

主辦機構  
Organiser :



執行機構  
Implementation Organisation :



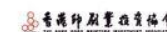
贊助機構  
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# 「色·式·識：灣區出發，盡顯世界色彩」啟動禮 暨 印刷新質生產力發展論壇

## Colour · Method · Master: GBA ReCreates the World's Colour

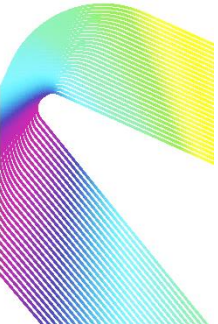


### 簡介「色·式·識」項目 Introduction to "Colour · Method · Master"

Executive Director of APTEC  
印刷科技研究中心總監 彭安琪女士 Ms. Brenda Pang

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# 突破傳統的印刷色彩控制方法：CTV

## A breakthrough in printing colour control method: CTV

- 於2017年ISO發佈ISO 20654 專色色彩控制方法 SCTV (Spot Colour Tone Value)

ISO published ISO 20654 in 2017 for spot colour control, SCTV

- APTEC 於2019年開始研究應用在四色  
APTEC started to study and research the application in 4C

- 2023年發佈ISO 10128，說明CTV是其中一個色彩控制方法

Published ISO 10128 in 2018 to state CTV as colour control method

ISO/TS 10128:2023(en) Graphic technology — Methods of adjustment of the colour reproduction of a



### 1 Scope

This document describes four methods for the adjustment of the digital content data that is input to a printing system to achieve consistency in the printed results among a number of presses printing to the same general aim conditions. These four methods are generally identified as:

- 1) matching of tone value curves (TVI and CTV),
- 2) use of near-neutral scales,
- 3) colour-optimised correction curve set, and
- 4) use of CMYK to CMYK multi-dimensional transforms.

The procedures for establishing the aim condition for the necessary correction curves, the procedures for determining the individual correction curves, and a comparison of the applicability of these four methods are included.

These adjustment procedures are intended for use with printing systems that use CMYK colourants. Such systems are not restricted to those that use traditional ink on paper printing but can involve other marking technologies such as those used for proofing and/or digital printing.



# CTV應用廣泛，容易掌握，效果理想

## CTV Widely Used, Easy-to-use, better performance

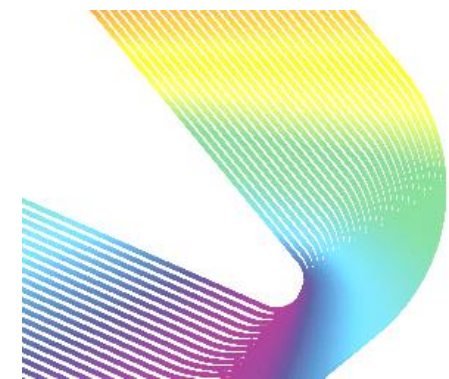
- 可使用任何油墨、印刷物料、網線、網種、印刷方法
- 與傳統印刷控制一樣，生產人員監控印刷網點變化，並同時監控顏色 → 容易掌握
- 檔案的50%色調 = 印刷50%色調
- 四色、專色及多色印刷都是相同色彩控制方法
- 使用CTV可以匹配其他方法的色彩控制方法，但漸變比較順滑、層次比較豐富、色彩對比度亦比較強烈
- Can be used with any printing ink, printing substrates, screen rulings, screening methods and printing methods
- Same as traditional printing control of printing dots, but simultaneously control colour → easy to master
- 50% tone in the file = 50% tone in printing
- 4C, spot colour and multicolour are using the same colour control method
- Using CTV can match colour with other methods, but **smoother gradation, more detailed and better colour contrast**



使用 CTV 印刷校正方法



使用其他印刷校正方法



Sponsor



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# 色·式·識：灣區出發，盡顯世界色彩 Color · Method · Master: GBA ReCreates the World's Colour

由香港印刷業商會主辦，文創產業發展處資助，APTEC執行  
Organised by The Hong Kong Printers Association, sponsored by CCIDA,  
implemented by APTEC

# 「色·式·識」項目目標

## “Color · Method · Master” Project Objectives

- 擴大CTV的應用範疇
- 向印刷業推廣CTV，及推動印刷企業尤其在粵港澳大灣區應用CTV
- 將CTV推進正式成為首個印刷的「灣區標準」
- 長遠目標旨在將CTV推廣成為中國的印刷色彩控制主流方法，並輻射至全球
- Extend the application areas of CTV
- Promote CTV to printing industry and encourage printing companies to use, especially for GBA
- Formalise CTV as the FIRST printing "GBA Standard"
- Strive to promote CTV as China's mainstream color control method and be used globally



