

ThermoFlex Narrow Hybrid Series 300

Internal Self-Study Guide
English

742-00118A-EN

Copyright

© Kodak, 2008 All rights reserved.

This document is also distributed in Adobe Systems Incorporated's PDF (Portable Document Format). You may reproduce the document from the PDF file for internal use. Copies produced from the PDF file must be reproduced in whole.

Trademarks

Kodak, Creo and Kodak ThermoFlex® Narrow Hybrid platesetter are trademarks of Kodak.

Adobe, Acrobat, Adobe Illustrator, Distiller, Photoshop, PostScript, and PageMaker are trademarks of Adobe Systems Incorporated.

Apple, AppleShare, AppleTalk, iMac, ImageWriter, LaserWriter, Mac OS, Power Macintosh, and TrueType are registered trademarks of Apple Computer, Inc. Macintosh is a trademark of Apple Computer, Inc., registered in the U.S.A. and other countries.

PANTONE, Hexachrome, PANTONE Hexachrome, and PANTONE MATCHING SYSTEM are the property of Pantone, Inc.

PEARL, PEARLdry, PEARLgold, PEARLhdp, and PEARLsetter are registered trademarks of Presstek, Inc.

XEROX is a trademark of XEROX CORPORATION.

FCC Compliance

Any Kodak equipment referred to in this document complies with the requirements in part 15 of the FCC Rules for a Class A digital device. Operation of the Kodak equipment in a residential area may cause unacceptable interference to radio and TV reception, requiring the operator to take whatever steps are necessary to correct the interference.

Equipment Recycling



In the European Union, this symbol indicates that when the last user wishes to discard this product, it must be sent to appropriate facilities for recovery and recycling.

Contact your local Kodak representative or refer to http://www.kodak.com/go/recycle for additional information on the collection and recovery programs available for this product.

Limitation of Liability

The product, software or services are being provided on an “as is” and “as available” basis. Except as may be stated specifically in your contract, Kodak expressly disclaims all warranties of any kind, whether express or implied, including, but not limited to, any implied warranties of merchantability, fitness for a particular purpose and non-infringement.

You understand and agree that, except as may be stated specifically in your contract, Kodak shall not be liable for any direct, indirect, incidental, special, consequential or exemplary damages, including but not limited to, damages for loss of profits, goodwill, use, data or other intangible losses (even if Kodak has been advised of the possibility of such damages), resulting from: (i) the use or the inability to use the product or software; (ii) the cost of procurement of substitute goods and services resulting from any products, goods, data, software, information or services purchased; (iii) unauthorized access to or alteration of your products, software or data; (iv) statements or conduct of any third party; (v) any other matter relating to the product, software, or services.

The text and drawings herein are for illustration and reference only. The specifications on which they are based are subject to change. Kodak may, at any time and without notice, make changes to this document. Kodak assumes no liability for technical or editorial errors or omissions made herein, and shall not be liable for incidental, consequential, indirect, or special damages, including, without limitation, loss of use, loss or alteration of data, delays, or lost profits or savings arising from the use of this document.

http://graphics.kodak.com/

Internal 742-00118A-EN

July 1, 2008 9:40 am

Contents

Course Description v

Using This Guide vi

Steps to Success vi
Guide Structure vii

Course Overview 1

Introduction 1
Course Outcomes 1

Module 1: The Differences Between ThermoFlex Narrow Hybrid Series 300 Devices and Earlier Version Devices 3

Lessons in This Module 3

Lesson 1: Identify the General Characteristics of the Series 300 Devices 4
Overview 4
Naming Conventions 5

Lesson 2: Identify the Changes in the ThermoFlex Narrow Hybrid Series 300 Device 6
Site Preparation and Installation 6
Device Colors 7
On/Off Switch 8
Harnesses 8
E-Box 9
D-Box Components 9
Balance System 11
Controller Software 11
Power Failure Protector Board 12
Safety Interlocks 12
Offset Upgrade Procedure 14
Support Kit 14

Self-Assessment #1: The Differences Between ThermoFlex Narrow Hybrid Series 300 Devices and Earlier Version Devices 15

