

Hong Kong Productivity Council 香港生産力促進局

# Materials and Manufacturing Technology 材料及製造科技



### 應用於漂染業的超臨界無水染色技術

超臨界無水染色技術是一項利用超臨界流體狀態下之二氧化碳為介質進行染色的新興技術。由於超臨界流體的特性,被染色之紡織品可以獲得良好的色牢度和均匀度。而且超臨界染色技術是一種零排放的環保技術,可被應用於不同紡織品的染色和處理。

#### 優點

- 無污染的染色技術
- 無需染色助劑
- 可應用於大多數功能紡織品
- 染色效率高及可連續生產
- 染色成本低
- 極佳的染色質量
- 剩餘的染料可被回收再用



超臨界染色紗樣品



超臨界染色試驗樣機

### 一站式顧問服務

香港生產力促進局向本地業界提供整套顧問及支援服務

- 工藝開發
- 樣品測試
- 技術轉移
- 試產
- 生產型系統設計及安裝
- 廠房設施規劃
- 廠內培訓



超臨界染色工藝流程

**Product** 

Enceptity 全前 : Tel 電話 : (852) 2788 6187 | Fax 傳真 : (852) 2788 5522 | E-mail 電郵 : fpj@hkpc.org

Hong Kong Productivity Council 香港生産力促進局

## Materials and Manufacturing Technology 材料及製造科技



### Supercritical Fluid Waterless Dyeing Technology for Bleaching & Dyeing Industry

Supercritical Fluid Waterless Dyeing Technology (SFDT) is an innovative dyeing technology which uses supercritical fluid state, carbon dioxide as solvent to proceed dyeing. Due to the properties of supercritical fluid, fabric could be easily dyed with good fastness and uniformity by SFDT. SFDT is an environmental friendly technology with zero effluent, and could be applied for dyeing and finishing of different fabrics.

### **Advantages**

- Pollution free dyeing process
- No need of any dyeing additives
- Applicable on a wide range of functional fabrics
- High dyeing efficiency and continuous production
- Low dyeing cost
- Outstanding dyeing quality
- Excess dye can be completely reused

SCFT dyed yarn sample

Lab scale supercritical fluid dyeing system

Supercritical fluid dyeing system

SCFT dyed fabric sample

### One stop consultancy service

HKPC provides a turnkey solution on supercritical fluid waterless dyeing technology to serve local industries.

- Process development
- Sample evaluation
- Technology transfer
- Trial production
- Production system design and equipment setup
- Facilities layout design
- In-house training



Recovery of Dye and SCF

Engulary 全面 & Tell 電話 & (852) 2788 6187 | Fax 傳真 : (852) 2788 5522 | E-mail 電郵 : fpj@hkpc.org