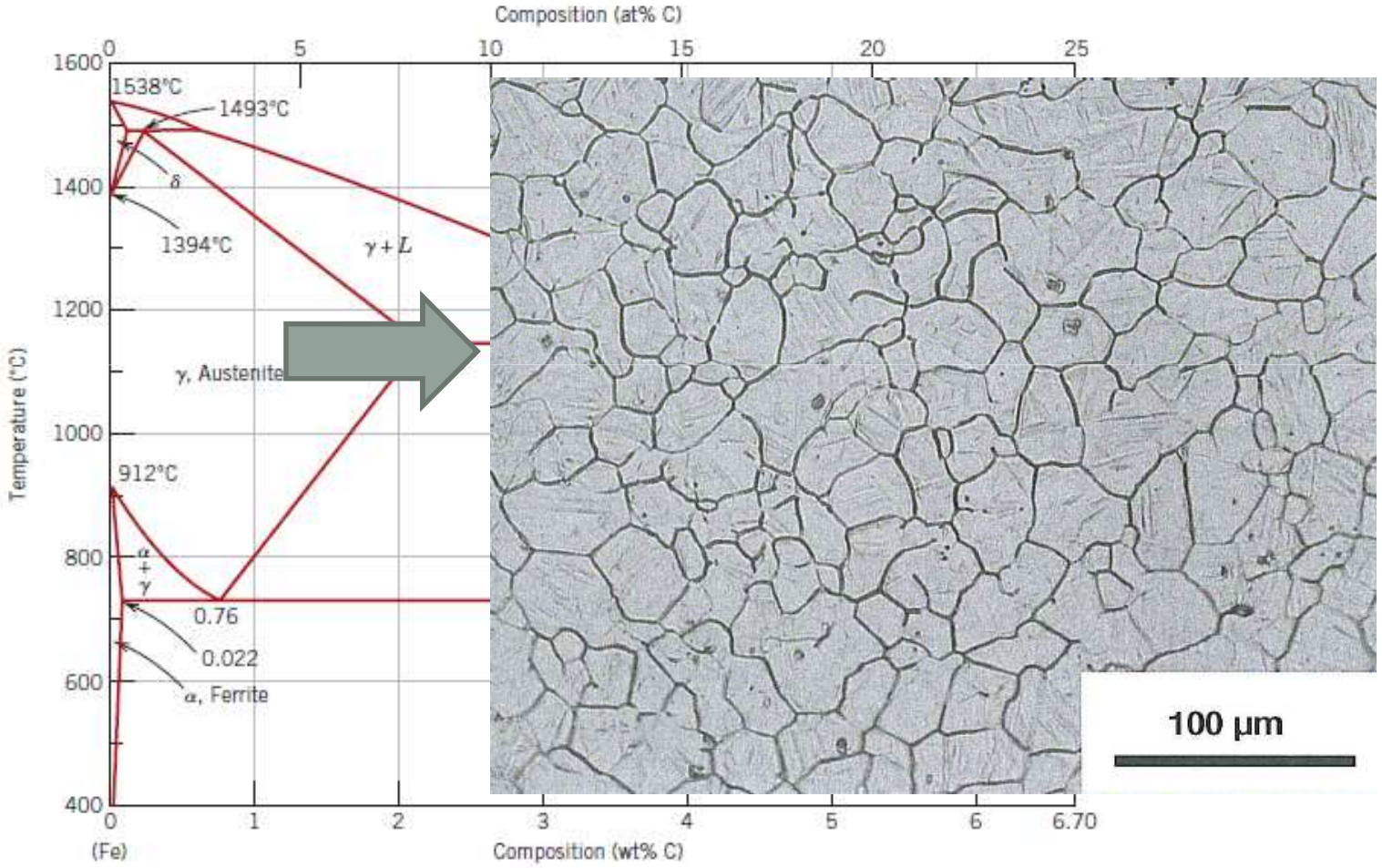
austenita γ



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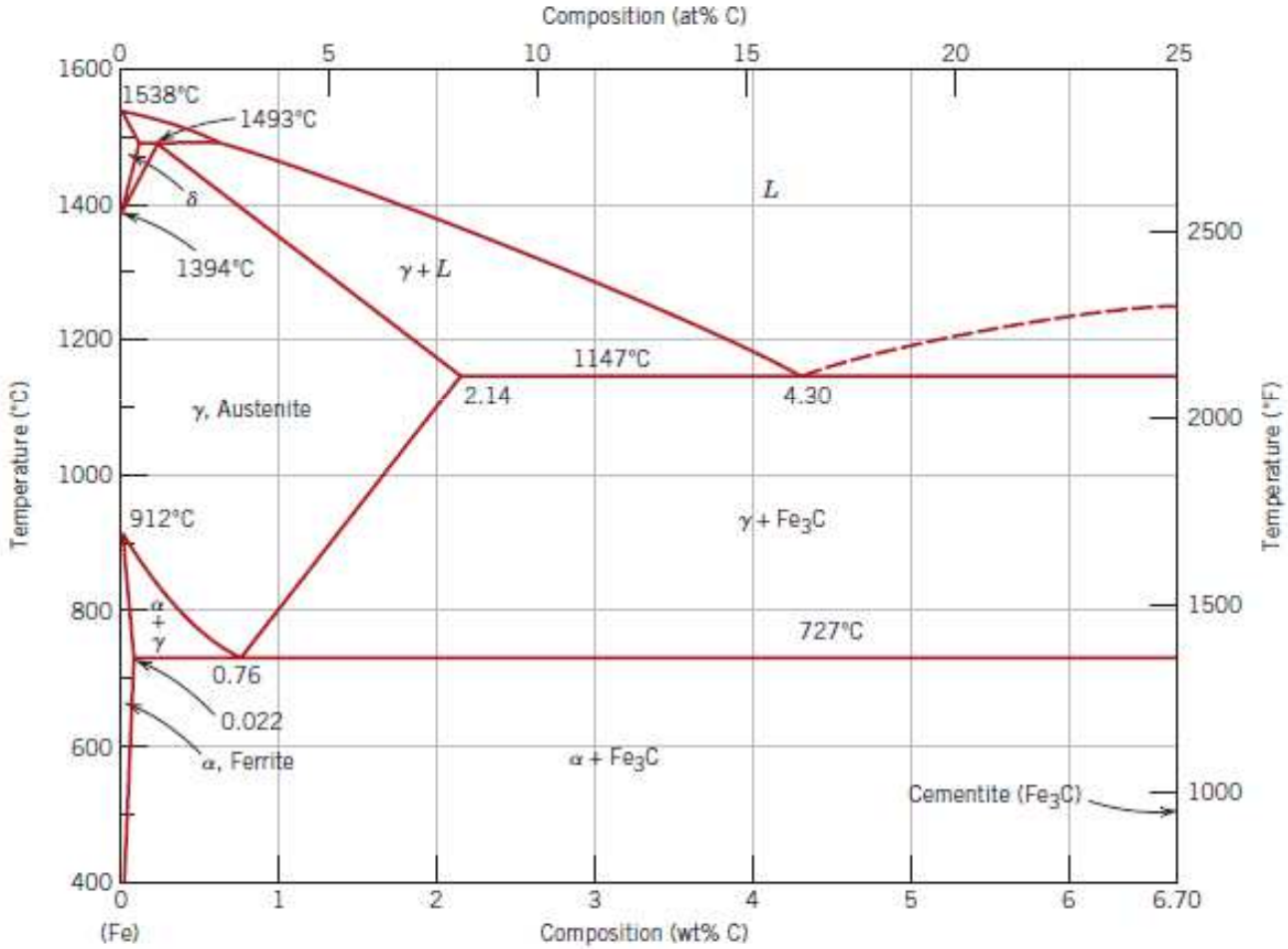
Diagramas Fe-Fe_3C