Evaluation of Internal Self-Study Course 17

Course Description

Course description	Internal course aimed at Kodak personnel who will be installing and supporting the ThermoFlex Narrow Hybrid Devices
Duration	2 hours
Target audience	The following Kodak personnel can benefit from attending this course: • Packaging CTP Product Support Managers from Customer Solution Centers all over the world (CSC PSM) • Packaging CTP Product Support Specialists from Customer Solution Centers all over the world (CSC PSS) • Field Service Engineers and Field Specialists • Application Engineers & Specialists • Packaging CTP Production team leaders and PD workers • Packaging CTP Trainers
Learner Prerequisites	Thermoflex Hybrid internal course (8 days classroom course)

Using This Guide

Steps to Success

A Path to Follow

- Allow yourself approximately 2 hours to complete the course.
- Find a quiet place to study the material.
- Notify your colleagues that you are working through the self-study guide. Arrange your schedule so that you will be able to complete all the components of the course, either all at once or in blocks of time.
- Read the self-study guide.
- Perform the hands-on activities.

Need Help With Content?

If you need help, consult the documentation materials or contact a service representative.

You can contact service representatives at the following locations:

Canada	1-800-472-2727
America	1-800-800-2500
Europe	+32-2-352-3090
Asia Pacific	+852-2839-8800
Japan	+81-3-3531-2201
Australia	+612-9879-4744
Internet Address:	http://graphics.kodak.com/

Guide Structure

This guide is divided into modules, each of which includes the following components:

- Introduction
- Lessons
- Learner self-assessment form

Each lesson includes the following components:

- How This Lesson Will Help You
- Topics in This Lesson

Course Overview

Introduction

The aim of this course is to update the service people who are already familiar with ThermoFlex Narrow Hybrid with all the changes that were made in the series 300 devices. (series 300 refers to all ThermoFlex Narrow Hybrid devices from serial number FN300 and up).

This course consists of 1 module and lasts 2 hours.

Course Outcomes

1. Identify the differences between the ThermoFlex Narrow Hybrid devices and the ThermoFlex Narrow Hybrid S300 devices
2. Install the ThermoFlex Narrow Hybrid S300 device
3. Service the ThermoFlex Narrow Hybrid S300 device
4. Troubleshoot and support the ThermoFlex Narrow Hybrid S300 device
5. Instruct the customer/user how to maintain the ThermoFlex Narrow Hybrid S300 device

MODULE 1

The Differences Between ThermoFlex Narrow Hybrid Series 300 Devices and Earlier Version Devices

How This Module Will Help You

You will learn about the ThermoFlex Narrow Hybrid Series 300 devices and how they are different from the earlier version devices.

Lessons in This Module

Lesson 1: Identify the General Characteristics of the Series 300 Devices

Lesson 2: Identify the Changes in the ThermoFlex Narrow Hybrid Series 300 Device

Lesson 1 Identify the General Characteristics of the Series 300 Devices

How This Lesson Will Help You

This lesson gives a general overview of the ThermoFlex Narrow Hybrid S300 device.

Topics in This Lesson

- Overview
- Naming Conventions

Overview

Several changes were made in the ThermoFlex Narrow hybrid series 300 devices. They now meet the North America CSA UL certification requirements.



Changes were made in the following areas:

Machine Hardware

- Device Colors
- On/Off Switch
- Harnesses
- E-Box

- D-Box
- Balance System
- Controller Software
- Power Failure Protector Board
- Safety Interlocks

Procedures

- Site Preparation and Installation
- Offset Upgrade Procedure

Additional Items

- Safety instructions and labels
- Support kit
- Spare parts list

Naming Conventions

This guide uses the following naming conventions:

- Narrow Hybrid - all ThermoFlex Narrow Hybrid devices with a serial number lower than FN300
- Narrow Hybrid Series 300 (S300) - all ThermoFlex Narrow Hybrid devices from serial number FN300 and up

Lesson 2 Identify the Changes in the ThermoFlex Narrow Hybrid Series 300 Device



How This Lesson Will Help You

This lesson lists the changes and updates that were made in the ThermoFlex Narrow Hybrid Series 300 Device.



Topics in This Lesson

- Site Preparation and Installation
- Device Colors
- On/Off Switch
- Harnesses
- E-Box
- D-Box Components
- Balance System
- Controller Software
- Power Failure Protector Board
- Safety Interlocks
- Offset Upgrade Procedure
- Support Kit

Site Preparation and Installation

Following are the changes that were made for the S300 devices:

- Since the balance system does not need an air supply unit, there is no longer a need for a air compressor to be installed.
- There is no longer a need to insert a plug key to the back of the D-box during machine installation



For the ThermoFlex Narrow and Mid II Hybrid ThermoFlex Narrow Hybrid Site Preparation Guide on TechPlanet:
http://techplanet.creo.com/cedirlink/redirectlink.asp?ID=7568

For the ThermoFlex Narrow and Mid II Hybrid ThermoFlex Narrow Hybrid Installation Guide on TechPlanet:
http://techplanet.creo.com/cedirlink/redirectlink.asp?ID=16568

Device Colors

The S300 devices colors were changed to accommodate the new Kodak CTPs colors.



