

# LEADER'S GUIDE FOR DVD-20/21C

## *Reflow Soldering*

*Reflow Soldering* (DVD-20/21C) has been developed to provide a comprehensive examination of the reflow soldering operation. The following is a description of this IPC Training Certification program.

The program is divided into two parts. Part 1 provides an introduction to reflow soldering and discusses the importance of the thermal profile. Part 2 describes solder paste and flux, then offers details of the different systems of applying heat – including vapor phase, infrared radiation and forced convection.

All of the training and testing materials for this program are available for download over the Internet at: <http://training.ipc.org/dvd/20-21c/>  
The URL for these download materials is also printed on the face label of the DVD.

These training support materials include a twenty-question *examination* and a printable certificate for students that score 70% or better on the final test.

### **How to Use this Program**

Below are our recommendations for how best to use the DVD and training materials to help insure that your students will pass the exam.

### **Review**

The sections of this video are separated by about two seconds of black. After you *play* each section of the DVD, you may want to stop the video and ask if there are any questions. It's also a good idea to clarify and reinforce any information or specific requirements that are important to you.

### **Test and Certificates**

After you complete the DVD, you can give the students the IPC *Training Certification Test* containing twenty multiple-choice questions. You may print as many copies of the *test* as necessary. Directions regarding how to take the test, mark answers, change answers, etc. are all provided on the first page of the test. Please review these directions with your students.

An *Answer Key* is also provided for grading the *test*. After you grade the tests, you may wish to return them to each student so they can review any incorrect answers.

A *color* version of an IPC *Training Certificate* is included on the DVD-20/21C download page. This .PDF certificate allows you to type in the names of all the students that pass the test - and print out individual color certificates. *Training Certificates* can be provided to students who obtain a passing grade of 70% (**14 correct answers**) or better on the final test.

### **CEUs**

In order to assign *continuing education units* to each student... measure the total training time in reviewing DVD-20/21C, group discussion and testing. Each one-hour increment of training translates into 0.1 CEU. Therefore, if you spend 2 hours in classroom training and evaluation, each student would earn 0.2 CEU. You may need to provide written documentation for student CEU records.

Thank you for purchasing this IPC training program.

Joel Kimmel  
DVD-20/21C Producer