



LET'S
CONNECT

INTERNATIONAL
PRINECT USER DAYS



Prinect APSC

How to start quickly!



Prinect APSC

Compensating paper stretching
with standard curves



Workshops no. 4 and no. 10

Presentation

Cordula Voelker

Prinect APSC

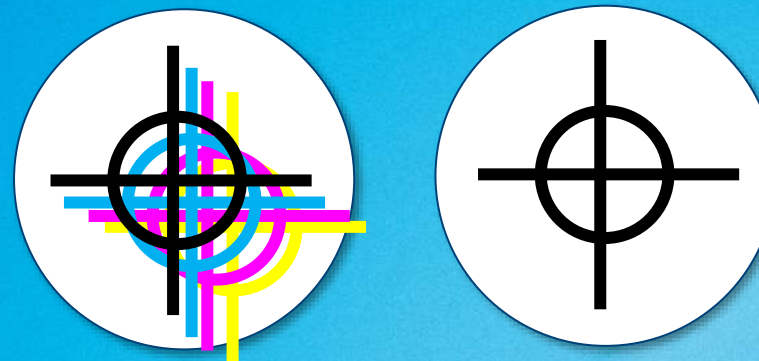
Christian van der Bosch

Speedmaster XL106-8-P

Stefan Giesa + Carsten Hass

Prinect APSC – How to start quickly!

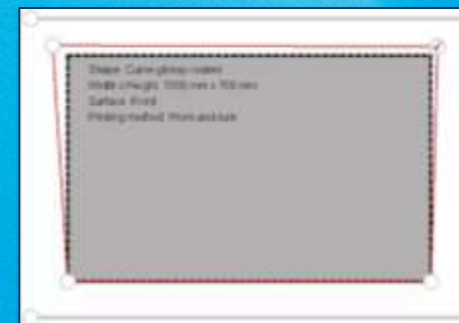
1. See the difference without and with APSC
Printing with XL106-8-P



