Trendsetter 400/800 II base, AL, CL, Spectrum

Installation Test Procedure

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Creo Inc.
3700 Gilmore Way
Burnaby, BC
Canada V5G 4M1
(604) 451-2700

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Revision History

Revision	Date	Author	Comments
N/A	26 Apr 2005	Janet Waterman	Installation test procedure that supports customer installation checklist (732-00049A-EN-A)

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1. BACKGROUND

Upon installation of the Trendsetter® 400/800 II base, AL, CL, Spectrum output device, the Creo service engineer must perform the Installation Test Procedure in the presence of a customer representative, to verify and demonstrate that the device meets the requirements for throughput and image quality.

As each test is completed successfully, the Creo service engineer fills out the appropriate section in the *Trendsetter 400/800 II Installation Test Checklist including AL, CL, Spectrum options* document (document number732-00049A-EN-A). When all test procedures are completed successfully and the rest of the installation test checklist is completed, the Creo service engineer records the date on that document, and both the service engineer and the customer representative sign it.

A copy of the checklist should then be returned to Creo for inclusion in the site information file.

2. PLATE THROUGHPUT TEST PROCEDURE

2.1 Plate Throughput Guidelines

Plate Size	Trendsetter Speed	Resolution	Throughput[1] (Plates Per Hour)		
			Base	AL	CL
838 mm (33 in.)	V speed – TS400 II	2400 dpi	36	41	41
1030 mm (40.5 in.)	V speed – TS800 II	2400 dpi	30	34	34
1030 mm (40.5 in.)	F speed – TS800 II	2400 dpi	22	24	24
838 mm (33 in.)	S speed – TS400 II	2400 dpi	19	21	21
1030 mm (40.5 in.)	S speed – TS800 II	2400 dpi	15	16	16

2.2 Plate Throughput Test Procedure

To calculate the approximate number of plates exposed in one hour:

1. Select the appropriate test file from the CD included in the CPTT CD kit (part number 658-00006A), so that it can be processed directly through Print Console.

[1] Throughput calculations are based on Trendsetter MCE Controlled Release 3.3. Throughput figures can only be achieved if the conditions outlined in step 4 on page 2 have been met.

File Name	Size	File Format	Resolution	Available Screening	Target
BTF_19x25_V2[2] (benchmark)	4-up	TIFF	2400 dpi	Round, 170 LPI	Throughput
BTF_25x38_V2 (benchmark)	8-up				

2. If different screening or dot shape is required, use the PDF version of the BTF files through Prinergy®, Prinergy Evo, or Brisque®.

   See http://techplanet.creo.com/idoc/72/3726A/A/72-3726A-A-PR01.PDF for information about how to process a file from Brisque.

3. If required, RIP/refine and process the image.

   The final image size should match the plate size at the site.

4. Ensure a maximum throughput as follows:

   - Identify the theoretical plate throughput per plate type/platesetter speed according to the *Media Database* spreadsheet

   (http://techplanet.creo.com/consumables/media/content/docs/CTP_MediaDataBase.xls).

   - For 8-up, measure throughput with a 1030-mm (40.5-in.) plate. A plate with a longer subscan requires more exposure time.
   - For 4-up, measure throughput with a 838-mm (33-in.) plate.
   - Ensure that Prinergy, Prinergy Evo, or Brisque is set to the correct workflow configuration.
   - Make sure that the **`drum speed`** parameter is correct.

     Stated throughput is based on media sensitivity of 130 mj/cm^2. Lower sensitivity media will have a lower throughput. For correct drum speed setup, refer to the *Media Database* spreadsheet

   (http://techplanet.creo.com/consumables/media/content/docs/CTP_MediaDataBase.xls).

   - Make sure that all loading parameters are set to their factory values.
   - Set verbose mode in the firmware to **`customer`**. Use **`Verbose default`** in Service Shell.
   - Send the same test image file from Brisque, Prinergy or Prinergy Evo.

   Third-party workflow may give lower than expected throughput results.

[2] Files are suitable for printing, benchmark tests and demonstrations.