The new colors are as follows:

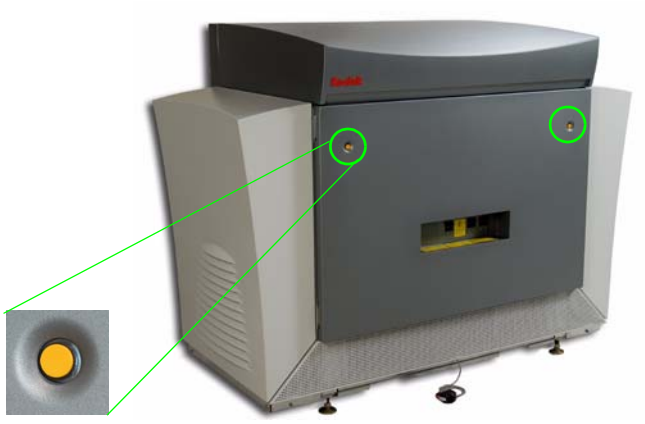
- Back cover (500-05219A) - Iron Gate
- Top door (500-05222A t) - Iron Gate
- Front cover (500-05197A) - Iron Gate
- Front Trapeze (252-17479A) - Silver lining
- Back Trapeze (252-17484A) - Silver lining
- Left Side Door (514-00241A) - Silver lining
- Right Side Door (514-00242A) - Silver lining

The colors details are:

- Silver lining 402-00276 (Paint, spray can, color)
- Iron gate 402-00271 (Paint, spray can, color)

On/Off Switch

Although the S300 switch looks similar to the older one, it has changed. The new part number is 220-02057A.



Harnesses

The harnesses were changed to fit the S300 device.

