

**TOYOBO**

**Cosmoslight®**  
**CTP**

WATER-WASH FLEXO PRINTING PLATES

**Flexo**

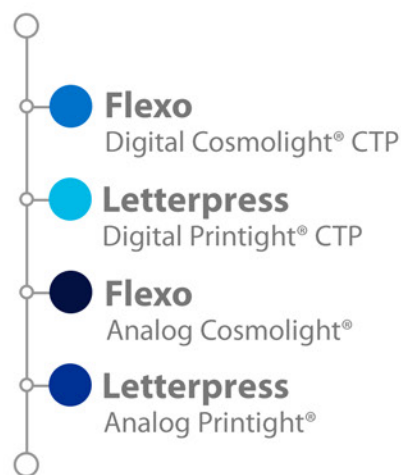
# Toyobo Water-wash Flexo Printing Plates



**Toyobo is the worldwide leading water-washable printing plate manufacturer for flexographic and letterpress printing.**

Toyobo's water-washable products are for printers who demand the highest print quality, while at the same time being able to operate in a solvent-free operation, fast processing and limited required processing equipment. Thanks to Toyobo's many resources and experience in chemistry, it is able to continuously develop high performance products for the flexo printing industry. Due to the unique material and structure of the plates, the phenomenal ink

transfer is complemented by a low dot-gain, with press ready plates in under 1 hour. Toyobo printing plates are offered for both flexo and letterpress in CTP as well as analog versions:



## Toyobo Cosmolight®

**Toyobo Cosmolight® CTP** plates are revolutionary water-washable digital flexo plates that are durable to water-, solvent- and UV based ink. Toyobo Cosmolight® CTP plates can be used in all CTP imaging devices and are available in 3 versions:

01	Cosmolight®	QZ
02	Cosmolight®	QS
03	Cosmolight®	QH

**Cosmolight flexo plates** plates have a black laser ablation mask as well as an oxygen-inhibition layer integrated into the plate, sealing the plate automatically for any oxygen-inhibition effects. The result is an extremely high-quality print due to a flat top dot, little dot gain and high ink transfer. Toyobo Cosmolight® CTP plates are, like all other Cosmolight® plates, certified by Esko for HD and FullHD. Cosmolight® will outperform thermal plates and can compete with solvent-based plates on the market.

Besides an excellent print quality, Cosmolight® plates do not need the use of hydrocarbon based solvents or even aggressive cleaning chemicals such as sodium hydroxide ('Caustic Soda') in prepress. The only 'chemical' to be used in the entire process is a detergent, similar to dish washing soap. We recommend the use of Cosmosoap® to ensure optimum dissolving of the polymer material.

For high-volume customers, we recommend using an Aquasupreme or Cosmoline with optional centrifugal filtration system to remove the polymer particles in solid form, which can be disposed of as household waste.

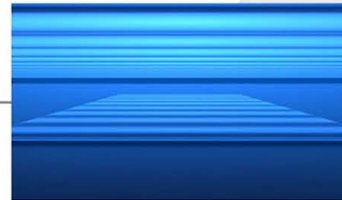


# CTP Plate making process:

There are 6 steps in the Cosmolight® CTP plate-making process which are described below. The only equipment that is required is a 'combi processor' - a combined washout, exposure & dryer unit such as an Aquasupreme or Cosmoline and a laser ablation device for imaging the plate.

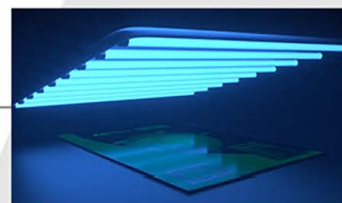
## 1. Back exposure

Expose the back of the plate with UV-A for setting the floor thickness in combi processor



## 2. Laser Ablation

in imaging device such as Esko CDI or Xeikon Thermoflexx



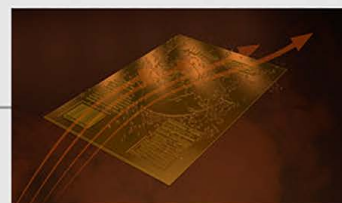
## 3. Main Exposure

UV-A exposure in combi processor



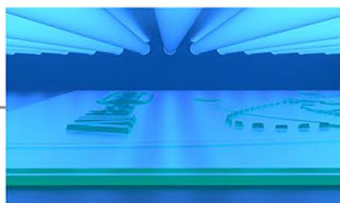
## 4. Washout

Process the plate in combi processor



## 5. Drying

Heated air drying with dryer in combi processor



## 6. Post-exposure

Expose to UV-A and UV-C light again to complete photo curing in a combi processor and to eliminate the tackiness of the plate surface.





## New! Cosmolight® QZ

### Advantages Cosmolight® QZ CTP

### Main applications Cosmolight® QZ CTP

Building on many years of experience, Cosmolight® QZ CTP is the latest development by Toyobo's R&D team in Japan. Cosmolight® has been developed for the narrow-web and wide-web flexo printers which demand the highest possible quality. Being able to outperform high-end solvent plates on print quality and durability, while at the same time reducing processing times, required equipment and operating cost.