# 項目兩個重點計劃 Two Major Schemes



CTV先導計劃  
CTV Pilot Scheme

製作CTV色彩數據庫

Production of  
Characterisation  
Dataset Program

共91間公司申請

91 companies  
applied

# CTV先導計劃 CTV Pilot Scheme



- 19間公司入選 (以大灣區為主，少量為其他中國城市和東盟)
  - 由APTEC為入選公司提供CTV實地培訓
  - 達標的公司成為「CTV認可印刷商」，符合條件後可獲得資助
- 19 selected companies (mainly from GBA, few from other Chinese cities and ASEAN)
  - APTEC provides CTV on-site training
  - Once achieve the target, will be awarded the qualification of the **“CTV Certified Printing Company” qualification** and obtain subsidy

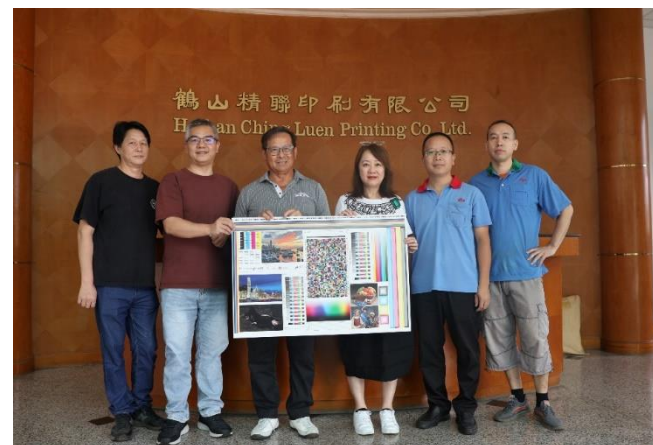
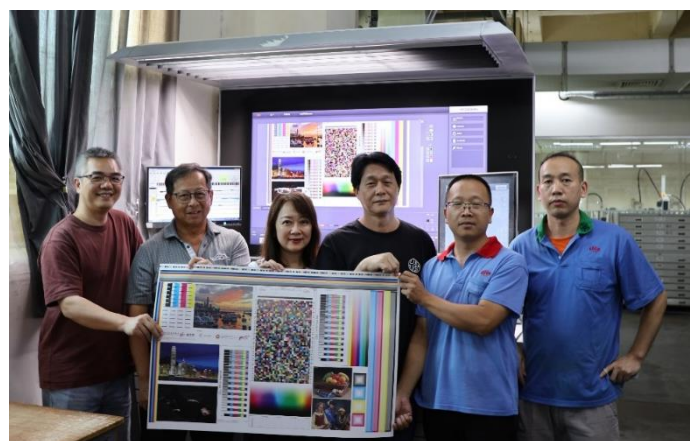
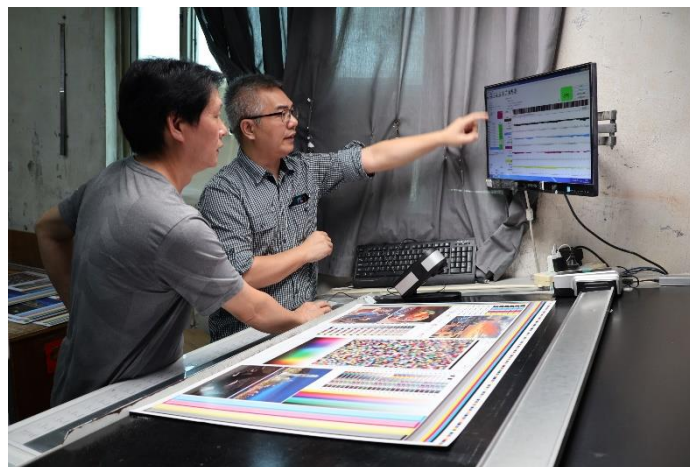




# CTV先導計劃 CTV Pilot Scheme



精聯印刷有限公司  
Ching Luen Printing Co. Ltd.





# CTV先導計劃 CTV Pilot Scheme



精聯印刷有限公司  
Ching Luen Printing Co. Ltd.