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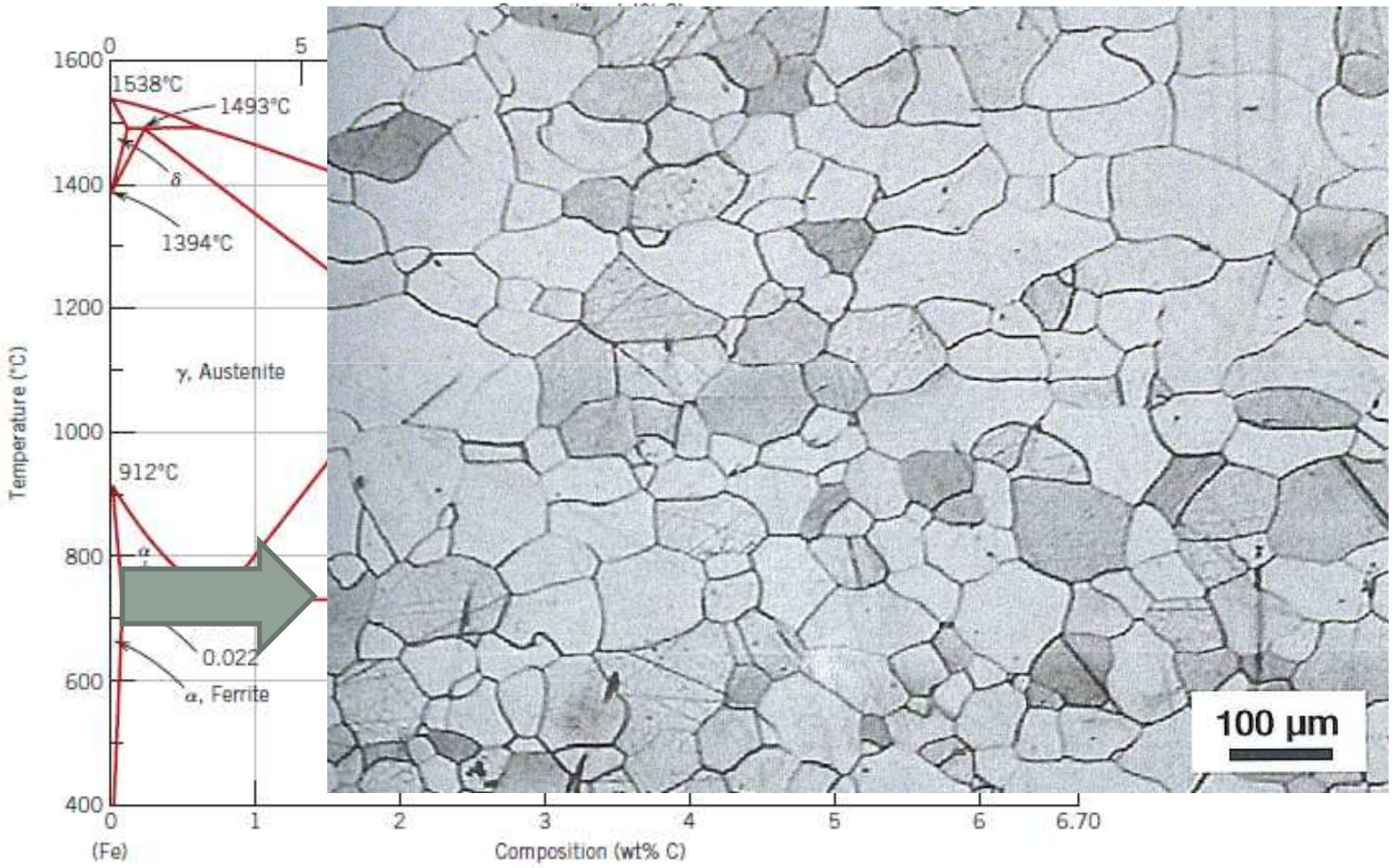
ferrita α



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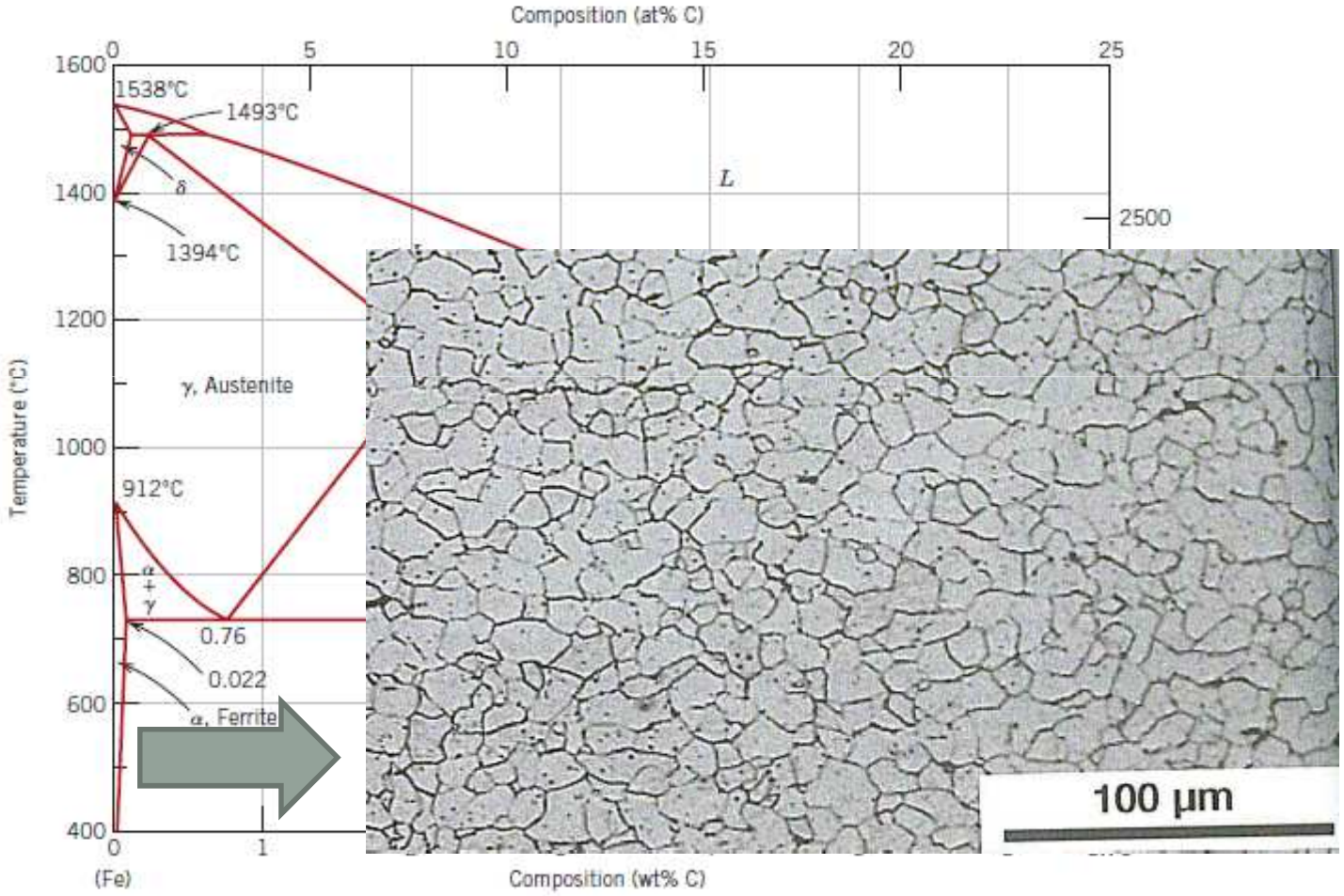
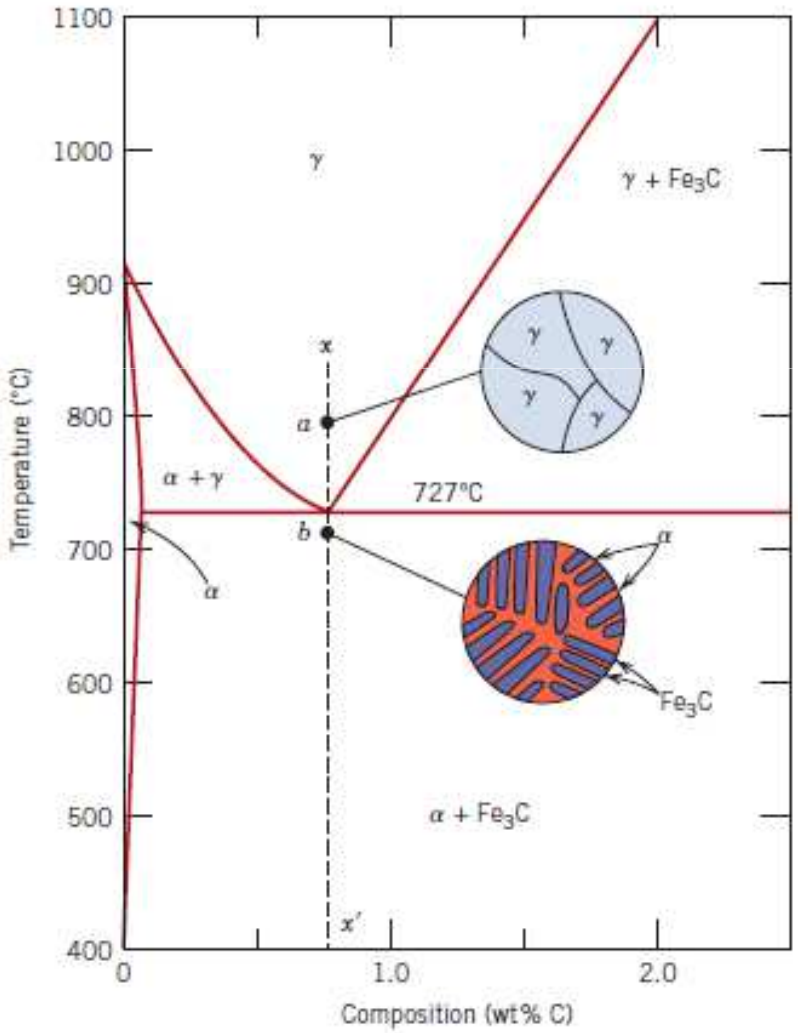
ferrita α + cementita (Fe_3C)