2. How to start quickly with compensation
3 clicks to use standard curves

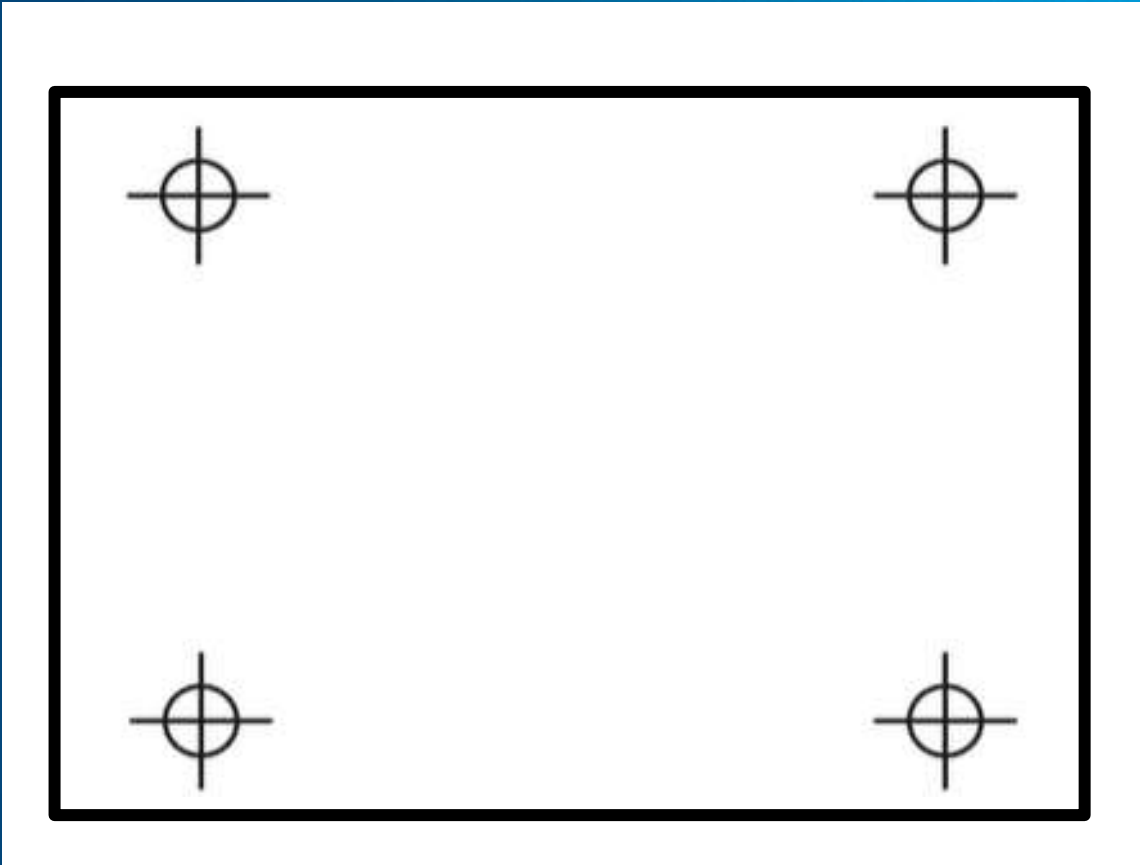


3. Improving standard curves
Diverse methods of curve adaptation

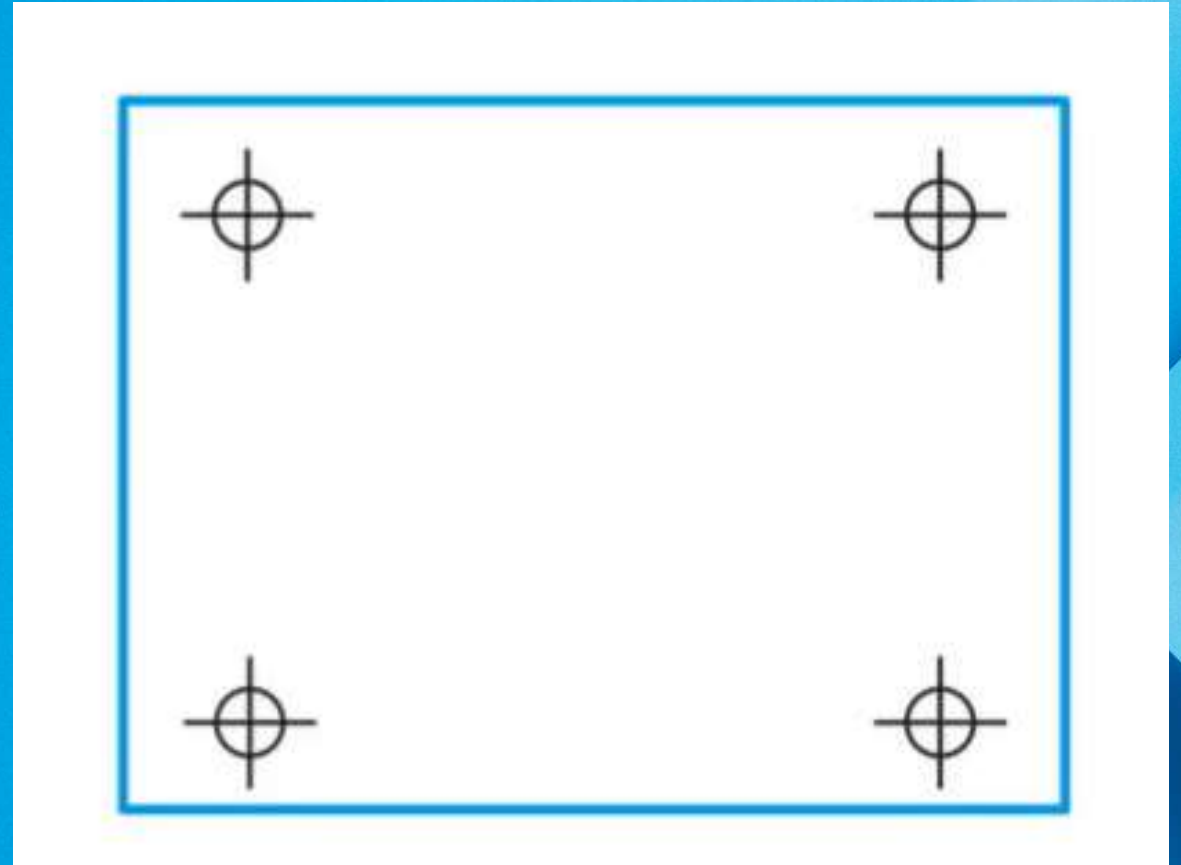




What is paper stretching?



No stretching

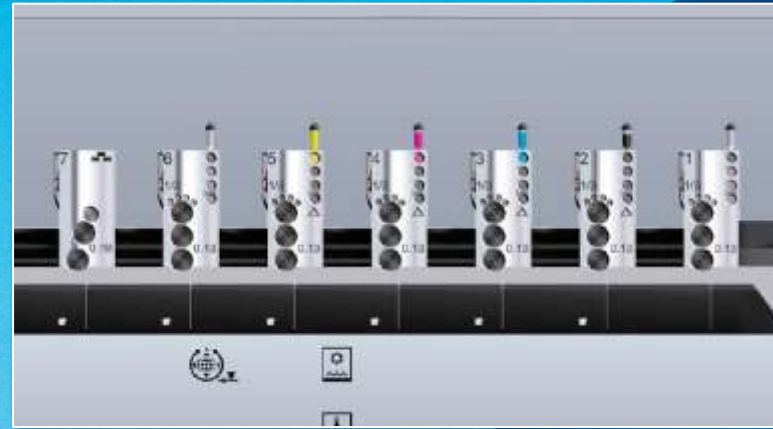


Stretching after printing with 4 printing units

What influences paper stretching?



