

Interpretation of Microstructures

Basic terminology and features

Discussion and demonstration of terms used to describe microstructures, such as equiaxed, martensite, inclusion, crack

Carbon and Low Alloy Steel

Heat treatment and structures possible in steels

Relationship of microstructure to mechanical properties

Cast Iron

Tool Steels

Stainless Steels

Super Alloys

Titanium

Copper

Aluminum

Special expertise

Fasteners

Structures of fastener materials,

Manufacturing processes revealed through the microstructure

Imperfections

Failure Analysis

Failure modes, such as creep, corrosion in various materials

Meteorites

This training course can be customized to your needs and offered at your facility if you have a metallographic laboratory. Alternatively, the course may be offered at a laboratory in West Los Angeles

The course consists of lectures followed by hands-on applications of the discussed topics. Each lecture is illustrated with slides and actual samples.