Aço eutetóide
%C = 0,76

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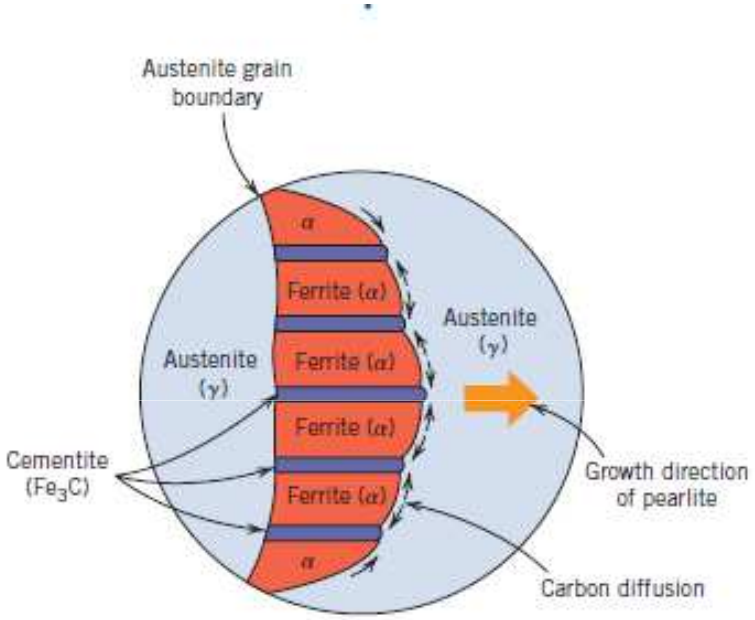
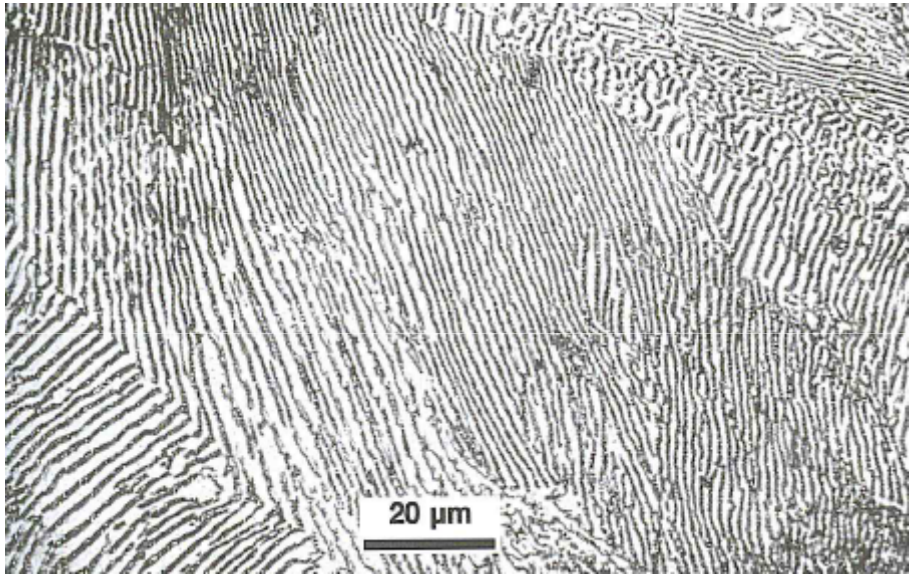
Perlita