5. Calculate the number of plates exposed in one hour as follows:
    a. Expose four separations of the required benchmark files:

    - For 4-up, use:

      BTF.BTF_19x25_v.1A.C.TIF
      BTF.BTF_19x25_v.1A.K.TIF
      BTF.BTF_19x25_v.1A.M.TIF
      BTF.BTF_19x25_v.1A.Y.TIF

    - For 8-up, use:

      BTF_25x38_v.1A.C.TIF
      BTF_25x38_v.1A.K.TIF
      BTF_25x38_v.1A.M.TIF
      BTF_25x38_v.1A.Y.TIF

    b. As soon as the first plate has unloaded, measure the time (in seconds) it takes until the fourth plate has unloaded.

    c. Use the time (in seconds) you measured for the three plates in the following formula:

      3600 (number of seconds in one hour) **/ (Time taken to expose three plates** / **3** (number of plates))

      For example, if you expose three plates in 400 seconds, the calculation would be:

      3600 / (400/3) = 3600 / 133.33 = 27 plates per hour

3. PLATE IMAGE QUALITY INSPECTION PROCEDURE

These procedures are designed to verify and demonstrate:

- Image quality
- Halftone uniformity

1. Select a file to expose from the Creo plate test target (CPTT) file.

   Choose the file type, resolution, size, and screen option that best suits your requirements for image quality inspection. For detailed information, see http://techplanet.creo.com/consumables/media/content/docs/731-00176A-EN.pdf.

2. File names appear differently in Brisque. To view a list of how CPTT files appear in Brisque, see

http://techplanet.creo.com/consumables/media/content/docs/CPTT_CD_set_file_directory.pdf

3. Expose the CPTT file you have selected.

4. To inspect the image quality, check the numbered elements on the exposed plate.

   The numbers corresponding to each element are described in the following table.

