



HEAT TREATING - OPERATOR

ABOUT THE COURSE

The two-day Heat Treating - Operator course provides the Process Operators with the information necessary to improve their skills and competencies in the aerospace workforce. After an introduction on Heat Treating, the Instructor covers:

Transformations during heating, cooling and/or quenching, including heating rate & heating temperature versus final microstructures & properties as well as TTT and CTT diagrams.

Metal properties during heat treating operations, such as Ferrous Alloys used in aerospace, Non-Ferrous Alloys used in aerospace (aluminum alloys, titanium alloys, nickel-cobalt alloys, super-alloys, magnesium and be-cu alloys), and Corrosion Resistant Steels.

Special process applications, with Brazing, Coatings, Diffusion Coatings, Carburizing & Nitriding, Heat Treatments, Final Heat Treatments, and Quenching.

Equipment capability to perform high quality heat treatment, which includes daily verification, preventive maintenance, load preparation, furnace loading, cleaning and cleanliness, spacing of parts, and loading hot versus loading cold.

Thermocouples, through definitions and interpretation, working with thermocouples, control thermocouples, recording thermocouples, load thermocouples, positioning of load thermocouples within the load.



"FILLED IN LOTS OF GAPS IN MY KNOWLEDGE OF HEAT TREATING."

Course Objectives

- Improve the general heat treat operator work performance, process efficiency and final product quality
- Provide basic knowledge of metallurgical aspects at heat treat, coating and brazing of metallic materials
- Facilitate the understanding of thermal processes and their effects on the final product properties

Process Owner

Process Operators understand and perform the basic hands-on operations of the special process.

Next Steps

- Go to www.PRI-Training.com
- Email PRI-Training@p-r-i.org
- Call +1 724 772 8645 (Americas), +44 870 350 5011 (Europe) or +86 10 6461 9807 (Asia)