α + Fe_3C com forma lamelar

Perlita



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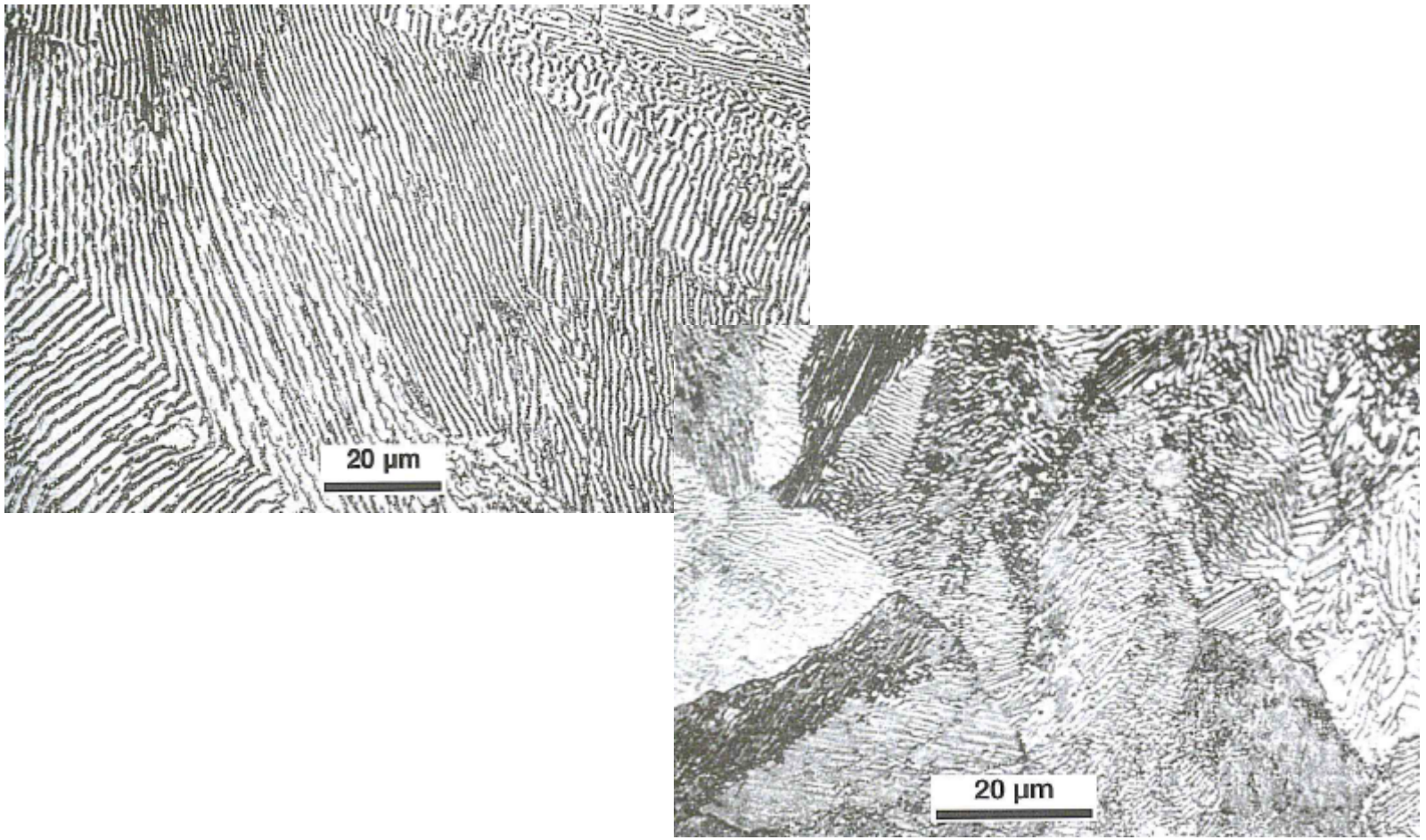
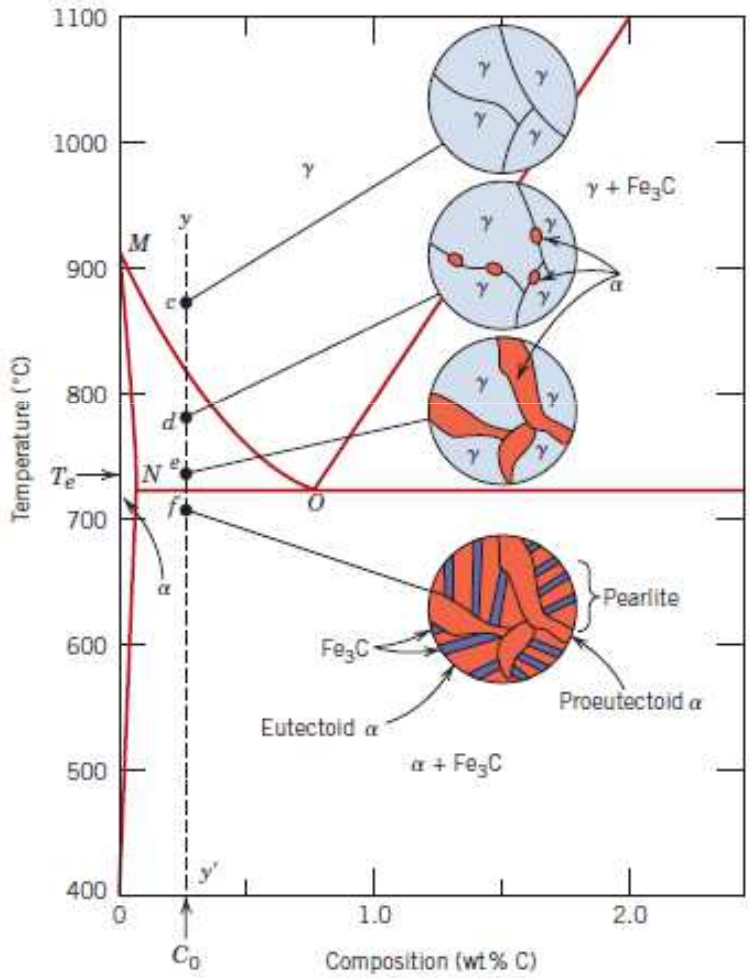
Perlita





