Microstructural Characterization of Pyrolytic Carbon for Heart Valves

J.L. Kaae and D.R. Wall

General Atomics, P.O. Box 85608, San Diego, California 92186-9784, U.S.A.

ABSTRACT

Microstructural information for silicon-alloyed isotropic pyrolytic carbons of the type used in heart valves is obtained using x–ray diffraction, transmission electron microscopy, and scanning backscattered electron microscopy. This microstructural information is described here. Each technique supplies information that is not available from the others, and only with the use of all three techniques can a complete microstructural description be obtained.