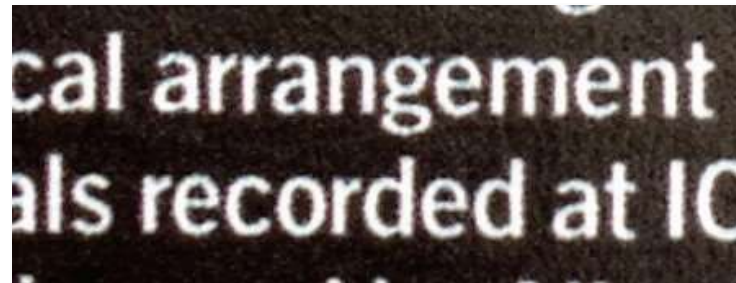
- Paper type, grain direction, grammage, surface
- Position of printing unit in printing press
- Type of press
- Type of ink, ink coverage
- Room temperature and humidity



What are the effects of paper stretching?

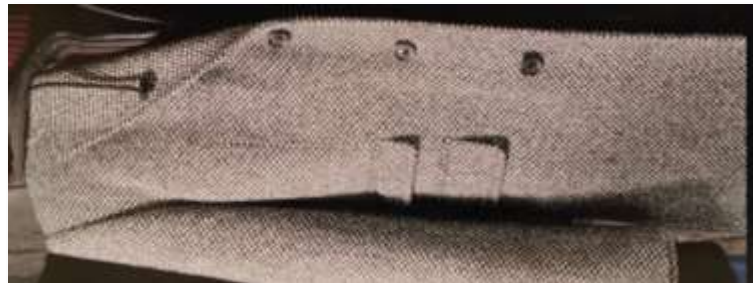
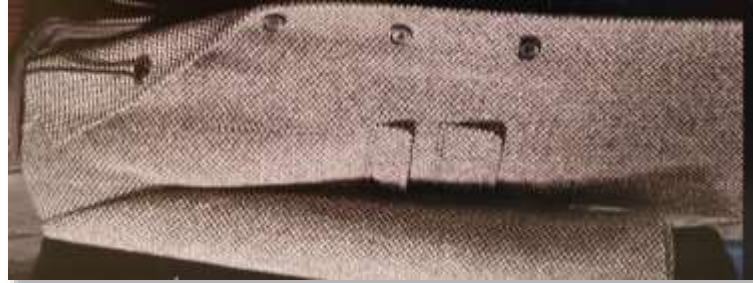
Small details and fonts