Aço hipoeutetóide

%C < 0,76

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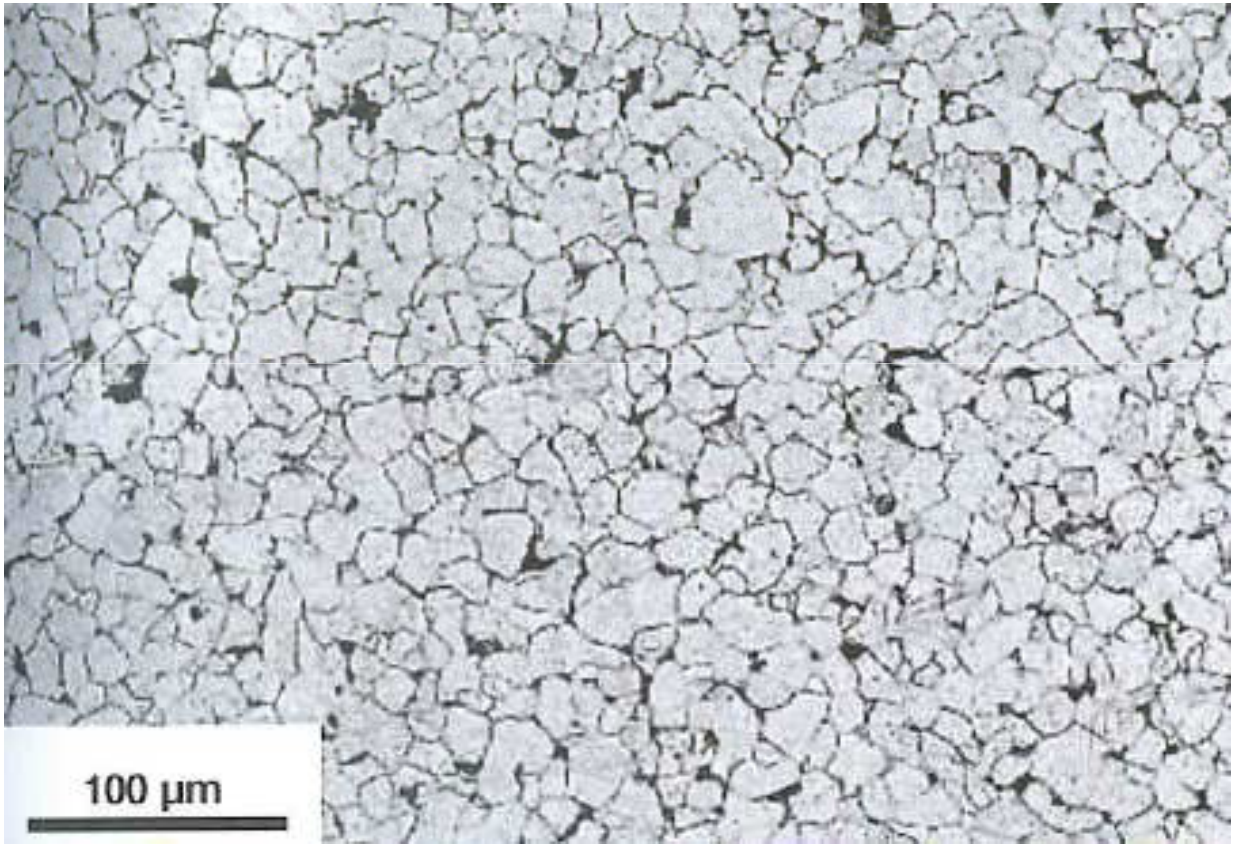
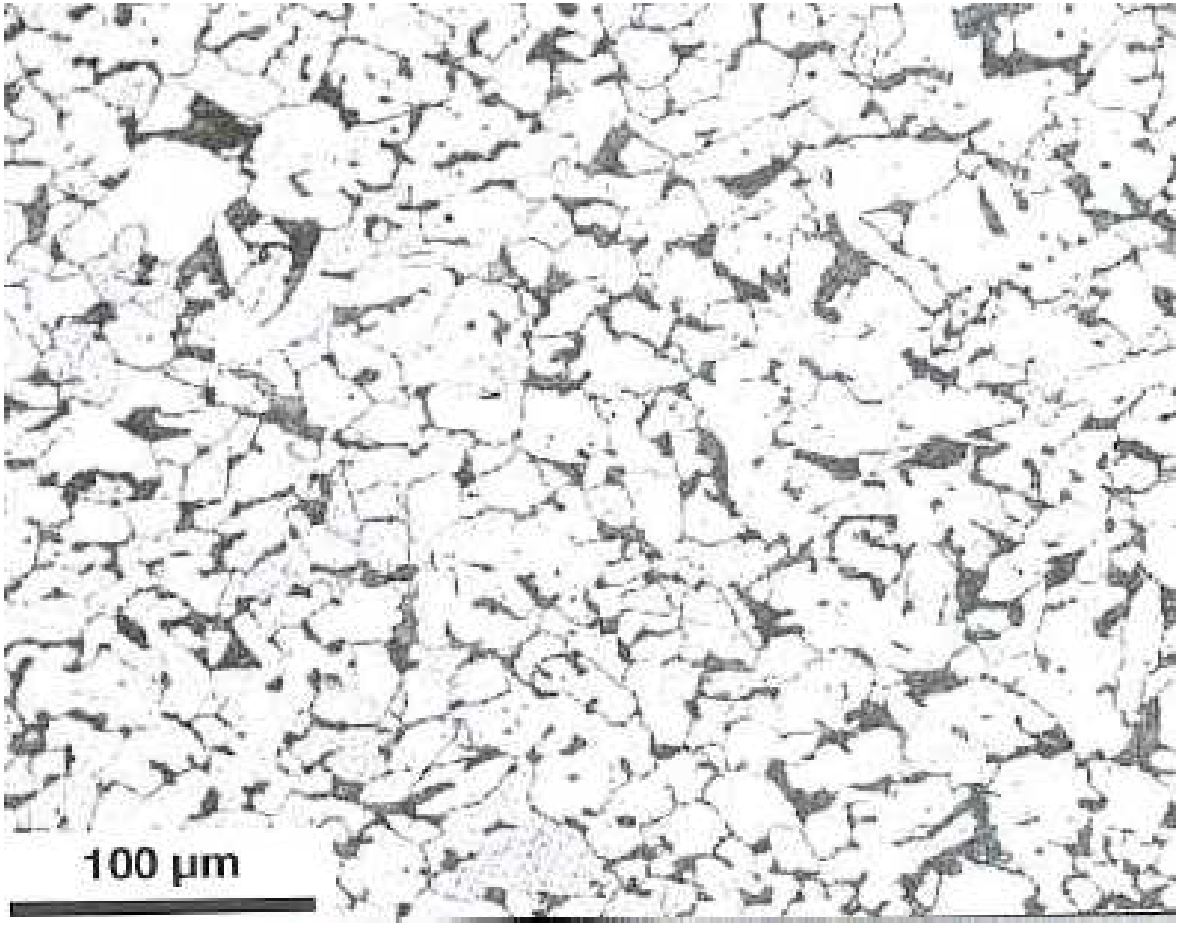
SAE 1006 – ferrita + perlita



SAE 1010 – ferrita + perlita



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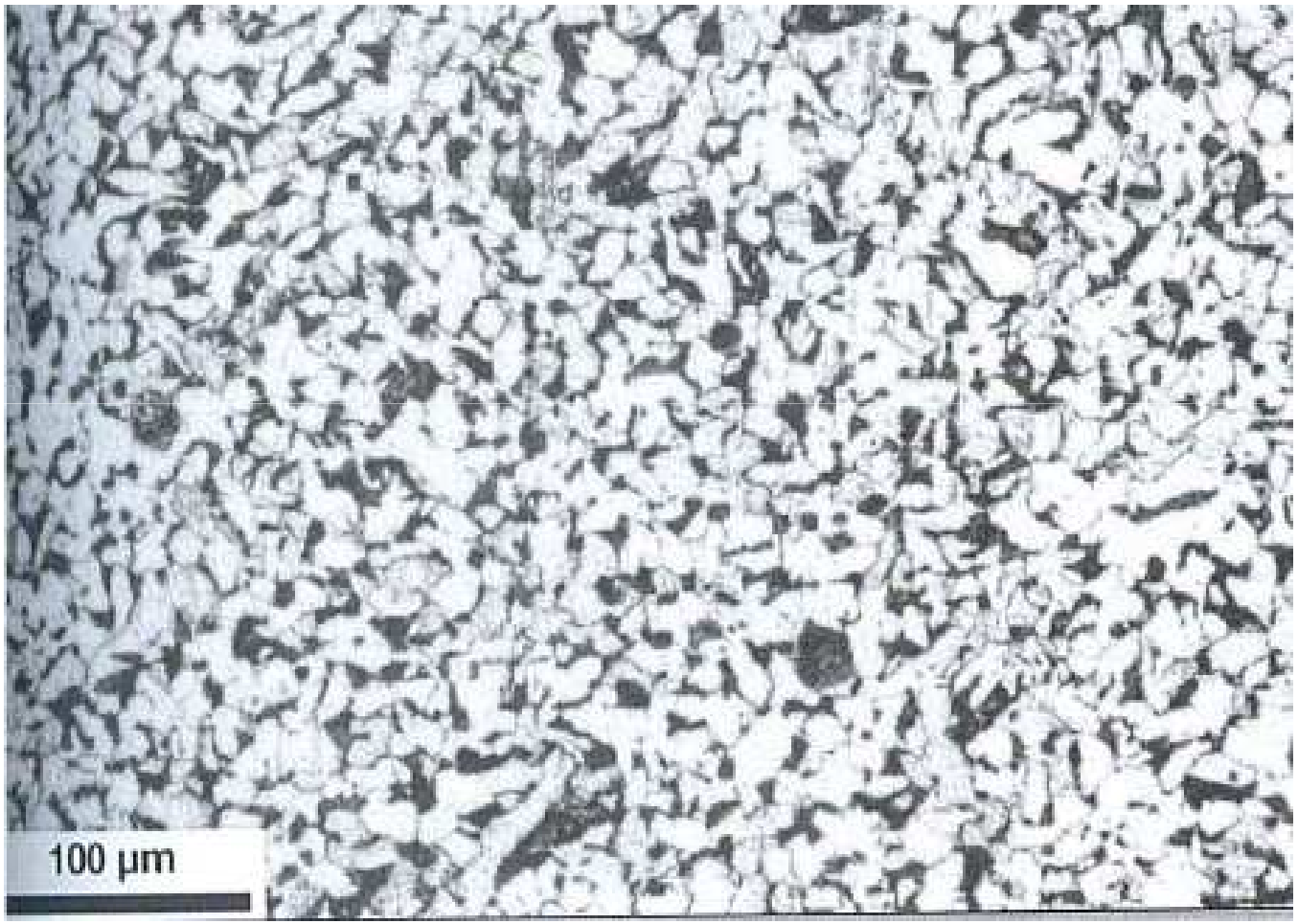
SAE 1015 – ferrita + perlita



