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Founder Flexo Miracle HD Screening Introduction

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Founder Information Industry is a leader in the information technology, providing comprehensive solutions, including IT services, software, hardware, and data operation.

Beijing Founder Electronics CO., Ltd.

Content



- FlexoRound Screening
- FlexoRound Balance Screening
- Miracle Cell technology
- Benefits
- How to Setup Flexo Screening in EagleRIP

FlexoRound Screening



Advantage

- Irrational angle technology, completely solves the visual problem coming from rational angle technology
- Improves the rosette pattern created by overprinting multiple separations, gray level is exquisite and smooth

FlexoRound Screening



New screening angle technology

FlexoRound 1





FlexoRound Balance Screening FOUNder

 On the highlight, based on AM screening technology, we adopt dots with different sizes – small, medium and large, increase gray level. As the dot percentage increases, the size of each individual dots increases accordingly, and they all reach the same size at certain dot percentage, to improve the smoothness and texture of highlight in flexo printing.



 On highlight, all dots of small, medium and large support each other during washing plate, this special technology can break the limitation of highlight dots in flexo printing, and get a smooth transitions to 0%.



Increase ink density of shadow in flexo printing

 On the shadow, based on FM screening technology, adds extract tiny dots in the shadow, increases the ink surface tension by these tiny dots, and increase the ink density of shadow, this special technology greatly improves the shortage of insufficient solid ink of flexo printing, and get a excellent print quality.

Miracle cell setting:

- Miracle cell size (0-5 pixel),
- Miracle cell density (0-50%),
- End percentage of miracle cell (50-100%),
- Miracle cell type (single: cell density is fixed, gradient: cell density is variable in different dot percentage)

Miracle Cell technology

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End value of miracle cell





Miracle cell type sets to single, density of extract tiny dots in different dot percentage is fixed



80%

90%

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Miracle Cell technology

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Miracle cell type sets to gradient, density of extract tiny dots dots in different dot percentage is variable



Different miracle cell density setting



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Benefits



Founder Miracle Flexo HD technology provides a high quality flexo printing

- 1. Achieves high quality of flexo printing with existing press equipment, no complex and expensive machine and working method changed.
- 2. Improves quality of highlights and shadows, gets higher solid ink density.
- 3. Better reproduces dot ranged from 0%-100%.
- 4. Smoother flat tones, texts, gradients and solids.
- 5. Implements highest image resolution to 9600dpi, getting more accurate images, smoother tints and a greater color gamut. (Supports 2400/2540/2800/3200/3600/4000/4800/5080/5600/6000/7200/8000/ 9600dpi)



How to Setup Flexo Screening in EagleRIP

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- 1. Select TIFF template
- 2. Select dot shape (FlexoRound 1/2 or FlexoRound Balance 1/2)
- 3. Select frequency

RIP Setup							
Screen RIP Color Management Mark Misc Help							
Resolution 4000.0*4	000.0	~	Color Mode		СМҮК	💌 KCMY 💌	
X 4	,000 🕀 Y 🚺 4,00	00	Pixel Bits		Halftone	. 💌	
🗹 Override frequenc	y in job 🛛 🗹 Override d	Dverride dot shape in job Halft		Halftone Levels			
🗹 Override angles in job 🛛 🗹 Precision Screening 🗧 Zone Screen Firs				reen First			
😑 Miracle Cell							
Miracle Cell							
Size(pixel) 0 D	ensity(%) 0	End Value(%) 🚺	Туре	Single 💽			
Dot Size							
Shadows dot size(um)	0 Highlights	s dot size(um) 🛛					
Separation Setup							
Output	Separation	Dot Shape		Frequency	A	ngle	
	Cyan	FlexoRound 1	~	150.0	8	2.5	
	Magenta	EagleFAM Roun	d 🖾	150.0	5	2.5	
	Yellow	EagleEM (Secon	d Order) 150.0		7	.5	
	Black	EagleAM Pound		150.0	22.5		
		EagleAM Round	bund				
Spot Color	Custom	EagleAmin dreik	Jana	ſ	v	Edit Setup	
		FlexoRound 2		1			
Calibration Curve	Default	FlexoRound Balance 1		ce 1		Preview	
Intended Press Curve	Default	FlexoRound Bal	ance 2 🚽		• (Preview	
Actual Press Curve	Default			[• (Preview	



FlexoRound Screening



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- 1. Select TIFF template
- 2. Select dot shape (FlexoRound 1/2 or FlexoRound Balance 1/2)
- 3. Check "Miracle Cell" option, modify the setting if necessary

4. Miracle Cell setting: miracle cell size (0-5 pixel), miracle cell density (0-50%), end percentage of miracle cell (50-100%), miracle cell type (single: cell density is fixed, gradient: cell density is variable in different dot

percentage)