become blurred



Gray balance

shows color cast

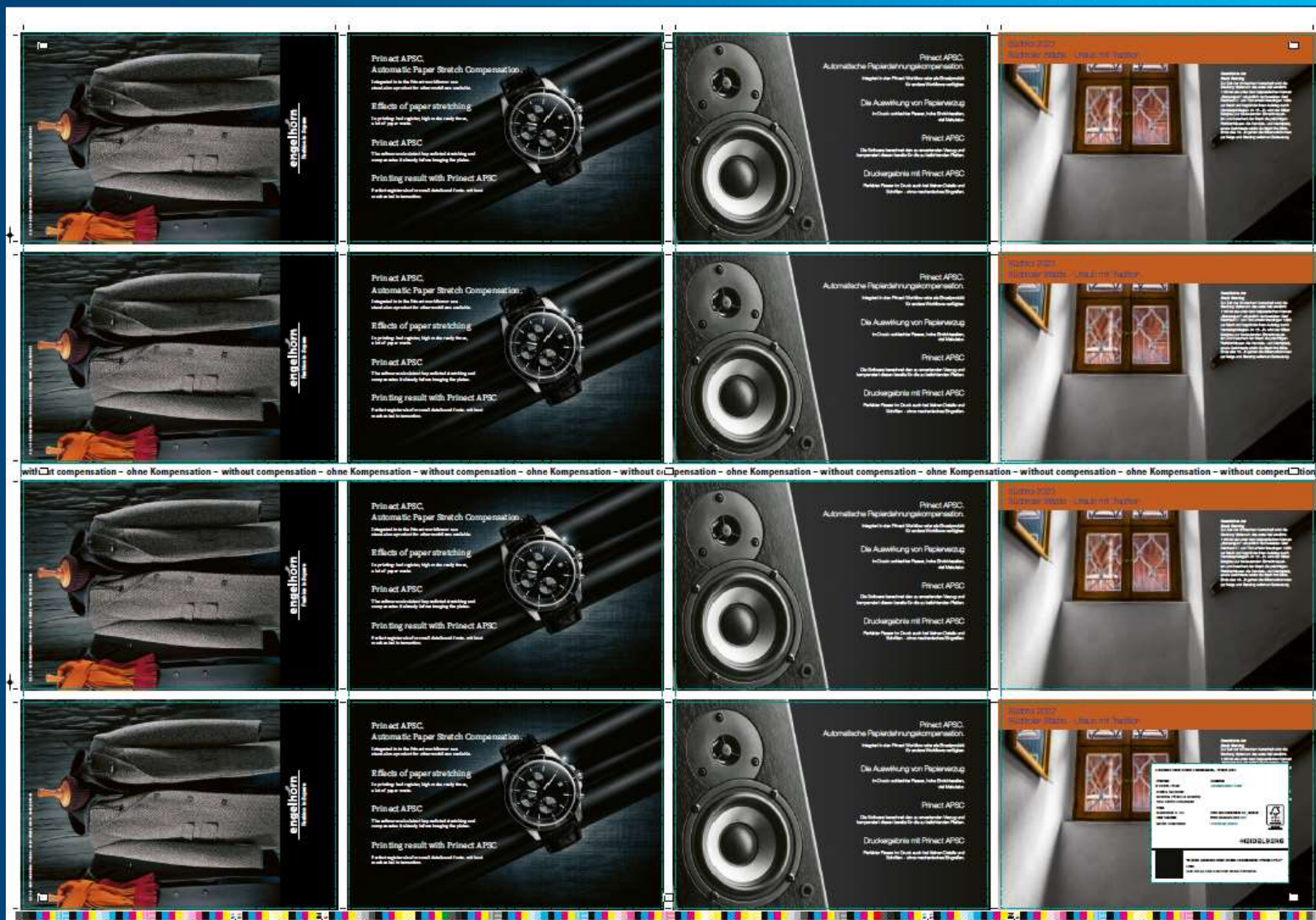


Layouts with multiple ups

show color shifting



What are the effects of paper stretching?





Register deviation without Prinect APSC

Job: 326425, Sheet: Sig001_FB 017, Surface: Front, Width (mm): 1001, Height (mm): 701, Grammage (g/m²): 115, First PU: 1, Color allocation: B, C, M, Y

Marks: 4, 6, 9

Offset to Sheet Margin (mm): 701, 1001

671	M02	M12	M22
350	M01	M11	M21
30	M00	M10	M20
30	500	971	

Measurement Data

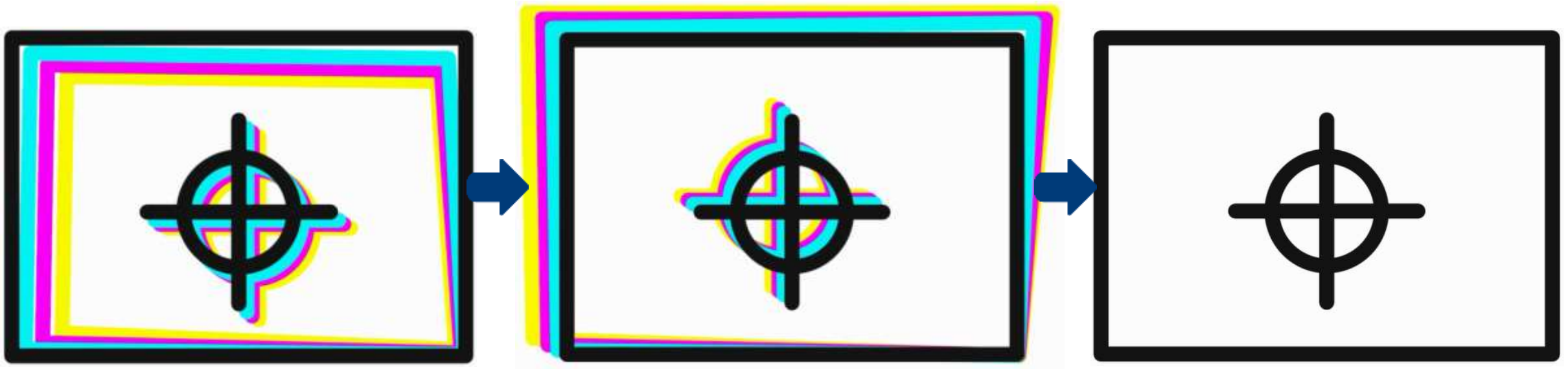
ΔX	0.0	ΔY	0.0
ΔX	-0.03	ΔY	-0.04
ΔX	-0.07	ΔY	-0.12
ΔX	-0.1	ΔY	-0.1