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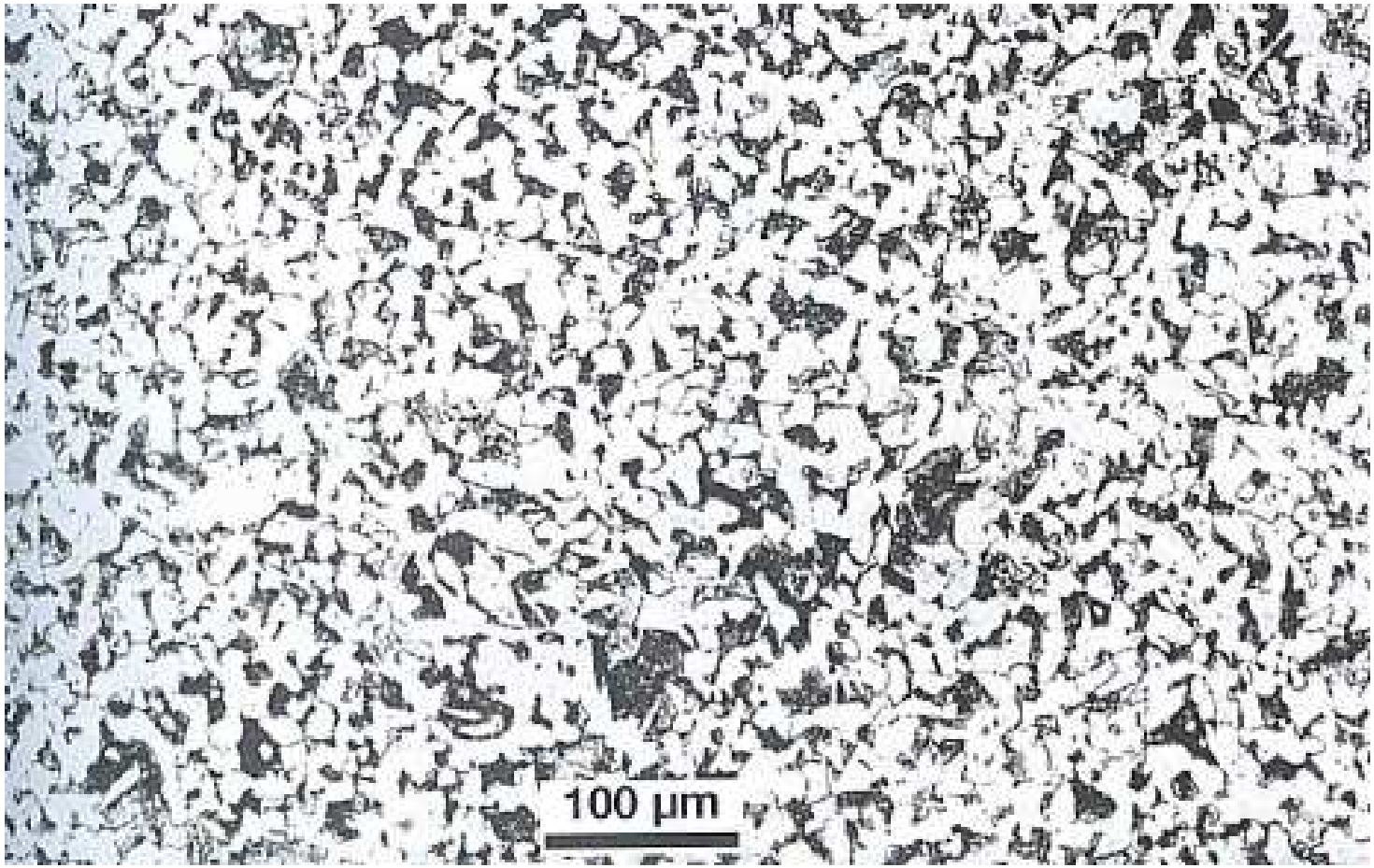
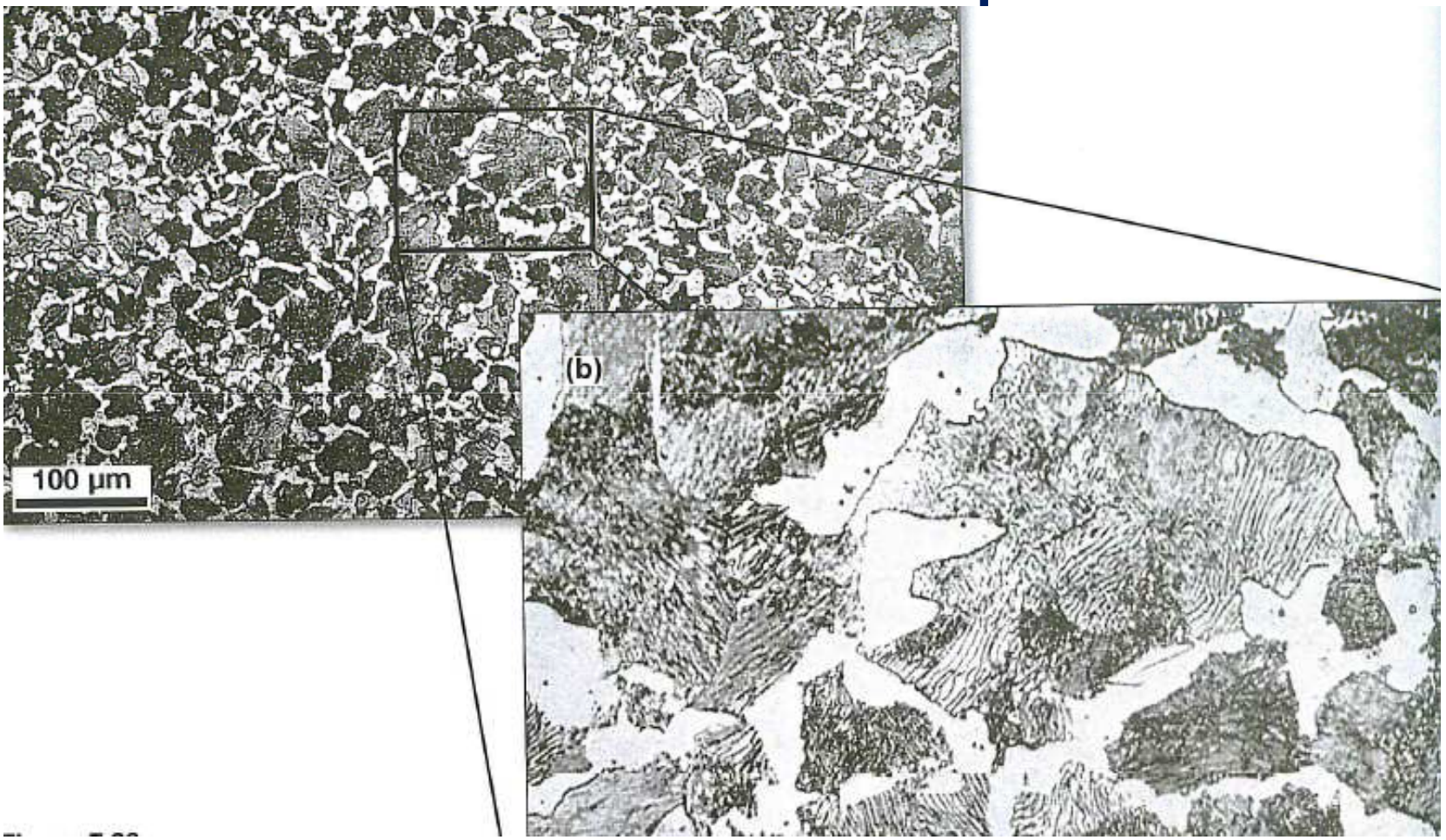
SAE 1030 – ferrita + perlita