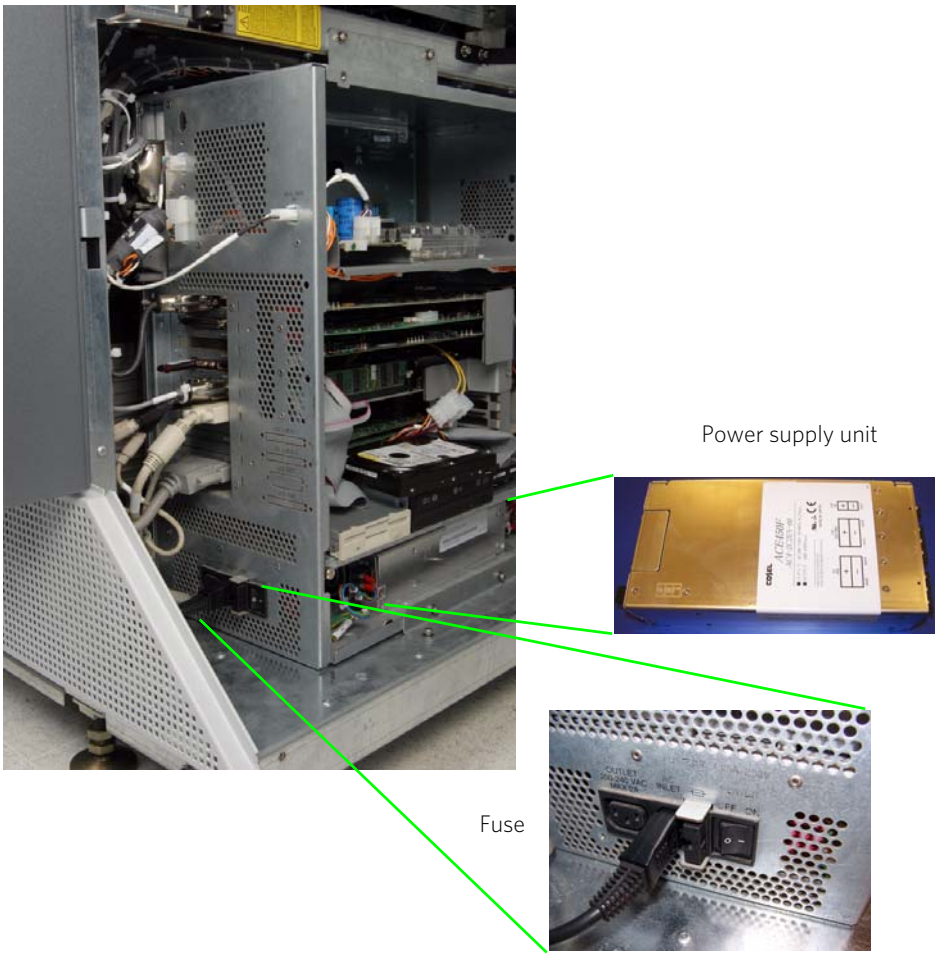
- Main harness part number - 220-02194A

For the main harness drawing on TechPlanet:
http://techplanet.creo.com/cedirlink/redirectlink.asp?ID=21127

- Local harness part number - 220-02243A

For the local harness drawing on TechPlanet:
http://techplanet.creo.com/cedirlink/redirectlink.asp?ID=21128

E-Box



Following are the new e-box components part numbers:

- E-box (514-00196A)
  - Fan (220-02242A)
  - Power supply unit (166-00126)
  - Fuse 10 A/250 V (sloblo) (175C31005)

D-Box Components

Following are the new components:

- 60 Hz D-Box (514-00214A)
- 50Hz D-Box (514-00213A)

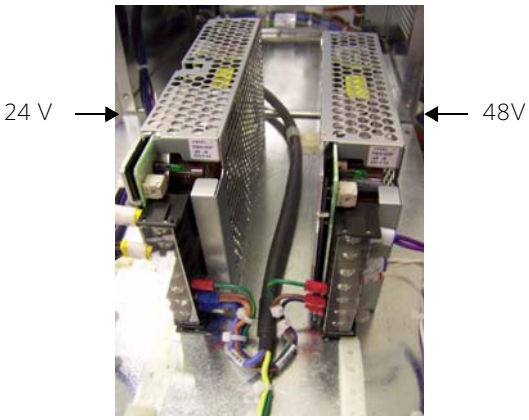
- Contactor (174-00047)



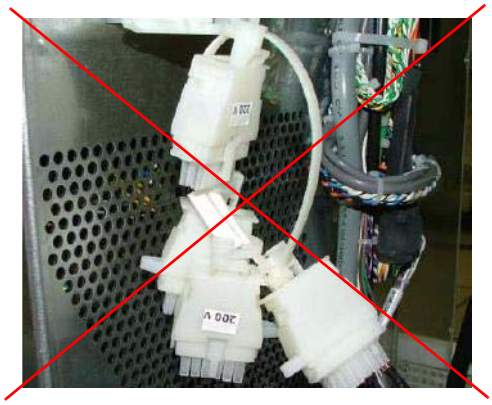
- Fuse 10 A/250 V (Sloblo) (175C31005)



- Power supply, 48V (166-00076)
- D-box power supply, 24V (166-00097)

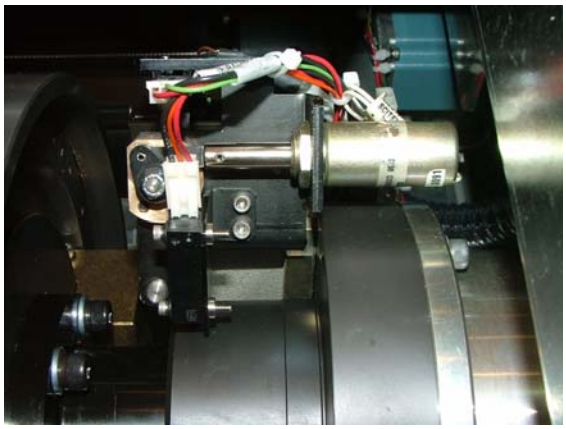


! **Important:** In the S300 devices there is **no need** to insert a dongle to the back of the D-box during machine installation

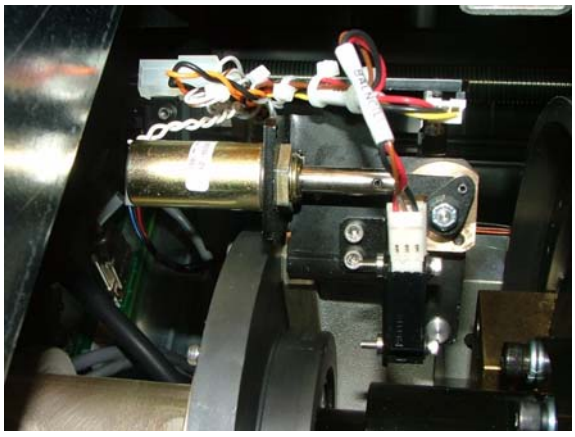


Balance System

The balance system was changed. It does not need air supply any longer. For this reason, a compressor is no longer needed.