#### Flat top dot

In-built oxygen-inhibition layer across Cosmolight CTP range

#### Further Enhancements

**Phenomenal ink transfer**

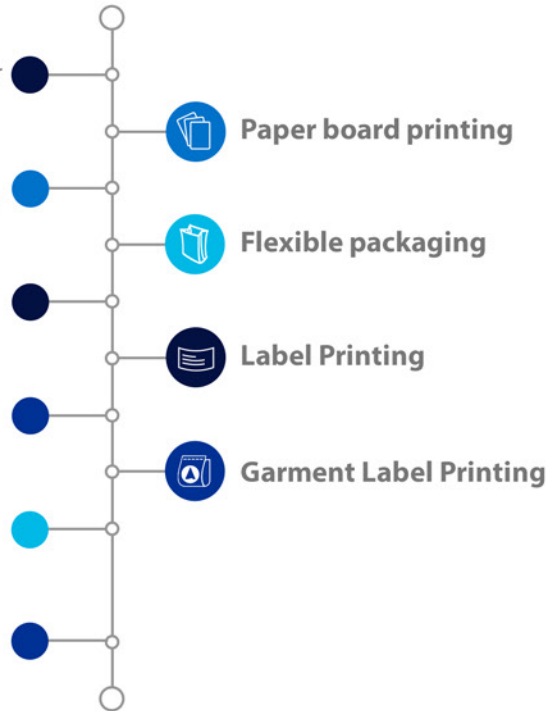
#### Further Enhancements

**Very Stable  
Small Half-Tones**  
even during long-run printing

**Allows for less or no  
dot-grain, providing  
(near) 1:1 reproduction**

**Resistant to  
all types of ink**

**Long lasting**



### Printed on film with Cosmolight® QZ







Cosmolight® QS sets the standard in high quality flexo

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## Cosmolight® QS

### Advantages Cosmolight® QS CTP

Very fast processing times

Durable for water based and solvent based inks

Existing CTP devices can be used

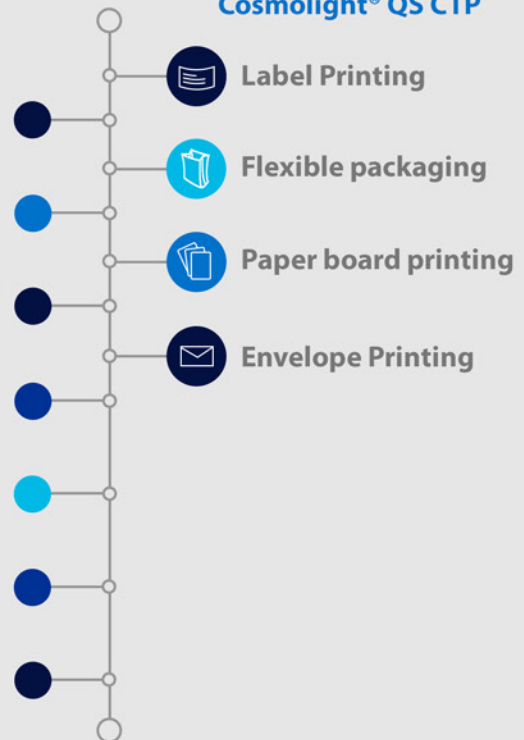
Flat top dot

Very stable small halftones even during long-run printing

Non-tacky

Long lasting

### Main applications Cosmolight® QS CTP



Cosmolight® QH is Toyobo's harder CTP plate. QH is available in 1.14mm and 1.7mm thickness. Cosmolight® QH is good for printing harder, smoother substrates such as film and shrink sleeves. QH can also be used very successfully as an alternative for letterpress plates.

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## Cosmolight® QH

### Advantages Cosmolight® QH CTP

Very fast processing times

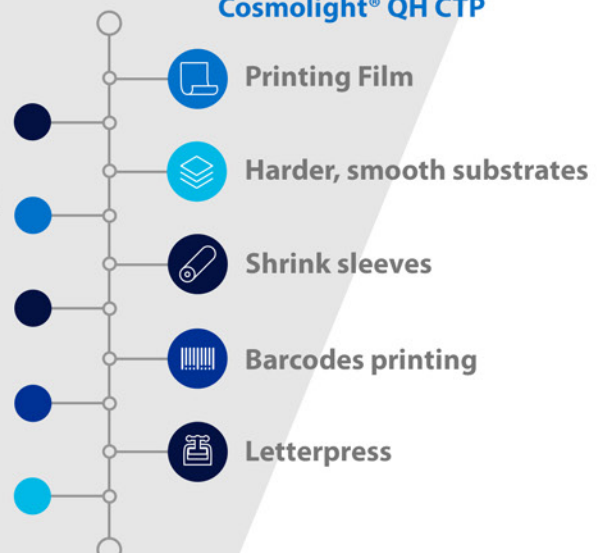
Durable for water based and solvent based inks

Flat top dot

Very stable small halftones even during long-run printing

Long lasting

### Main applications Cosmolight® QH CTP



# Cosmolight® CTP Specification

SPECIFICATION	COSMOLIGHT QZ, QS & QH				
Thickness	1.14 mm	0.045 in	1.7 mm	0.067 in	
Hardness	81, 77, 81 respectively		74, 71, 76 respectively		Shore A
Base Film	0.125				mm
Plate size	635 x 762	762 x 1016	900 x 1200		mm
	25 x 30	30 x 40	35 x 47		in
Screen Image	200 lpi / 1~95%				
Min Fine Line	0.03 mm (0.001")				
Min Isolated Dot	0.20 mm (0.008")				

# Testimonials References for Toyobo Cosmolight® CTP



**Mission Labels has been using Toyobo Cosmolight for years in combination with an Aquasupreme.**

**Dave Humphrey mentions:**

"My personal advice to anyone looking to invest in plate making facilities, is to opt for water wash."

"We are very enthusiastic about the way the Aquasupreme doubles our capacity. It means that we are able to compete and take a much firmer stand in the market. It also means that we have saved a significant amount of costs with this investment."





# Aquasupreme



Cosmolight  
processing equipment  
offered by Allflexo B.V.

# Cosmoline



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