Reference Color: Black, Cyan, Magenta, Yellow

Yellow:
Delta Y = 0,1 mm
Delta X = 0,1 mm



Prinect APSC: Compensating before printing



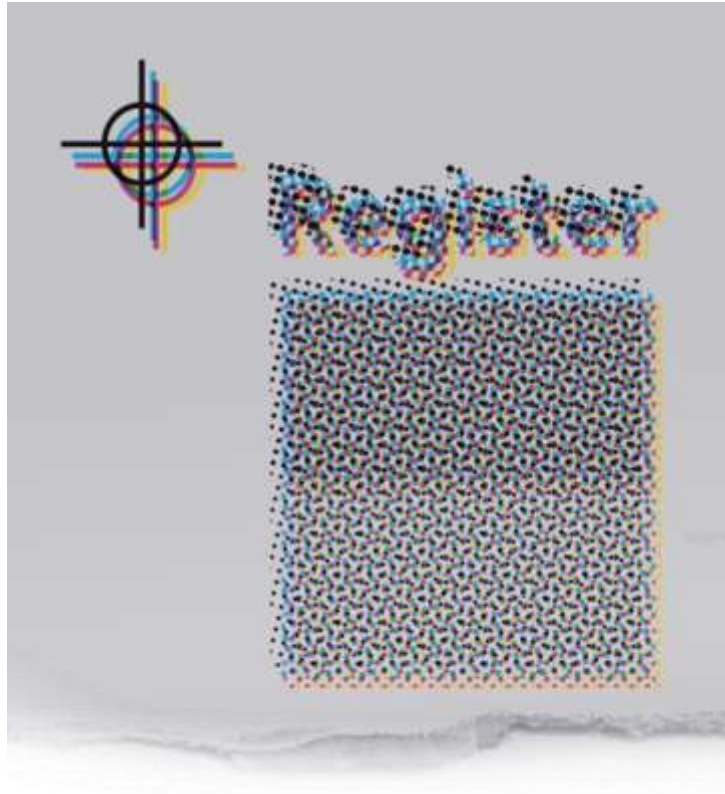
Bad register due to paper stretching

Predictive compensation

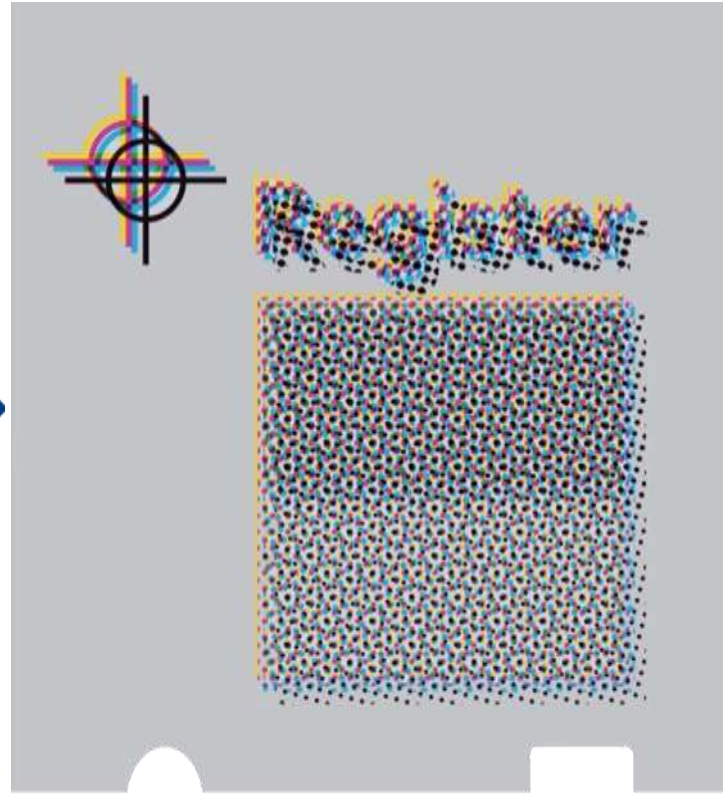
Perfect register in print



How compensation is calculated



Bad register due to paper stretching



Compensated printing plates



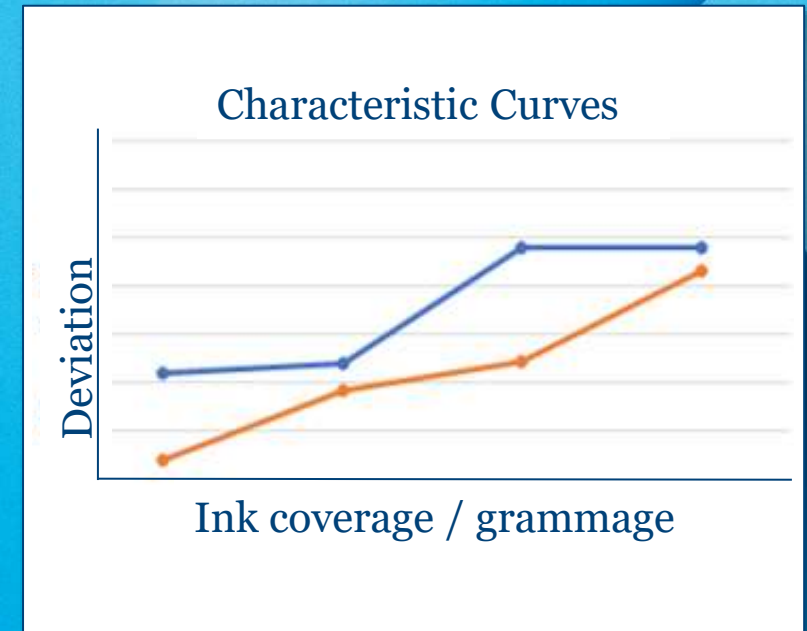
Perfect dots and rosettes in print



How can we deal with this problem?

Get to know paper's behaviour under different conditions:

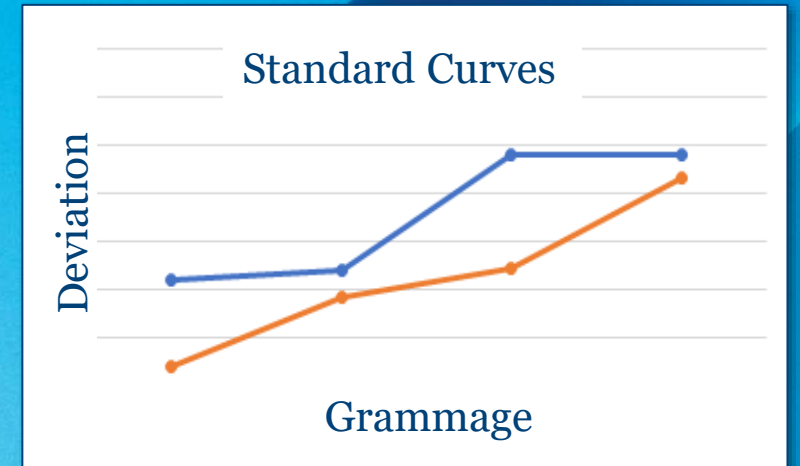
- Print test charts
- Measure register deviations
- Generate characteristic curves



Prinect APSC can be used out of the box



- Several standard curves provided!
- Ready for use.
- User can start immediately.
- No printing and measuring necessary.



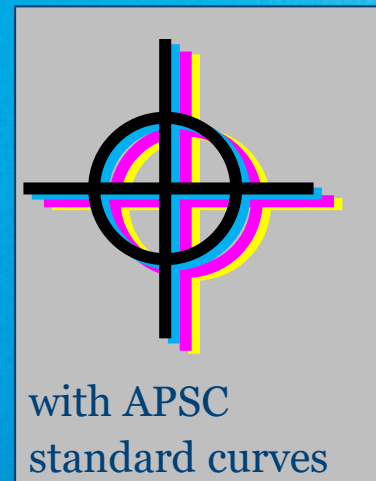
Better result



- Standard curves increase register accuracy by at least 50 %

50 %

50 %



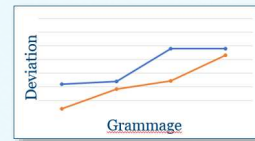


Compensation made easy by 3 clicks

