





TOYOBO CO.,LTD.

Photo-functional Materials Department

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Protective Cover Film (Polyester

Slip Coat Layer

Adhesive Layer

Base (Polyester Film)

Photo-sensitive Polymer Laver

Structure

The Environmentally Friendly Way to Process Flexo Plates

We, the pioneer of a water-wash letterpress plate, have commercialized the world's first water-wash flexo plate, Cosmolight™.

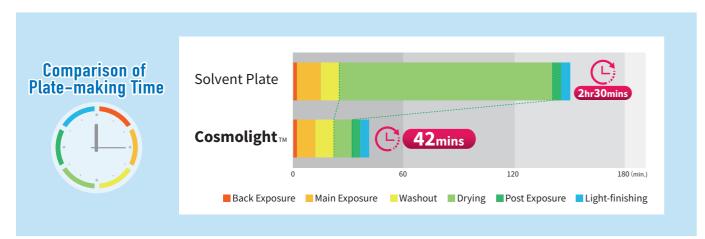
This revolutionary plate eliminates the use of toxic, environmentally damaging solvents from a plate-making process to produce a press-ready plate in one hour or less.

With TOYOBO's core technology in polymerization and modification, Cosmolight™ achieved a feature of water-wash and tolerance against water-based ink, as well as solvent-based, alcohol-based and UV inks.

Feature of Cosmelight.

- 1. Washout in tap water with a small amount of mild detergent.

 The plate makes the working environment free from dangerous hydrocarbon and hazardous washout solvents.
- 2. Plates are "press-ready" within an hour and "press-down time" is dramatically reduced.
- 3. Rich ink transfer and sharp highlight, sometimes referred as contradictory characteristics, are ensured thanks to TOYOBO's unique polymer technology.
- **4.** Solvent-based, water-based, alcohol-base and UV ink can be used with excellent resistance.
- **5.** Excellent ink transfer and resistance with water-based varnish and UV varnish.
- **6.** Excellent plate thickness accuracy, allows "kiss-touch" printing pressure.

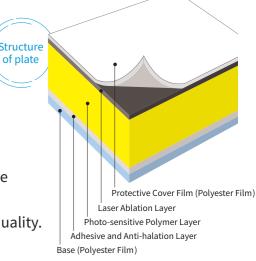


Feature of Cosmelight, CTP

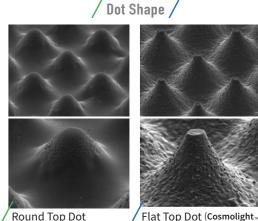
- 1. Solvent-free in the plate-making process, toxic-free for operators.
- 2. Total plate-making time within one hour.
- 3. Built-in flat top dot reproduced with TOYOBO's unique LAMS technology.

It achieves minimum dot gains and consistent print quality.

4. Compatible with various screening technologies.



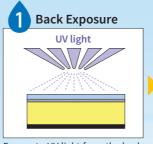




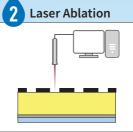
Cosmelight. CTP Plate-making Process

Washout in tap water at 40°C (104°F) with a small amount of mild detergent.

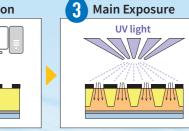
Cosmolight₁ is a solvent-free process that improves a working environment in a plate-making room.



Expose to UV light from the back side to establish floor.



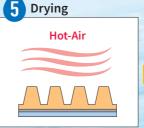
Depict images through an IR laser head to a laser ablation layer directly.



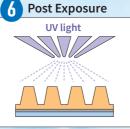
s through an IR Expose to UV light with 360nm a laser ablation wave lengths.



small amount of mild detergent.
Use washout machines for Cosmolight...



Remove water droplets from a plate surface, and dry it in a hot-air dryer.



Expose to UV light to get plate stability.



Expose to UV-C light to eliminate a plate tackiness.

Please follow all the laws and regulations in your district for the treatment of washout solutions.

Cosmelight. Type and Application

		Plate Thickness (mm/inch)	Plate Hardness (Shore A)	Screen Reproducibility	Min. Fine Line (μm)	Min. Isolated Dot (μm)	Application							
							Cloth Tag	Envelope	Folding Carton	Label		Flexible	Coating	
										Paper	Film	Packaging	Aqueous Varnish	UV Varnish
СТР	QZ	1.14 / 0.045	81	200lpi 1∼95%	20	100								
		1.70 / 0.067	74	200lpi 1∼95%	20	100								
	QН	0.95 / 0.037	83	175lpi 1∼95%	40	150								
		1.14 / 0.045	81	175lpi 1∼95%	40	150								
		1.70 / 0.067	76	175lpi 1∼95%	40	150								
	QS	1.14 / 0.045	77	175lpi 1∼95%	30	100								
		1.70 / 0.067	71	175lpi 1∼95%	30	100								
		2.54 / 0.100	65	175lpi 1∼95%	30	100								
		2.84 / 0.112	64	175lpi 1∼95%	30	100								
	QO	1.14 / 0.045	71	150lpi 2∼95%	50	150								
		1.70 / 0.067	60	150lpi 2∼95%	50	150								
		2.54 / 0.100	52	150lpi 2∼95%	50	150								
		2.84 / 0.112	50	150lpi 2~95%	50	150								
	QT	1.14 / 0.045	77	150lpi 2~95%	30	200								
		1.70 / 0.067	71	150lpi 2~95%	30	200								
Analog	NZ	1.14 / 0.045	81	175lpi 1~95%	30	100								
		1.70 / 0.067	74	175lpi 1~95%	30	100								
	NH	0.95 / 0.037	83	175lpi 1~95%	40	100								
		1.14 / 0.045	81	175lpi 1~95%	40	100								
		1.70 / 0.067	76	175lpi 1~95%	40	100								
	NS	1.14 / 0.045	77	175lpi 1~95%	30	100								
		1.70 / 0.067	71	175lpi 1~95%	30	100								
		2.54 / 0.100	65	175lpi 1~95%	30	100								
		2.84 / 0.112	64	175lpi 1~95%	30	100								
	NEO	1.14 / 0.045	71	150lpi 2∼95%	50	150								
		1.70 / 0.067	60	150lpi 2~95%	50	150								
		2.54 / 0.100	52	150lpi 2~95%	50	150								
		2.84 / 0.112	50	150lpi 2~95%	50	150								
	NTE	1.14 / 0.045	77	150lpi 2~95%	30	200								
		1.70 / 0.067	71	150lpi 2~95%	30	200								