RIP Setup					x	
Screen RIP Color Management Mark Misc Help						
Resolution 4000.0*	4000.0	~	Color Mode	CMYK 💌 🛛	KCMY 💌	
x	4,000🕀 Y 🦳	4,000	Pixel Bits	Halftone	~	
🗹 Override frequer	ncy in job 🗹 Ov	erride dot shape in job	Halftone Levels	256		
🗹 Override angles	in job 🗹 Pre	ecision Screening	😑 Zone Screen First			
Miracle Cell						
-Miracle Cell-						
Size(pixel) 3	Density(%) 10	End Value(%) 80	Type Gradient			
-Dot Size-					J	
Shadows dot size(un	n) 🚺 Hij	ghlights dot size(um) 0				
Separation Setup						
Output	Separation	Dot Shape	Frequency	Angle		
	Cyan	FlexoRound 1	150.0	82.5		
	Magenta	FlexoRound 1	150.0	52.5		
	Yellow	FlexoRound 1	150.0	7.5		
	Black	FlexoRound 1	150.0	22.5		



Miracle Cell technology





- 1. Supported resolution and frequency of Flexo screening
- 2. The frequency in red at below table does not support miracle cell function

Resolution	Frequency (LPI)					
(DPI)	FlexoRound 1 / 2	FlexoRound Balance 1 / 2				
2400	40/50/65/87/100/110/120/133/150/165/175/200	133/150/165/175/200				
2540	40/50/65/87/100/110/120/133/150/165/175/200	100/110/120/133/150/165/175/200				
2800	40/50/65/87/100/110/120/133/150/165/175/200	133/150/165/175/200				
3200	40/50/65/87/100/110/120/133/150/165/175/200	133/150/165/175/200				
3600	40/50/65/87/100/110/120/133/150/165/175/200	133/150/165/175/200				
4000	40/50/65/87/100/110/120/133/150/165/175/200	133/150/165/175/200				
4800	40/50/65/87/100/110/120/133/150/165/175/200	133/150/165/175/200				
5080	40/50/65/87/100/110/120/133/150/165/175/200	133/150/165/175/200				
5600	40/50/65/87/100/110/120/133/150/165/175/200	175/200				
6000	40/50/65/87/100/110/120/133/150/165/175/200	175/200				
7200	40/50/65/87/100/110/120/133/150/165/175/200	175/200				
8000	40/50/65/87/100/110/120/133/150/165/175/200	175/200				
9600	40/50/65/87/100/110/120/133/150/165/175/200	175/200				

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Create flexo curve if necessary

Add							×
Calibration Help							
			0				
Resolution			4				
4000.0*4000.0 💌		2	5				
x 4,000		3	6	[
Y 4,000		(100	100		(
		\bigcap	\bigcap	((
Misc		(\bigcap	$\left(\right)$		$\left(\begin{array}{c} \\ \end{array} \right)$	
Negative False 💌 X: 104.0	Y: 82.0						
Separation	Cyan		💌 Cu	irve Name	TIFF(4000.0)	
Add	C 🗶 Del	🕞 🗇 Copy] 📿	Reset	🗌 🗋 Load	Eload	1 3.0 Curve
🗹 All Curves Use the Same Data 🗹 Flexo Curve 🛛 Direct Curve 🛛 🔡 Save As 🔪 🥌 🍪 Test 🥏							
OK Cancel							



Load the flexo curve in the template

RIP Setup				×		
Screen RIP Color Management Mark Misc Help						
Resolution 4000.0*4	000.0	~	Color Mode	СМҮК 💌 КСМҮ 💌		
X 4	,000 🕀 Y 🌔	4,000	Pixel Bits	Halftone		
🗹 Override frequenc	y in job 🛛 🗹 Overri	de dot shape in job	Halftone Levels	256		
🗹 Override angles in job 🛛 🗹 Precision Screening			😑 Zone Screen First			
Miracle Cell	ensitv(%)	End Value(%)	Type Single	<u></u>		
-Dot Size			i jes joingie			
Shadows dot size(um)	0 Highli	ghts dot size(um) 🚺				
-Separation Setup						
Output	Separation	Dot Shape	Frequency	Angle		
	Cyan	FlexoRound 1	150.0	82.5		
	Magenta	FlexoRound 1	150.0	52.5		
	Yellow	FlexoRound 1	150.0	7.5		
	Black	FlexoRound 1	150.0	22.5		
Cost Color	Countrast					
Spot Color	Custom			Eur Setup		
Calibration Curve	TIFF(4000.0)			Preview		
Intended Press Curve	Default			Preview		
Actual Press Curve	Default			Preview		

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Thanks

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