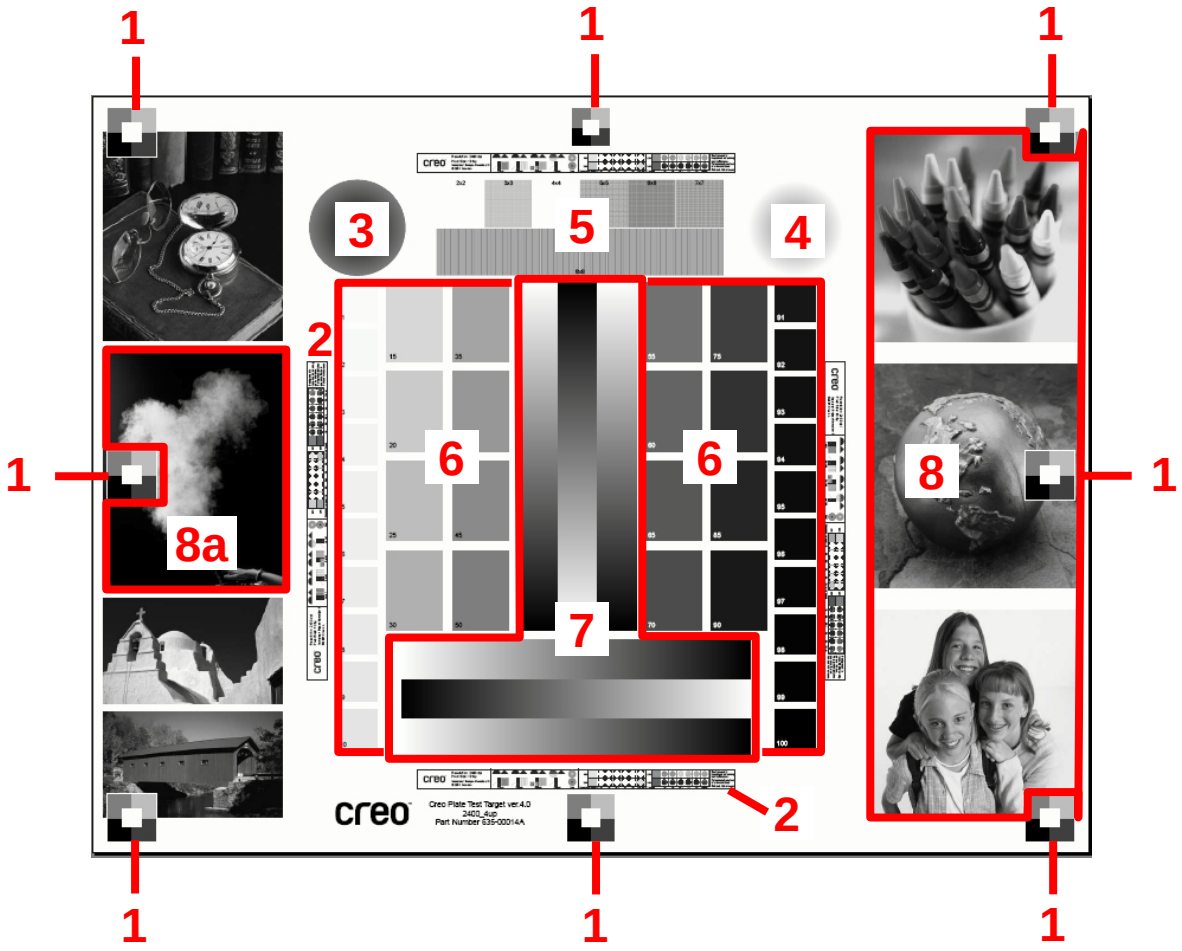


Plate Test Target Element	Description
1. Uniformity patches	Used for testing the uniformity of the processing line across the plate
2. CTTP test strip	Used for testing the tone scales
3. Radial vignette 50% to 100%	Used to ensure no shade stepping is present (a smooth transition from 50% to 100%)
4. Radial vignette 0% to 50%	Used to ensure no shade stepping is present (a smooth transition from 0% to 50%)
5. Checkerboard patterns	Used to verify/compare the image quality of the checkerboards. Used when tuning the head with internal plot patterns.
6. Tone scales	Used for visual inspection to confirm the image quality is acceptable at the level of Staccato® screening that the customer has purchased
7. Vertical and horizontal vignettes	Used to ensure no shade stepping is present (a smooth transition from 0% to 100%)
8. Grayscale images	Used during the sales cycle by Marcom. These images give the customer an idea of what they can expect when they run their jobs using Staccato screening.
8a. Grayscale images: Smoke test image	Used as a critical imaging quality test by the VIP and consulting services group

For additional information, see *Using the Creo Plate Test Target* at http://techplanet.creo.com/consumables/media/content/docs/731-00176A-EN.pdf.

4. SPECTRUM PROOFING THROUGHPUT TEST PROCEDURE

4.1 Proofing Throughput Guidelines

For proofing throughput specifications, see the appropriate Spectrum Proofing option + proofing media specifications document on TechPlanet:

http://techplanet.creo.com/proofing/trendsetter_spectrum/nav/overview.htm#specs

4.2 Proofing Throughput Test Procedure

1. Load the 4-up or 8-up multiproof cassette with two sets of media.
2. Process the following files as one proofing job in Print Console:
   - For 4-up, use:

     BTF.BTF_19x25_v.1A.C.TIF
     BTF.BTF_19x25_v.1A.K.TIF
     BTF.BTF_19x25_v.1A.M.TIF
     BTF.BTF_19x25_v.1A.Y.TIF

   - For 8-up, use:

     BTF_25x38_v.1A.C.TIF
     BTF_25x38_v.1A.K.TIF
     BTF_25x38_v.1A.M.TIF
     BTF_25x38_v.1A.Y.TIF
3. Measure the time from when the first donor is loaded to the time when the receiver is unloaded.

Proof Size	Media Type	Proofing Time (Target)
4-page	Dupont Waterproof® Thermal, Gen II	AM and Staccato 25 20 minutes
		Staccato 20 25 minutes
	KPG Matchprint, Fuji FinalProof	20 minutes
8-page	Dupont Waterproof Thermal, Gen II	AM and Staccato 25 30 minutes
		Staccato 20 40 minutes
	KPG Matchprint, Fuji FinalProof	32 minutes

All times are for a four-color proof including load/unload and imaging, but excluding network file transfer, RIP, and screening time.

5. PROOFING IMAGE QUALITY INSPECTION PROCEDURE

1. Select a 20-micron Staccato or AM150 version to expose from the Creo plate test target (CPTT) file:

   - For AM150 screening, use:

     CSTTver1.0.150am.C.TIF / CSTTver1.0.150am.M.TIF / CSTTver1.0.150am.Y.TIF / CSTTver1.0.150am.K.TIF for 150LPI

   - For 20-micron Staccato, use:

     CSTTver1.0.20m.C.TIF / CSTTver1.0.20m.M.TIF / CSTTver1.0.20m.Y.TIF / CSTTver1.0.20m.K.TIF

2. If other screening is required, process the PostScript® file (**CSTTver1.0.zip**) through the customer's workflow (Prinergy, Prinergy Evo, Brisque, or third-party).

3. Laminate the proof.

4. To inspect the image quality, check the numbered elements on the laminated proof.

   The numbers corresponding to each element are described in the following table.



Proof Test Target Element	Description
1. Uniformity testing	100% coverage on the square marked 1 or any other solid square
2. Tonal range	The lightest patches (1% to 10%) are printed and the darkest are not solid (90% to 99%).

Proof Test Target Element	Description
3. Registration	Inspect the four-color registration marks at all four corners. The maximum registration error between any of the four colors must be less than 0.05 mm (0.002 in.).

For additional information, see *Using the Creo Plate Test Target* at http://techplanet.creo.com/consumables/media/content/docs/731-00176A-EN.pdf.