鶴山精聯的印前經理表示：「這的確是一個突破，**不應該以傳統網點增大的思維去理解**，使用CTV後，圖像層次更加鮮明。CTV可以**解決專色網點控制**，我們會將CTV應用在印刷生產上。」

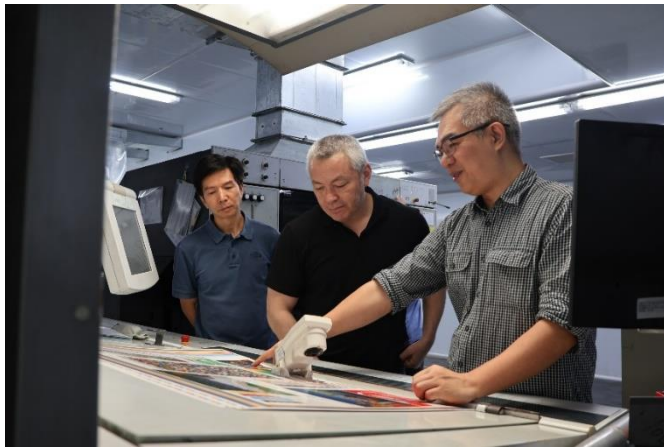
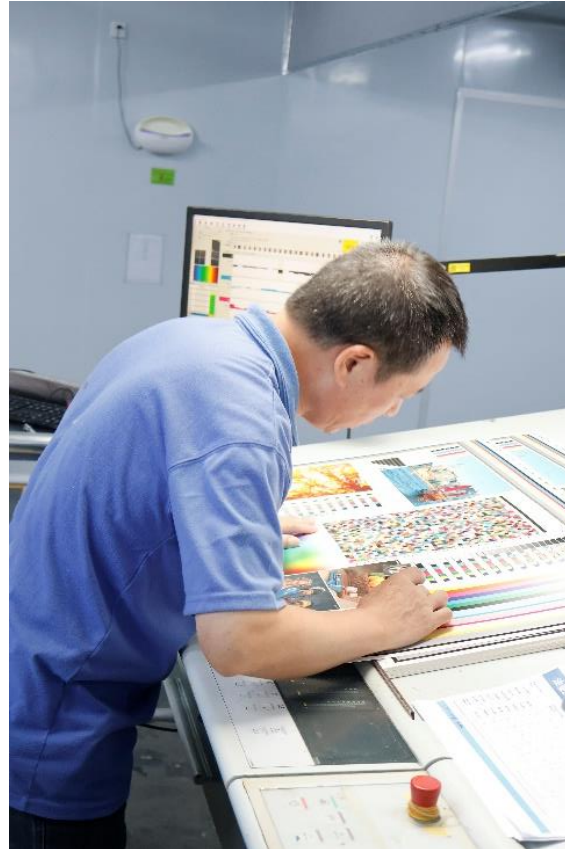
印刷經理表示：「相比其他方法，**使用CTV，更容易達到目標數據，同時亦能瞭解印刷機的狀態。**」



Prepress Manager of Ching Luen stated that, “It is a breakthrough. **We should not use the traditional TVI concept to interpret.** After using CTV, image contrast is better. **CTV can help to solve the spot colour control problem.** We will use CTV in our daily production.”

Production Manager mentioned, “Compared with other colour control methods, **using CTV can meet the target easier. And it can help to spot out the problems of press machine.**”

# CTV先導計劃 CTV Pilot Scheme



# CTV先導計劃 CTV Pilot Scheme



中山鴻興的技術經理表示：「與其他印刷方法相比，**CTV的確更為容易和有效控制專色**，以及能夠帶出**圖像更多層次**。我們會視乎不同的客戶要求和印刷品性質，靈活選擇應用CTV在實際生產中，以達致最佳效果。」



Technical Manager of Hung Hing stated that “Compared with other colour control methods, **CTV is easier and more effective to control spot colour, and can bring more details for the image**. We will consider to apply CTV in production for better performance, subject to the nature of jobs.”



# 製作CTV色彩數據庫

## Production of Characterisation Dataset



- 11間大灣區公司入選 (柯式、柔版、數碼印刷)
- 協助APTEC製作六組CTV色彩數據庫
  - 柯式：粉紙、書紙、潤色域
  - 柔版：粉紙、標籤不乾膠、PVC
- 成功完成後可獲得資助
- 11 selected companies from GBA (offset, flexo, digital printing)
- Assist APTEC to produce 6 sets of characterisation dataset by CTV
  - Offset: coated paper, uncoated paper, multi-colour
  - Flexo: coated paper, label, PVC
- Will obtain subsidy once complete successfully



# 製作CTV色彩數據庫

## Production of Characterisation Dataset



金杯印刷有限公司  
GOLDEN CUP PRINTING CO., LTD.

