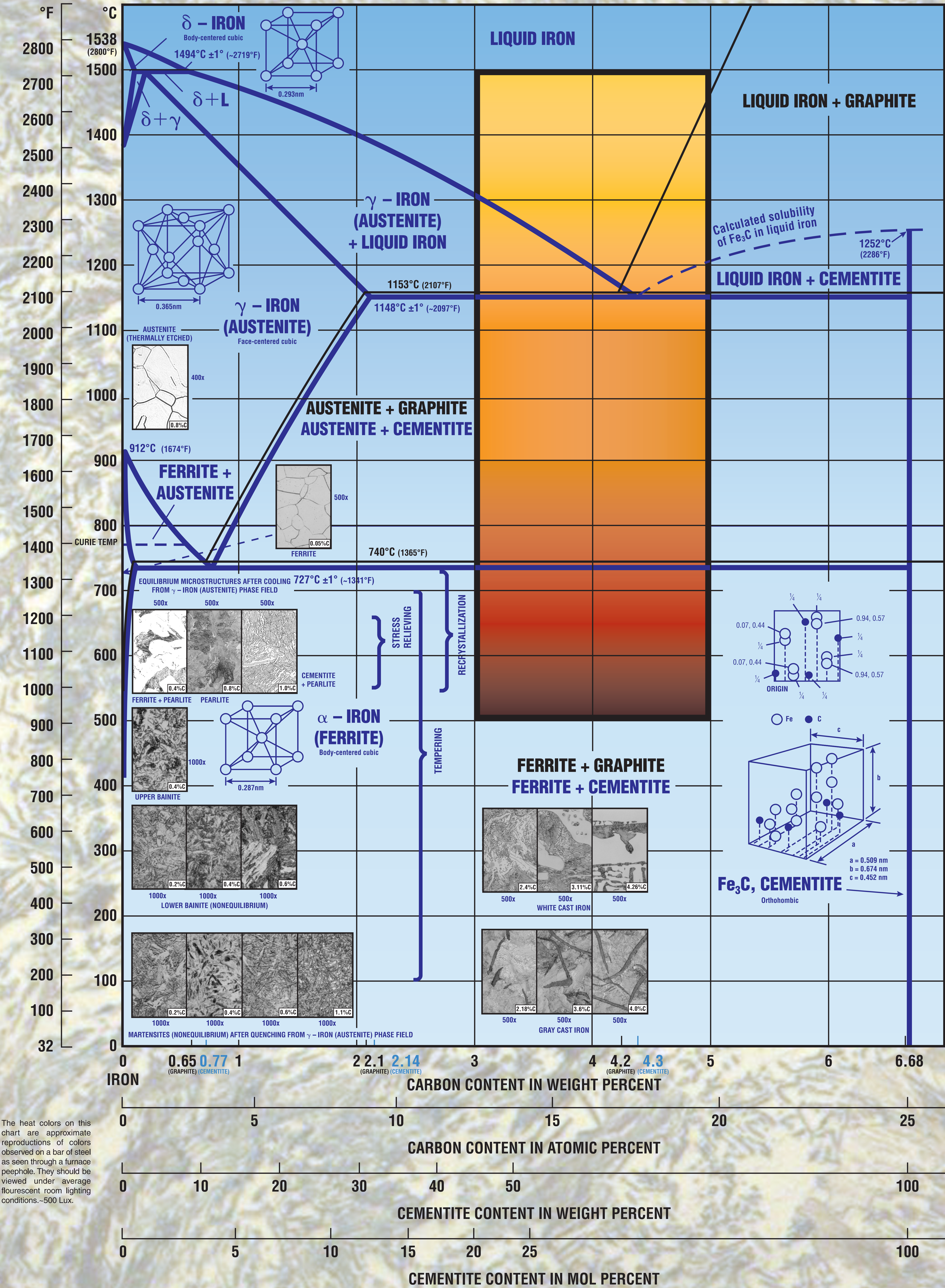


IRON-CARBON/CEMENTITE PHASE DIAGRAM



The heat colors on this chart are approximate reproductions of colors observed on a bar of steel as seen through a furnace peephole. They should be viewed under average fluorescent room lighting conditions. ~500 Lux.

Crystal Structures:
C. S. Barrett and W. B. Pearson: in Metals Handbook, Desk Edition, Sec. 2, American Society for Metals, 1985.
E. J. Fiasiska and G. A. Jeffrey: Acta Cryst., vol. 19, p. 463, 1965.
W. Plisch: Archiv Eisenhüttenwesen, vol. 29, p. 485, 1958.
W. Plisch: Archiv Eisenhüttenwesen, vol. 34, p. 641, 1963.
K. W. Andrews: Acta Metall., vol. 11, p. 939, 1963.

Phase Diagram:
M. Hansen and K. Anderko: "Constitution of Binary Alloys," McGraw-Hill, New York, 2nd edition, 1958.
J. Chipman: Metallurgical Trans., vol. 3, p. 55, 1972.
J. Chipman: in Metals Handbook, 8th edition, vol. 8, p. 275, American Society for Metals, 1973.
E. Schürmann and R. Schmid: Archiv Eisenhüttenwesen, vol. 50, pp. 101 and 185, 1979.
O. Kubaschewski: Iron — Binary Phase Diagrams, Springer Verlag, 1982.

Microstructures:
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