

# Keen Plate performance test results using a customer order

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# Content

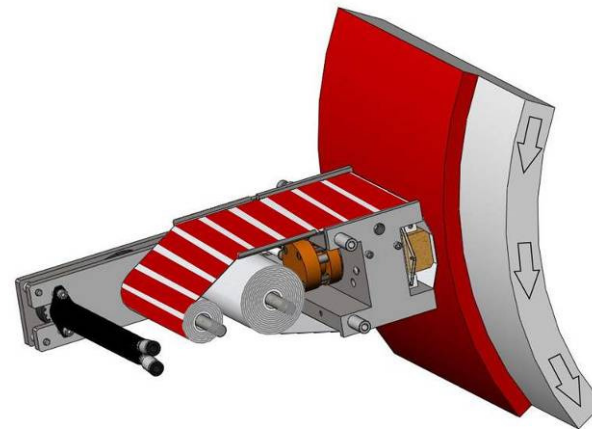
- What is Kleen Plate?
- Test Procedure
- Test Results:
  - Colour variation
  - Start-up sheets
  - Filling
  - Defects full tone
- Validation of Kleen Plate claims

**You are too late cleaning print plates  
when you notice defects in the printed image!**

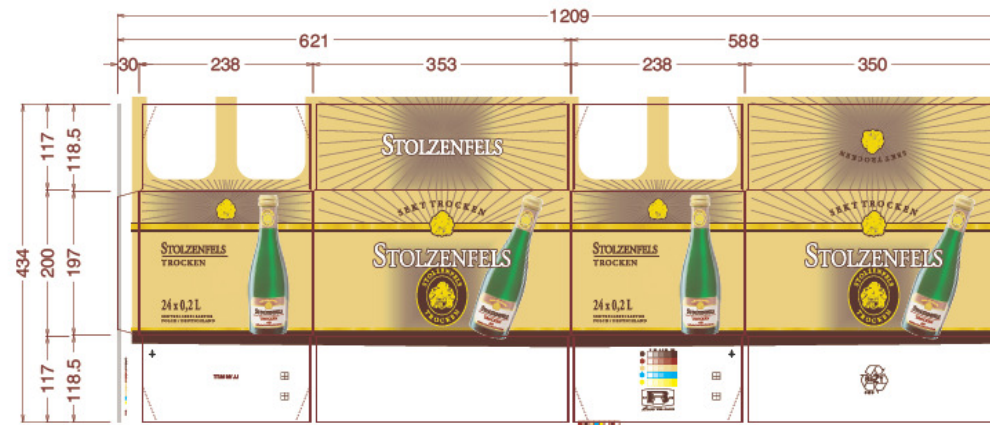


# What Is Kleen Plate?

- Kleen Plate is continues cleaning the flexo printing plate by traversing while the machine is printing
- Kleen Plate removes dirt and dried ink from the print plate that can cause print defects



# Test Procedure



- A production order was used
- Sheets were produced with and without using Kleen Plate
- Samples for evaluation were taking during production:
  - Sheet 1 – 30 are used for evaluation
  - Next top sheet of produced bundles with sheet interval 25. Thus sheet 51, 76,... 226 are used for evaluation

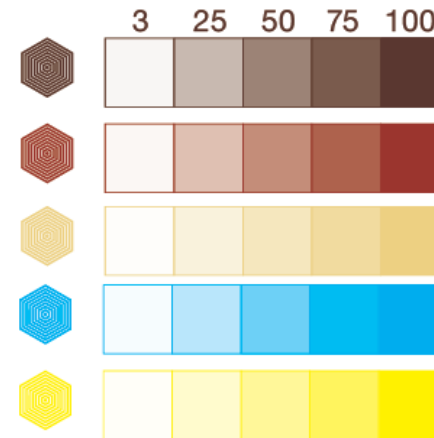


# Test Results

## Properties evaluated from samples taken:

- Colour variation
- Colour change during start-up
- Defects full tone
- Filling of halftone area