SAE 1050 – ferrita + perlita



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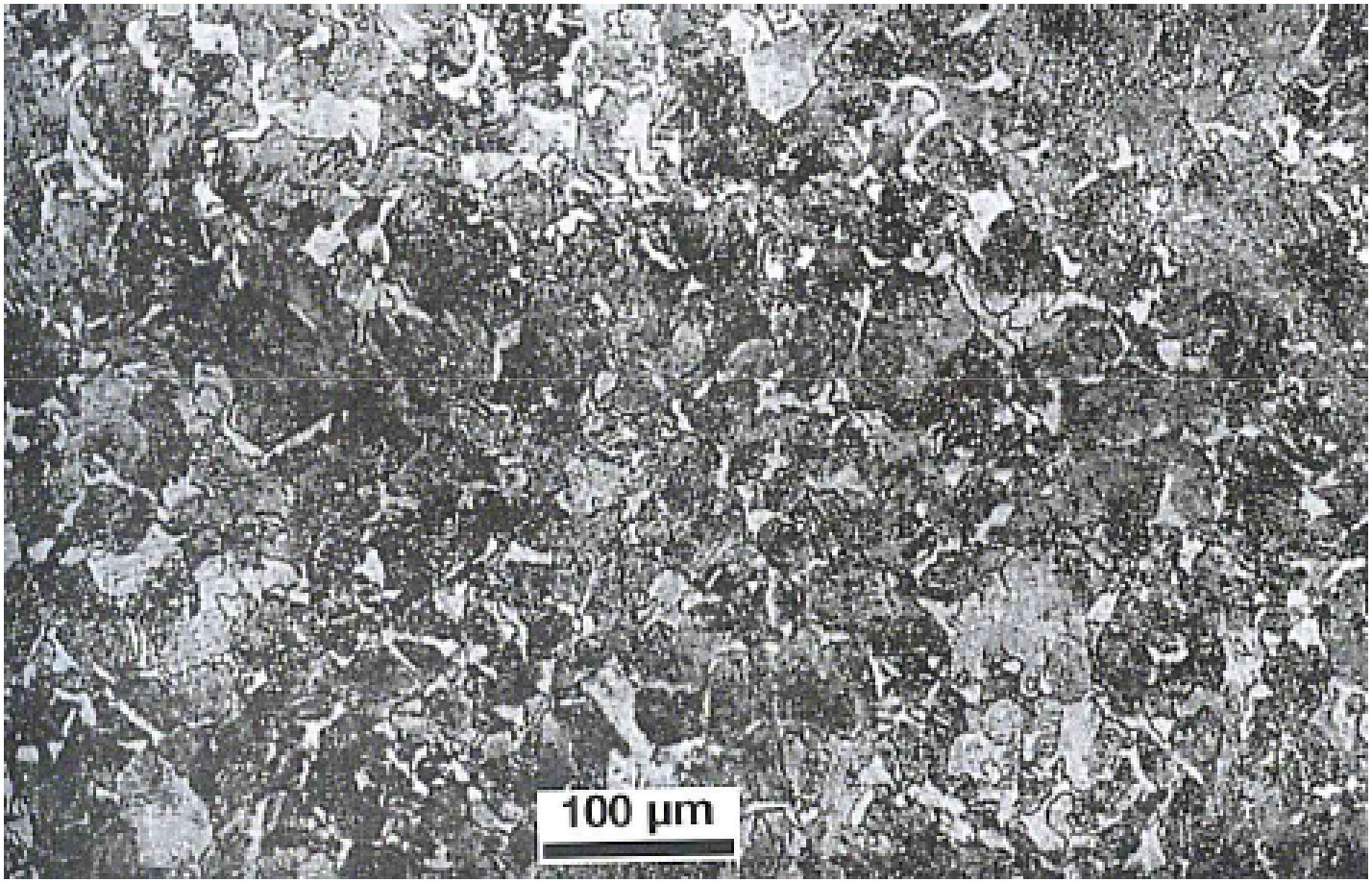
SAE 1070 – ferrita + perlita