Left dynamic balance actuator (500-06451A)



Right dynamic balance actuator (500-06450A)

Controller Software

The Controller version for the S300 devices is 2.03.355.003

This version supports the following new features that were added to the S300 devices:

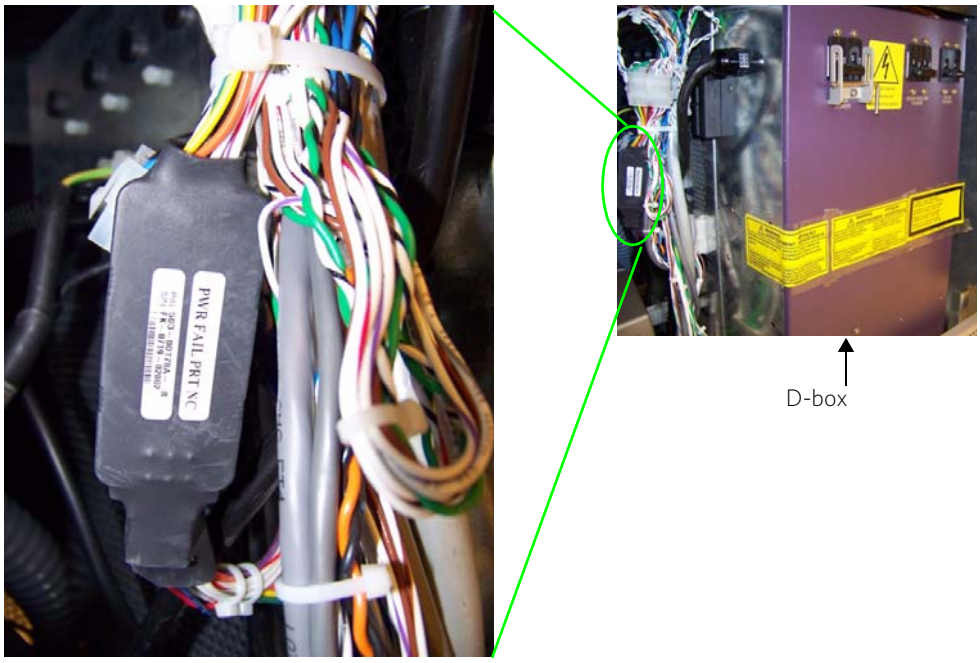
1. Omron interlocks are supported to comply with the U.S. and Canadian UL regulations.
2. For ThermoFlex Narrow Hybrid with Omron interlocks, electrical balance is supported and the air pressure unit is not required.
3. Online help for ThermoFlex Narrow Hybrid is included in the software.
4. UDRC-related warning messages
5. UDRC-related error messages

For the ThermoFlex Narrow and Mid II Hybrid Controller Software Version 2.03.355.003 Release Notes on TechPlanet:
http://techplanet.creo.com/cedirlink/redirectlink.asp?ID=21624

Power Failure Protector Board

This new board (503-00178A) has the same functionality as the previous version board. It was redesigned in order to apply with the CSA UL certification requirements.

It is connected to the D-box.



Safety Interlocks

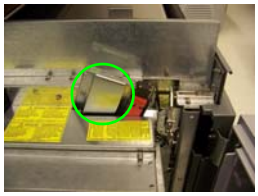
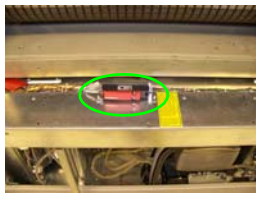
Interlock switches disconnect power from all laser sources and from mechanically hazardous parts when an interlocked platesetter door is open or an interlocked panel is removed.

Danger: You must not under any circumstances defeat any of the laser interlock switches.

The new interlocks for the doors and panels are listed in the table below.

In addition, there is a mechanical motors interlock defeat switch. When the motors interlock defeat switch is activated, the motors interlock is defeated.

Note: The drum does not rotate when the motors interlock defeatable switch is activated.