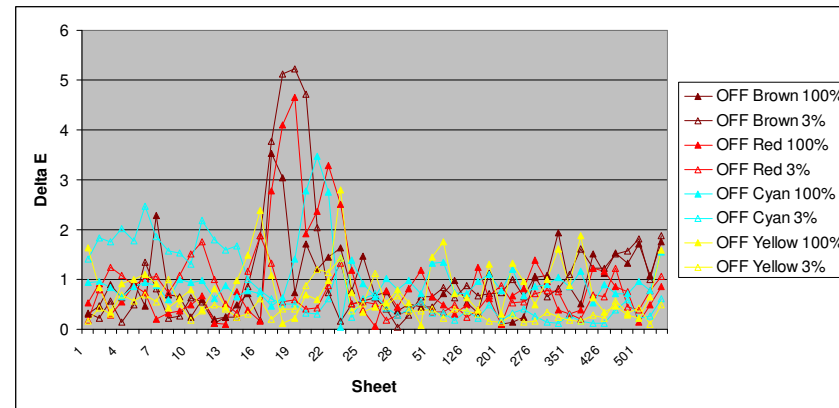
Evaluation areas of design



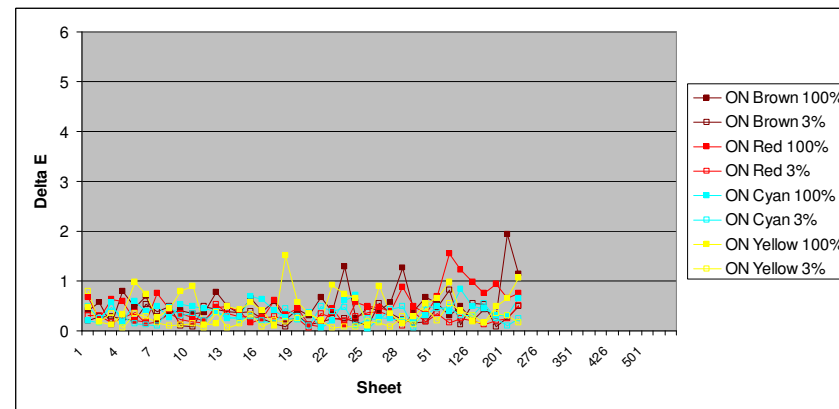
# Colour variation Trend

- The colour variation trend shows a stable colour when using Kleen Plate

Kleen Plate OFF



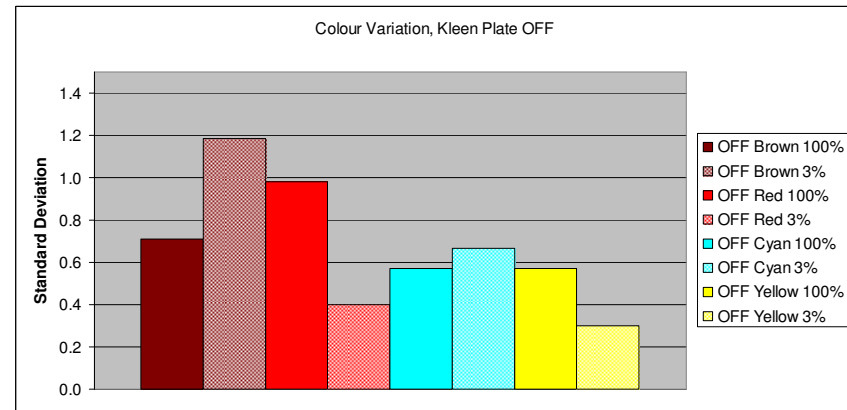
Kleen Plate ON



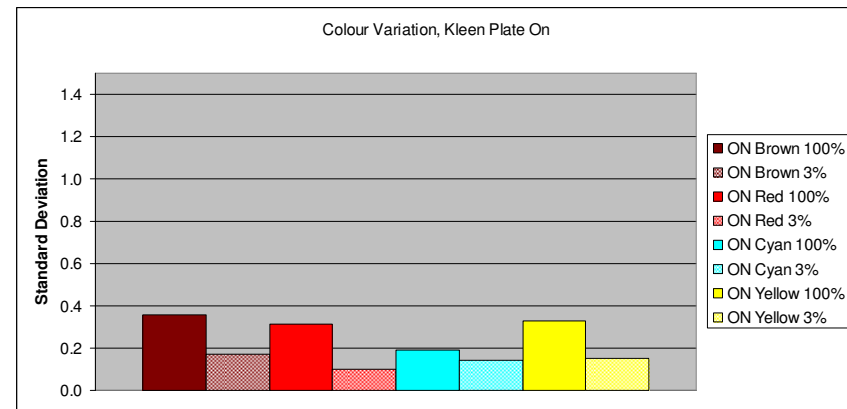
# Colour variation, Standard deviation

- Colour Variation is low when using Kleen Plate!