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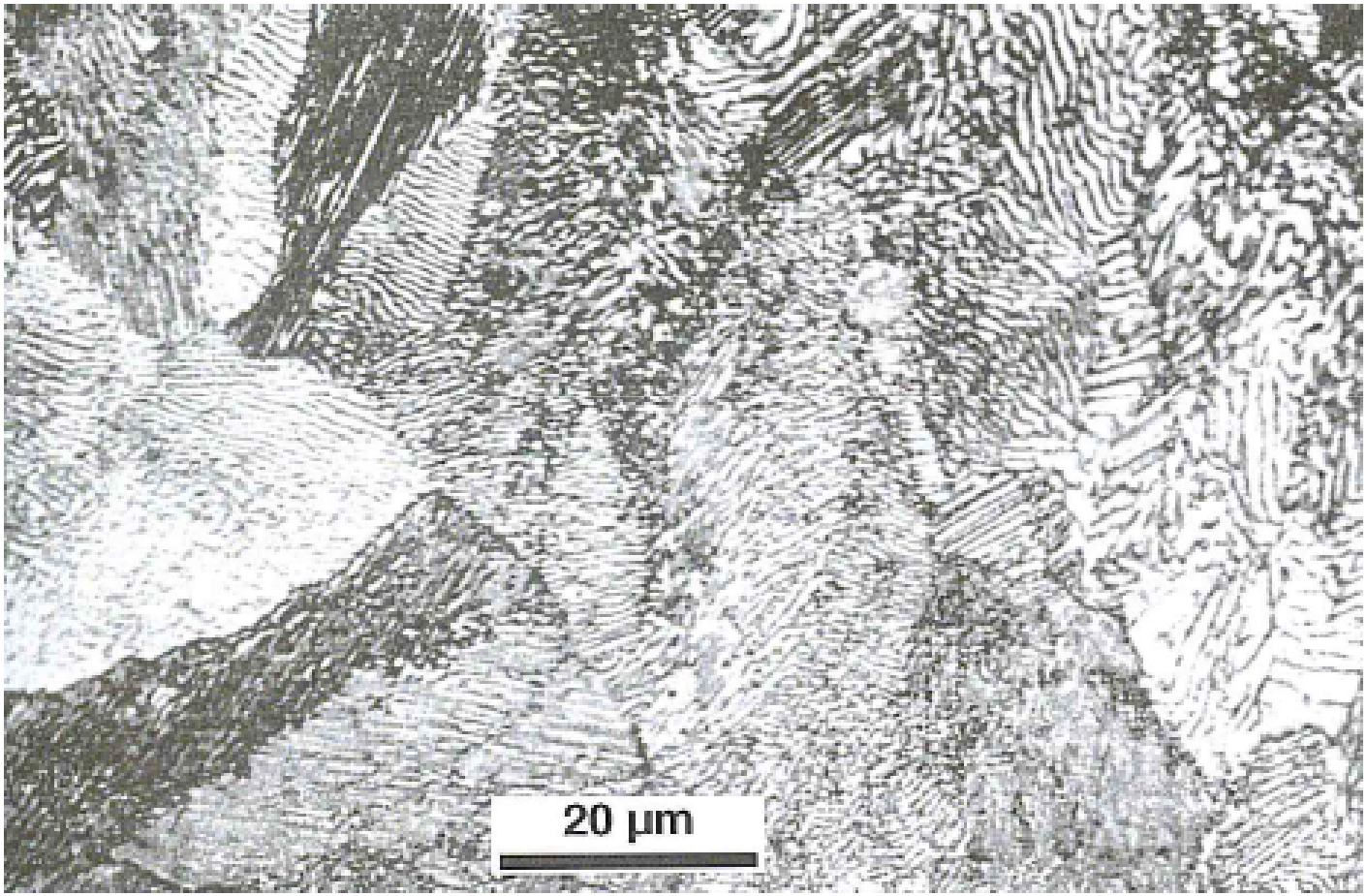
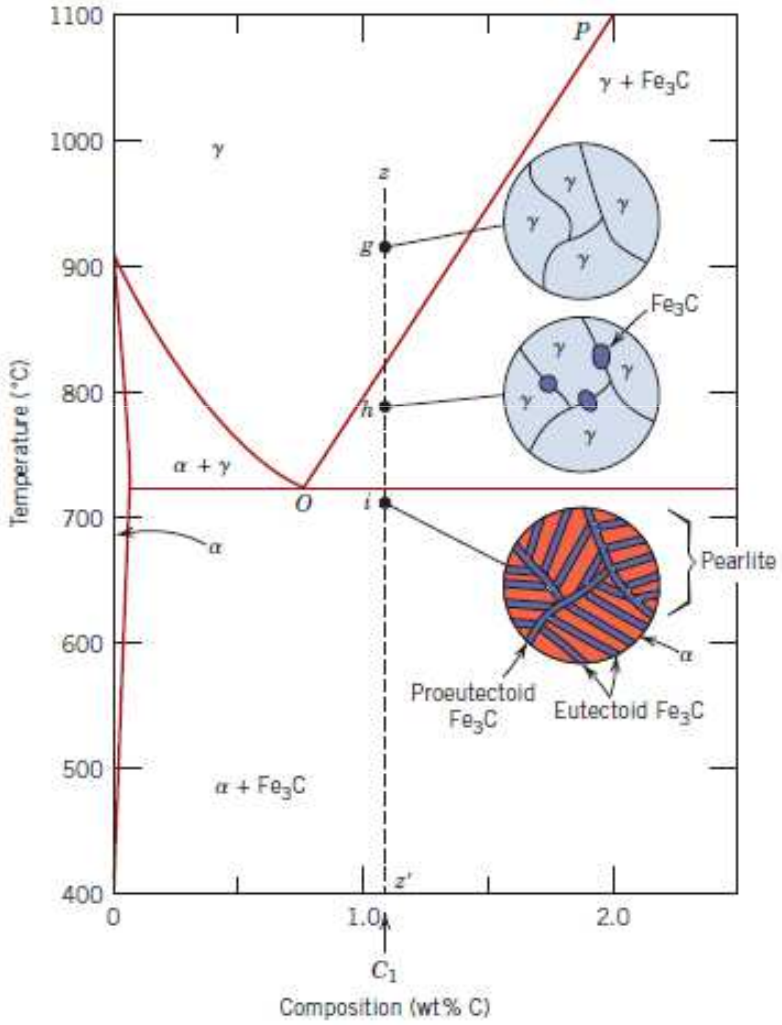
SAE 1076 – perlita





Aço hipereutetóide

%C > 0,76

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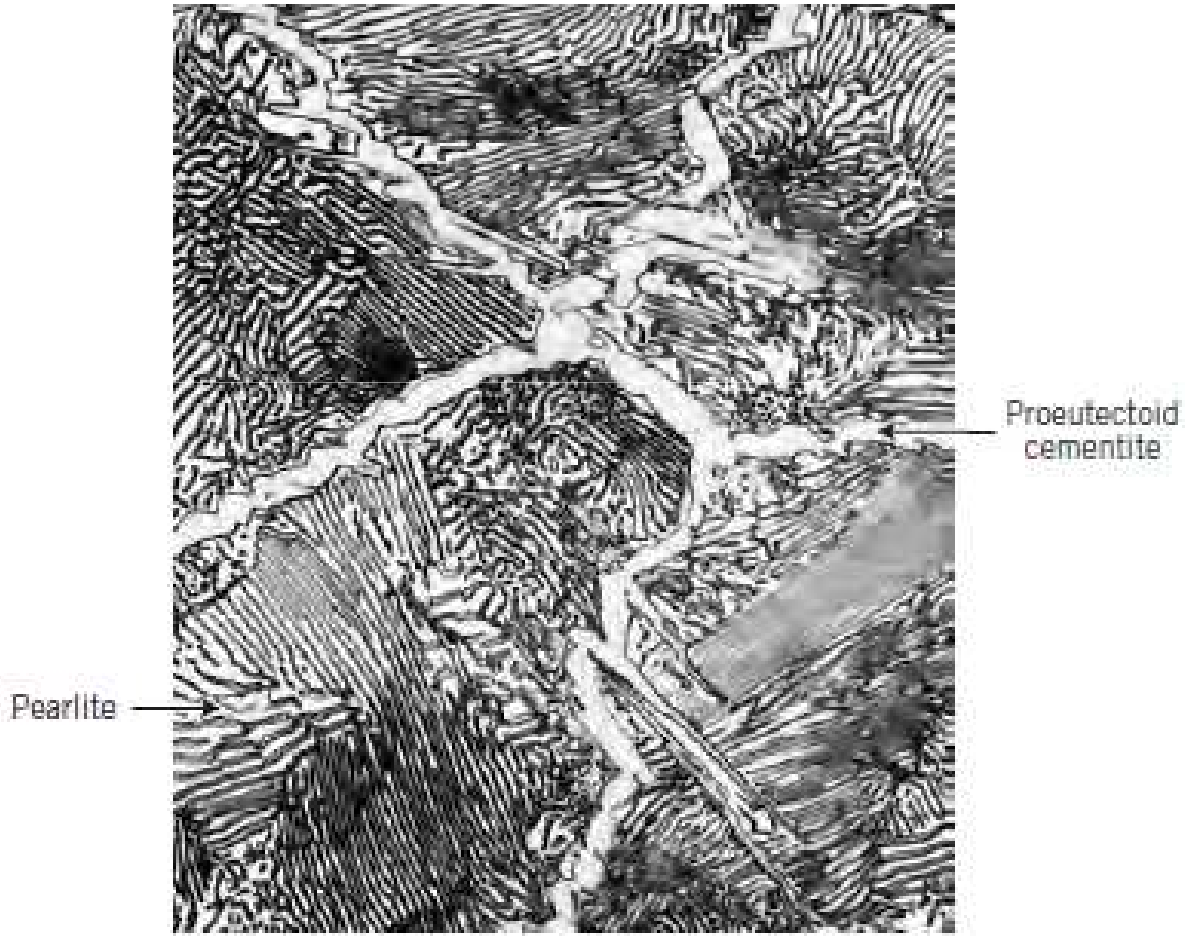
Fe3C + perlita



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Fe3C + perlita