With **Prinect Production Manager**

→ You need only **3** clicks

to use standard curves





M19-0002

Overview

Name: A-E Number: M19-0002

Product Description Processing Colors Documents 1 Pages 32 Imposition 0 Proof 0 Plates 0 Precutting

APSC+115g-BB (ImpositionOutput)

<input checked="" type="checkbox"/>	Screening	on	Tif-B-Shooter on KIE-HEIPC02
<input checked="" type="checkbox"/>	Sheet Preview Generation	on	Tif-B-Shooter on KIE-HEIPC02
<input type="checkbox"/>	Thumbnail Generation	on	Tif-B-Shooter on KIE-HEIPC02
<input type="checkbox"/>	Halftone Soft Proof	on	Tif-B-Shooter on KIE-HEIPC02
<input checked="" type="checkbox"/>	File Output	on	Tif-B-Shooter on KIE-HEIPC02
<input checked="" type="checkbox"/>	Paper Stretch Compensation	on	AllPaperStretchCompensators

Paper Stretch Compensation

Use Printing Material Group as Job Group

Job Group: Default
Device ID: XL106-DEF

First Printing Unit (Front): 1
First Printing Unit (Back): 5

Compensation on imagesetter (only for Heidelberg imagesetters)

Paper Properties
 Use Master Data, else Error
 Use default values, if necessary
 Always Use Default Values