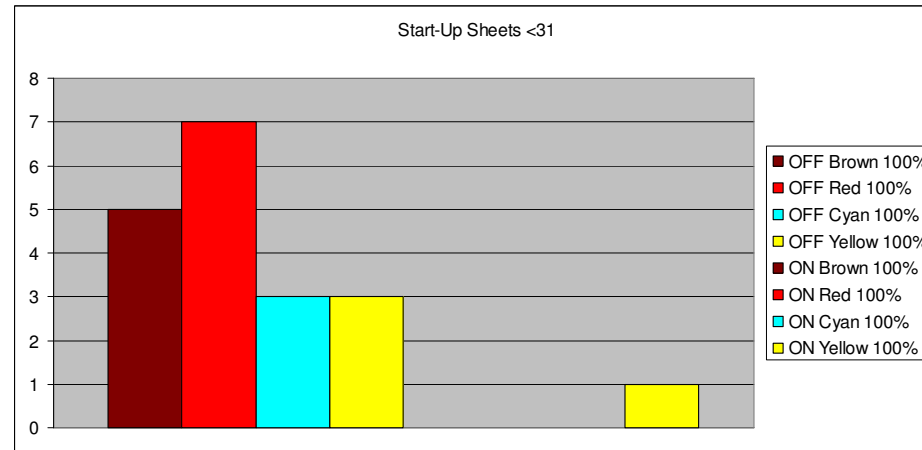
Kleen Plate OFF



Kleen Plate ON



# Colour change during start-up

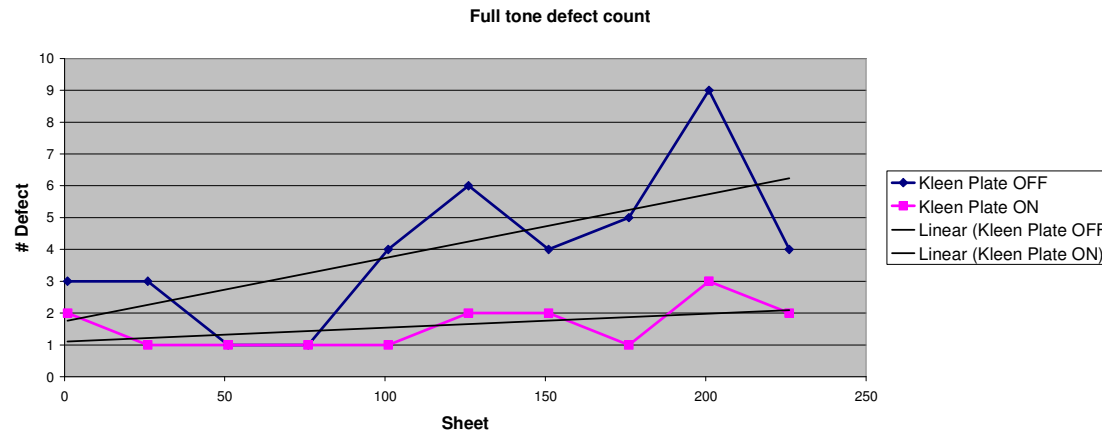


- Less Sheets are needed during start-up when using Kleen Plate





# Defects full tone



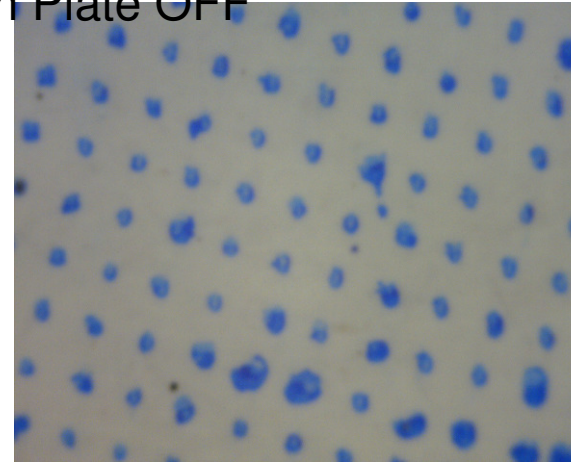
- Significant less defects occur when using Kleen Plate



