

INTRODUCTION

Our company's PS plates have good plate life, high color contrast, and perfect dot reproduction abilities. In order to make the plate reached the best printing state, please use it under the following requirements.

1. Exposure level

Aided by the Fuji Fifteen-steps step guide (recommended) or other compatible step guide, then under the correct developer concentration, temperature and the developing time, you should control the exposure level between the first two steps white and the third step shallow appearance. For example:

OUR STANDARD

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

Positive Type (the first two steps clear) FUJI fifteen-steps step guide

(1) Exposing time

The exposing time under 3000W Iodine gallium lamp at 1 meter is about 75S. If the power of the lamp and the distance to the plate are different, please expose the plate abiding the data in the following table.

Before Exposing, please notice the efficiency of the vacuum-pumping, the film must be engaged with the PS plate without any cracks, or it will produce some halation, then the halation will influence the dot reproducing and decrease the plate life. So please keep the vacuum degree below 20Kpa.

The lamp distance to the plate must be longer than the diagonal line, and the lamp aligns to the plate positively. Or it will produce the halation and the exposure stage of plate will be non-homogeneous.

When the Iodine gallium have been used for a long period, because of the ageing processing, you should notice to elongate the exposing time. When the exposing time is 20% longer than the normal exposing time, so as not to influence the working efficiency, you should consider to replace the Iodine gallium lamp.

2. Developing

Developer: Fuji DP-4 developer or our company's ARFA-II developer

Temperature: 25±1℃ Time of Developing: 30+/-10s

The developer's dilution ratio:

Automatic plate processor: 1:6

Manual plate processor: 1:10

Notes: Our PS plates required weak alkalinity developing; the developer's concentration, temperature and the developing time should be paid much attention, or it will decrease the run length and the printing efficiency. On the developer or developing powder which are produced by other companies, please use it under the condition they required to achieve our standard.

3. Correction

Please use the image remover to wipe off the unwanted stains. And be sure not to damage the image. When the remover remains on plate for 45S, wipe off it with a piece of soft cloth, then wash it clear by water. Or it will be easily to be dusted.

4 Gumming

The gum must be diluted under the manufacturer's requirements, and the layer should be well-distributed. If the layer is too thin, it will be easy to be dusted and be scratched; if the layer is too thick, the plate is not easy to get the ink, and the text is easy to lose. And if you gum the plate automatically, please control the dry temperature at 60°C.

5 Baking

Baking temperature(Recommended): 230–250°C

Baking time: 6–8 minutes

After baking, please cool the plate naturally, don't cool it by wind or water, or it would be distorted.

6 Storage

Before exposing: The plates should be stored in the cool (10–30°C), dark and dry place.

After exposing: To avoid the light, and storing under the safety yellow light.

7 The reason of problems may happen and solutions

Problems	Examine process	Reasons	Solutions
Surface breezing	Exposing handling	Plates have been wrinkled.	improve the way of handling the plate
	Exposure	Light source is too closed to the plate.	Adjust the distance between lamp and the plate longer than plate diagonal.
		There are dusts on the film and the glass on the exposing machine.	Clean them with specialized cleanser.
Exposure Non-homogeneous	Exposure	Light source is too closed to the plate.	Adjust the distance between lamp and the plate longer than plate diagonal.
		Light source do not positive align to the plate.	Adjust the light source positive toe the plate.
Text Fragment	Exposure	Dust on the glass of the exposing machine.	Clean them with specialized cleanser.
Low run length	Exposure	Exposure degree haven't achieved (Negative plate)	Check the real exposure degree by step guide, increase the exposing time.
	developing	overdeveloped	Check the dilution rate, temperature of the developer, and the developing time
	Adjust the reel roll pressure	The pressure between plate and rubber sheet is too high.	Decrease the pressure , and check it scheduled
		The pressure between ink-roll and the plate is too high.	Decrease the pressure, and check it scheduled
	Rubber sheet	The elastane of the rubber sheet is weak	Replace the rubber sheet
	Handling	Overexposed(Positive plate)	Check the real exposure degree by step guide, decrease the exposing time.
	Fountain solution	The concentration of the solution is changed	Using the supply point.
Plate splitted	Lock-up	Plate is been distorted and splitted when locking up	Be careful to lock up
	Handling	Plate has been wrinkled	Be careful to handle
Ink shortage	gumming	Gum is too thick or not well distribute.	Diluted the gum, and find a good way too make the layer well distributed.
	Baking	Baking gum is too dense	Well-distribute the baking gum on the surface

	Adjust the printing pressure	The pressure of the plate cylinder—blanket cylinder and impression cylinder –blanket are low.	Increase the pressure, and check it scheduled.
		The pressure of the plate cylinder—ink roll is low.	Increase the contacted pressure, and check it scheduled.
		the contacted pressure of the fountain solution roll is not correct.	Adjust the pressure.
	Rubber sheet	Rough and distorted	Check it on schedule
	Fountain solution	Too much solution	Adjust the solution
Net dots expanded	Exposure	overexposed (negative plate) insufficient exposure (positive plate)	Check the exposure degree
	developing	Deficit developing (negative plate)	Check the concentration, temperature of the developer and the developing time.
	Impression pressure adjustment	The pressure of the plate cylinder—blanket cylinder and impression cylinder –blanket are high.	Check the impression pressure on scheduled.
	the adjustment of the ink in the ink fountain	Too much ink	Decrease the ink on the ink roll
Net dots lost	Exposure	Overexposed(positive plate)	Check with the step guide
	developing	overdeveloping (positive plate)	Control the developing by step guide , and check the activity of the developer.
	Impression pressure adjustment	The pressure of the plate cylinder—blanket cylinder and impression cylinder –blanket are low.	Check the impression pressure on scheduled
Plate fuzzified	Fountain solution	No enough fountain solution	Increase the fountain solution
Plate dusted	exposure	Exposing time is too long (negative plate)	Check the real step guide.
		Deficit exposure (positive plate)	Check the step guide
	Developing	Deficit developing (positive plate)	Control the developing by step guide , and check the activity of the developer.
	correction	The remover have not been washed completely	Cleaning the plate completely
		Have not being gummed	Gumming when mending plate
	gumming	The gum is too thin	Make the gum been thick
	Baking	The baking gum is too thin	Adjust the amount of the baking gum
	Adjust the pressure of the impression cylinder	The indirect pressure of the ink roll is too high.	Decrease the pressure and check it on schedule
	Fountain solution	Not enough fountain solution	Add more fountain solution
		The dilution rate of the fountain solution is too low	Heighten the dilution rate
	the ink in the ink fountain	Too much ink	Reducing the ink on the ink roll
	Starting to print	Plate had been splitted and spotted.	When plates are treated by cleanser, and wash the cleanser up completely by water.
	Rubber sheet	The rubber sheet is aged.	Replace the rubber sheet

The ink color	Adjust the pressure of the ink roll	The roll is aged	Check the pressure of the roll on scheduled
Double image	Adjustment of the roll pressure	The pressure of the fountain solution roll is not correct	Check the pressure of the roll on schedule
	Fountain solution	Too much fountain solution	Reduce the fountain solution
The ink color is shallow	Fountain solution	Too much fountain solution, or the ink is not good.	Reduce the fountain solution.