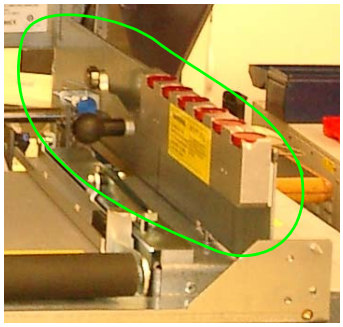
Location	Picture	Defeatable?	Description	Part Number
Top door		No		220-00979A
		Yes	Mechanical motors interlock defeatable switch	500-02425A
			Interlock defeater	252-08050A
Front panel		No		220-00979A
Rear panel		No		220-00979A
Left door		No		220-00979A
Right door		No		220-00979A

For the ThermoFlex Narrow and Mid II Hybrid Platesetter Safety Precautions for Service on TechPlanet:
http://techplanet.creo.com/cedirlink/redirectlink.asp?ID=20300

For the ThermoFlex Narrow and Mid II Hybrid Platesetter Safety Precautions for operator on TechPlanet:
http://techplanet.creo.com/cedirlink/redirectlink.asp?ID=20296

Offset Upgrade Procedure

When performing this procedure on an S300 device, there is no longer a need to replace the side panel (252-15848A).



For the ThermoFlex Narrow and Mid II Hybrid Platesetter Offset Upgrade Procedure on TechPlanet:
http://techplanet.creo.com/cedirlink/redirectlink.asp?ID=21033

Support Kit

The support kit has also changed. It now includes the following items:

- Support kit CD (634-00568A)
  - Kodak blank DVD with logo (610-00040)
  - Windows XP image DVD (651-00588A)
  - Backup & restore (651-00623A)
  - Bios for SBC (651-00662A)
  - Training movie and VRG (651-00754A)
  - Documentation CD (651-00870A)
  - ThermoFlex Controller ver 2.03.355.003 CD (651-00997A)

Self-Assessment #1: The Differences Between ThermoFlex Narrow Hybrid Series 300 Devices and Earlier Version Devices

This self-assessment activity will help you:

- Confirm your knowledge of the changes and updated that were made in the THermoFlex Narrow Hybrid S300 devices
- Identify areas for more practice

How well are you doing?

How do you rate your ability to do the tasks in each lesson?

Lesson	Poor	Fair	Good	Excellent
Identify the General Characteristics of the Series 300 Devices	☐	☐	☐	☐
Identify the Changes in the ThermoFlex Narrow Hybrid Series 300 Device	☐	☐	☐	☐

Areas where you feel you need more training and practice:

1.

2.

3.

Evaluation of Internal Self-Study Course

Our goal is to make this course as relevant and effective as possible for our customers. We value your feedback highly and request that you complete this evaluation form.

After you complete the form, scan and send it via e-mail to:

sigalit.barzilai@kodak.com

Your name:	
Title:	
Company's name:	
Phone number:	
Course:	ThermoFlex Narrow Hybrid Series 300
Date:	

Course:

	(1) Not at all	(2)	(3)	(4) Completely
Addressed your needs	☐	☐	☐	☐
Presented the topics in the most logical order	☐	☐	☐	☐
Provided exercises that reinforced "need to know" topics	☐	☐	☐	☐
Improved your confidence with the product	☐	☐	☐	☐

Course Material:

	(1) Don't Agree	(2)	(3)	(4) Fully Agree
Is well written and easy to understand	☐	☐	☐	☐
Contains useful information	☐	☐	☐	☐

	(1) Don't Agree	**(2)**	**(3)**	**(4) Fully Agree**
Is well designed and organized	☐	☐	☐	☐
Is suitable for independent study	☐	☐	☐	☐
Includes enough theory	☐	☐	☐	☐
Includes enough practice and exercises	☐	☐	☐	☐

How do you rate this course on a scale of 1 (very bad) to 6 (excellent)?

_____

Are there any subjects that you think should be added to the course or given more attention?

_____

_____

_____

Are there any exercises that you think should be added to the course?

_____

_____

_____

Comments:

_____

_____

_____

_____

Kodak

Eastman Kodak Company
343 State Street
Rochester, NY 14650 U.S.A.

© Kodak, 2007. All rights reserved.
TM: Kodak

Kodak, Creo and Kodak ThermoFlex® Narrow Hybrid platesetter are trademarks of Kodak.

To learn more about solutions from Kodak, visit http://graphics.kodak.com/.

Subject to technical change without notice.