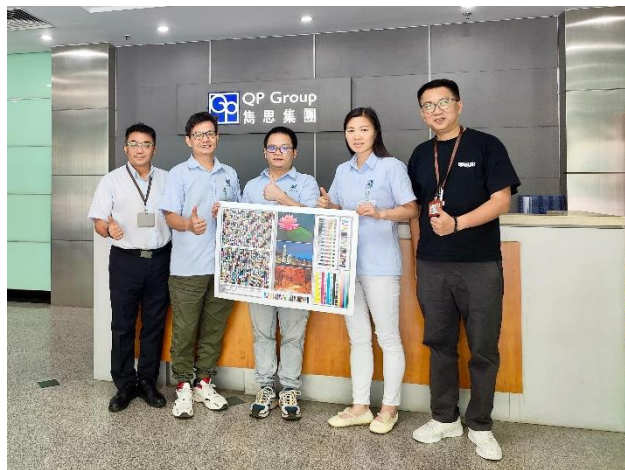
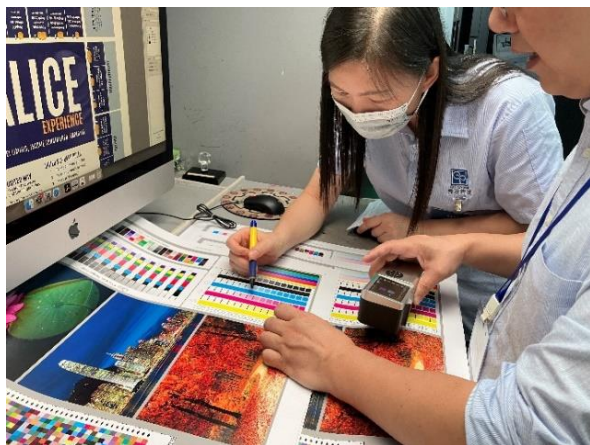


永經堂印刷集團  
Wing King Tong Printing Group  
*since 1944*

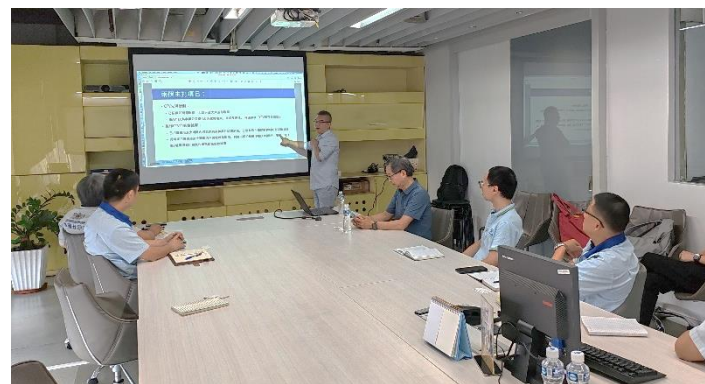
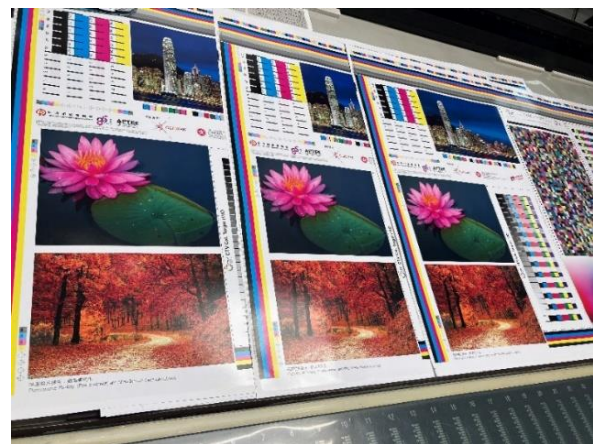


# 製作CTV色彩數據庫

## Production of Characterisation Dataset



LEO PAPER GROUP  
鹤山雅图仕印刷有限公司  
利奥纸品印刷集团成员





# 未來活動Upcoming Events

- CTV先導計劃實地培訓 (直至2025年7月)
- 於2025年在香港和上海開辦共四班CTV 培訓課程
- 參展華南國際印刷工業展覽會 (3/2025)
- 參展北京國際印刷技術展 (5/2025)
- 香港國際印刷標準化論壇暨 CTV 頒發證書典禮
- 參加全國印刷標準化技術委員會年會
- 參加法蘭克福書展香港館2025
- 研討會
- 全方位宣傳 ...
- On-site training for CTV Pilot Scheme (until Jul 2025)
- 4 CTV public training classes in HK and Shanghai in 2025
- Participate in the South China International Exhibition on Printing Industry (Mar 2025)
- Participate in the China Print (May 2025)
- Hong Kong Summit – International Printing Standardisation cum CTV Certification Ceremony
- Participate in the SAC/TC170 annual meetings
- Participate in the 2025 Frankfurt Book Fair Hong Kong Pavilion
- Seminars
- All-rounded promotion ...



# 謝謝支持！ Thank you for your support!

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