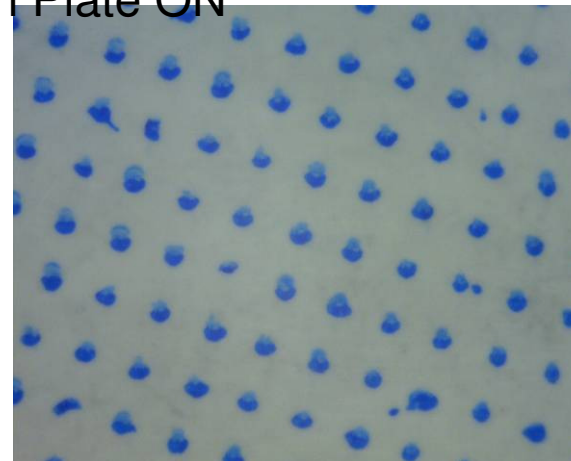
# Filling of halftone area

- Images of cyan 3% coverage area taken from sheet 26 using and not using Kleen Plate
- Significant less smearing of ink when using Kleen Plate

Kleen Plate OFF



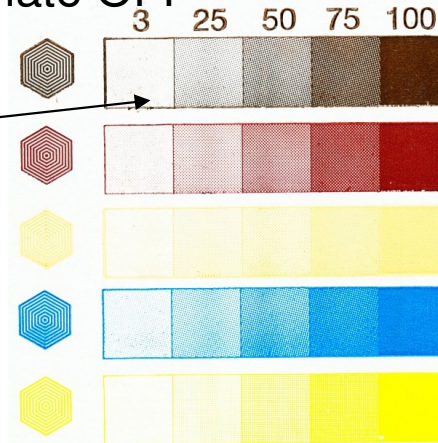
Kleen Plate ON



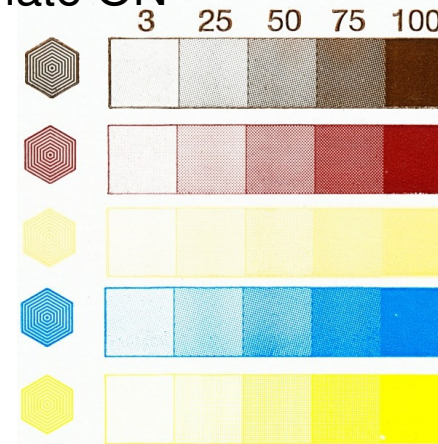
# Filling of halftone area

- Sheet 226!
- No “fuzzy edges” when using Kleen Plate

Kleen Plate OFF



Kleen Plate ON



# Validation Kleen Plate Claims

<b>JB Machinery Claim</b>	Confirmed	Likely Valid	Not Yet Confirmed
Doctor Blade Banding or Striping			<input checked="" type="checkbox"/>
Poor Ink Release when not using	<input checked="" type="checkbox"/>		
Dry Ink Feed Back to Anilox Rolls (Ghosting)	<input checked="" type="checkbox"/>		
Colour Variation / Dirty Image	<input checked="" type="checkbox"/>		
Plate Damage (due to frequent washing)		<input checked="" type="checkbox"/>	
Significant waste reduction	<input checked="" type="checkbox"/>		
Removes Hickies (paper dust) continuously	<input checked="" type="checkbox"/>		
Minimizes dot gain	<input checked="" type="checkbox"/>		
Colour variation reduction	<input checked="" type="checkbox"/>		
Minimizes bridging & plugging, optimizing image reproduction	<input checked="" type="checkbox"/>		
Minimizes tack, sheet wraps and anilox cell feedback		<input checked="" type="checkbox"/>	



**A full report about this Kleen  
Plate test is available**

**Thank you for your attention**