Compensation required

Front: -----

Individual Compensation

Back: -----

Job list

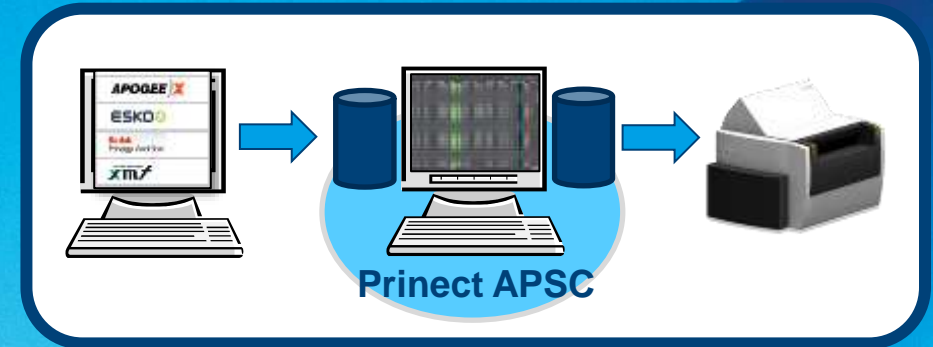
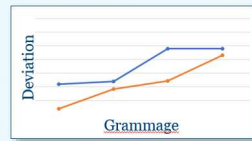
Compensation made easy by 3 steps



With **hotfolder workflows** (3rd party prepress)

→ You need only **3** steps

to use standard curves

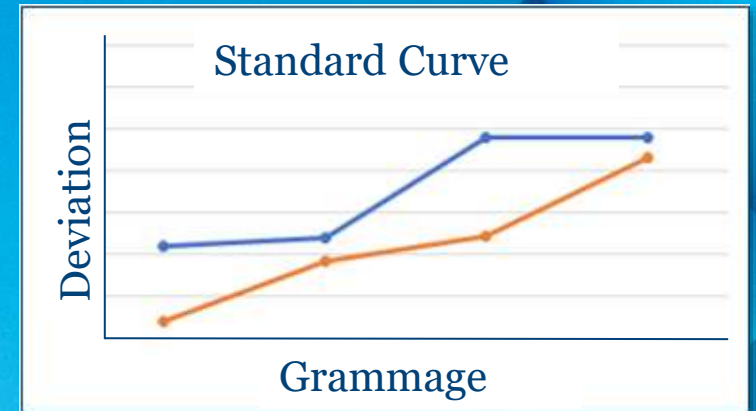




Conditions for use of standard curves

Standard curves can be applied for:

- Presses XL106, XL 75, CX 104, CX102, SX102, CX92, CS92
- Print sequence **B-C-M-Y**
- Coated paper
- Front or Front and Back
- Conditions in print room / for print material are stable



APSC Directory Structure	Name
data	CS92_43X38
database	CX92_43X38
PDKPlusDB	CX102_43X37
defaultCurves (selected)	CX102_52X28
markDefinition	CX104_43X37
service	CX104_52X28
work	SX102_43X37
AutolInstall	SX102_52X28
Backup Toolkit	XL75C
Common Service:	XL75F
	XL106



Printing with standard curves: How does it look like?



Adapting curves



1. Easy mode



Adapt contour

2. Expert mode



Insert values

3. Expert mode



Use measuring results of production sheet

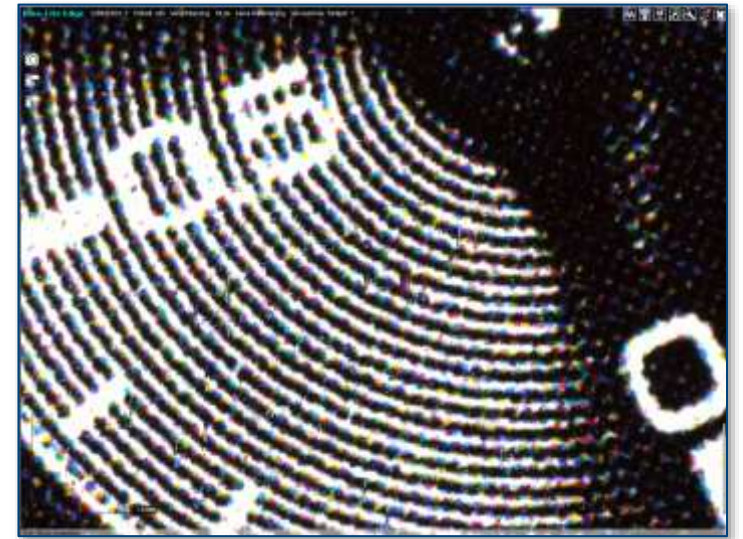
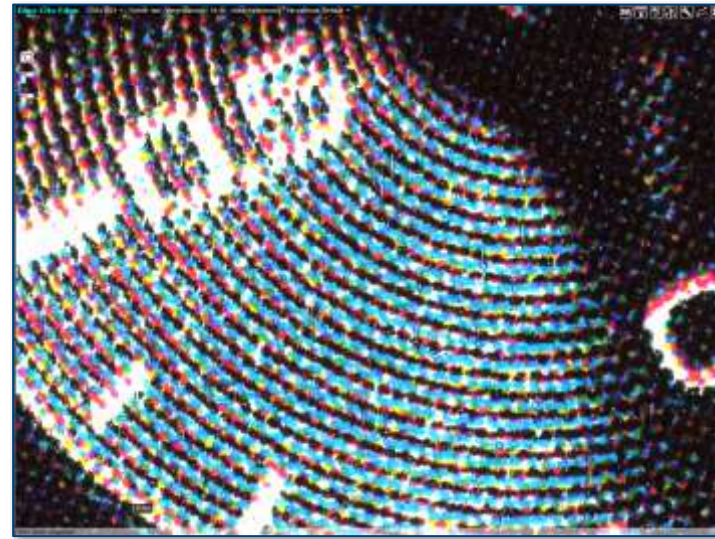
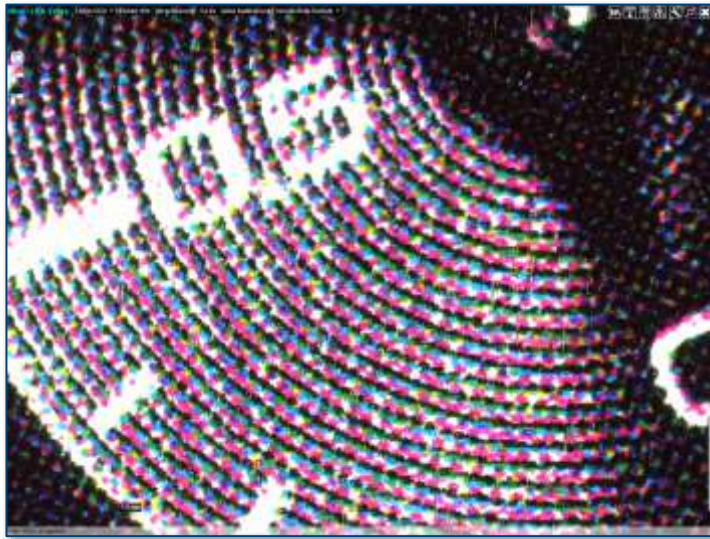


Printing with individually adapted curves: How does it look like?





Result – without and with Prinect APSC



Without Prinect APSC

With standard curve

With adapted curve



Result – without and with Prinect APSC

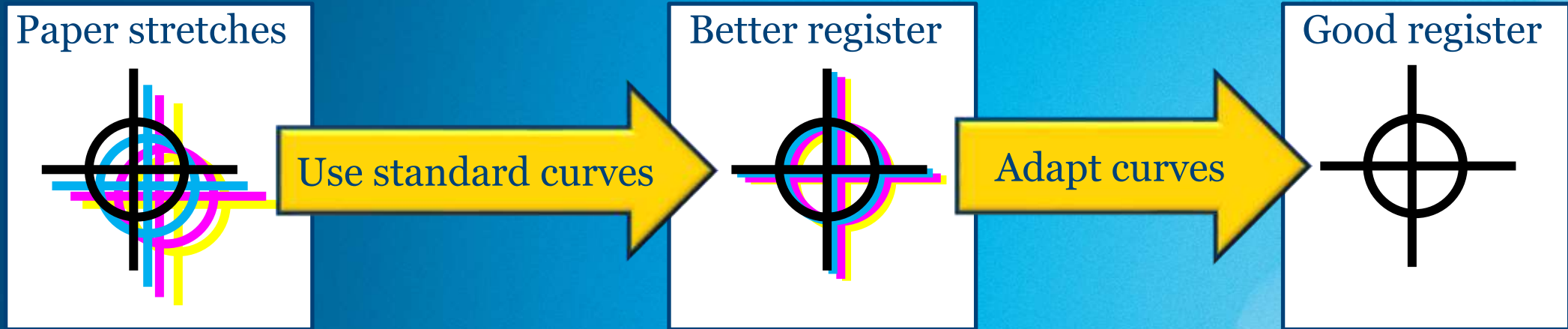


Without Prinect APSC

With standard curve

With adapted curve

Quick start with Prinect APSC



Print sequence = **BCMY** (+ subsequent spot colors)

Characteristic curves for paper type and press

Savings with Prinect APSC



→ Saves make ready time

of 5 minutes and more
per compensated job



→ Saves waste

of 80 sheets and more per
compensated job



→ Improves productivity

all parts of the sheet can
be sold



Prinect APSC

How to start quickly!