

Trendsetter NEWS

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

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1. BACKGROUND

Upon installation of the Trendsetter NEWS 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 NEWS Installation Test Checklist* document (document number 732-00048A-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. TEST FILES

The following test files are available from the Creo Plate Test Target (CPTT) page on TechPlanet:
http://techplanet.creo.com/common/test_files/cptt.htm

Use the resolution, size, and screen option that best suits your requirements for both the throughput test and the image quality test. For detailed information about the CPTT files, see *Using the Creo Plate Test Target:*
http://techplanet.creo.com/consumables/media/content/docs/731-00176A-EN.pdf.

Size	Resolution	Screen	File name
Panorama plate: 482.6 x 635 mm (19 x 25 in.)	1016	AM 100 lpi	**10164AM100-K.tif**
		Staccato 36	**10164S36-K. tif**
	1200	AM 100 lpi	**12004AM100-K. tif**
		Staccato 36	**12004S36-K. tif**
	1270	AM 100 lpi	**12704AM100-K. tif**
		Staccato 36	**12704S36-K.TIF**
	2400	AM 150 lpi	**24004AM155-K.tif**
		Staccato 36	**24004S35-K.tif**
	2540	AM 150 lpi	**25404AM155-K.tif**
		Staccato 36	**25404S35-K.tif**
Broadsheet plate: 290 mm x 482.6 mm (11.417 in. x 19 in.)	1016	AM 100 lpi	**10162AM100-K. tif**
		Staccato 36	**10162S36-K. tif**
	1200	100AM	**12002AM100-K. tif**
		Staccato 36	**12002S36-K. tif**
	1270	100AM	**12702AM100-K. tif**
		Staccato 36	**12702S36-K. tif**

3. PLATE THROUGHPUT TEST PROCEDURE

3.1 Plate Throughput Targets

Plate throughput on Trendsetter NEWS output devices depends on several factors:

- Model of Trendsetter NEWS device purchased (NEWS 50, NEWS 70, NEWS 100, NEWS 150, NEWS 200, or NEWS SA)
- Plate size(s) used at customer site
- Plate type (energy transfer requirements of different plate types affect drum speed)

For throughput targets of the NEWS device being tested, see the sales contract. You can also check the plate throughput for a given model/plate type/plate size using the Media Database spreadsheet on TechPlanet: (http://techplanet.creo.com/consumables/media/content/docs/CTP_MediaDataBase.xls).

3.2 Plate Throughput Test

1. Select the appropriate CPTT test file. (See "Test Files" on page 1 for more information.)
2. For maximum throughput, ensure that the following conditions are met:

   Set the verbose mode in firmware to customer, and turn off verbosity for all subsystems except mdh (media handler). Use the following commands:
   ```
   verbose user customer
   verbose off all
   verbose on mdh
   ```
   For NEWS 200 devices, also turn off verbosity for the slave thermal head (MCE2):
   ```
   verbose off all
   ```

   Note: Third-party workflow may give lower than expected throughput results.
3. From the workstation, submit 12 jobs (same file), rotated and mirrored. If imaging two broadsheet plates, send two jobs per file.
4. After completion of the 12 jobs, go to the workstation hard drive and open the most recent device log file in a text editor.
5. Record the time stamp for the **`unload complete`** operation of the 1st and 11th cycle, and calculate the difference in seconds between these operations.

   Note: Throughput specifications for NEWS devices are based on continuous imaging, which is why the time stamps for the first and twelfth cycles are not used
6. Divide the difference in seconds between the ends of the 1st and 11th jobs by 10 to obtain the average time for each job.
7. To calculate the plates per hour, divide the number of seconds in an hour (3600) by the average time in seconds for each job. For dual broadsheets, multiply this figure by two.

Example 1—NEWS 200
(2 broadsheet plates: 575 mm mainscan x 320 mm subscan)

- Job 2 Timestamp:`14:47:01.258`
- Job 11 Timestamp:`14:52:23.937`
- Time elapsed between 1st and 11th jobs:
  5:22:679 or 322.679 seconds
- Average cycle time per job:
  322.679/10 = 32.268 seconds
- Jobs per hour: 3600/32.268 = 111.6
- Plates per hour: 111.6 x 2 = 223.2

Example 2—NEWS 50
(1 panorama plate: 586 mm mainscan x 817 mm subscan)

- Job 2 Timestamp: `15:02:22.357`
- Job 11 Timestamp: `15:27:21:362`
- Time elapsed between 1st and 11th jobs:
  24:59:005 or 1499.005 seconds
- Average cycle time per job:
  1499.005/10 = 149.9 seconds
- Jobs/plates per hour: 3600/149.9 = 24.02

4. PLATE IMAGE QUALITY INSPECTION PROCEDURE

These procedures are designed to verify and demonstrate the following:

- Image quality
- Halftone uniformity

1. Select the appropriate CPTT test file. (See "Test Files" on page 1 for more information.)

   Note: 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.

2. Expose the CPTT file you have selected.

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

   The numbers corresponding to each element are described in the table below Figure 1.

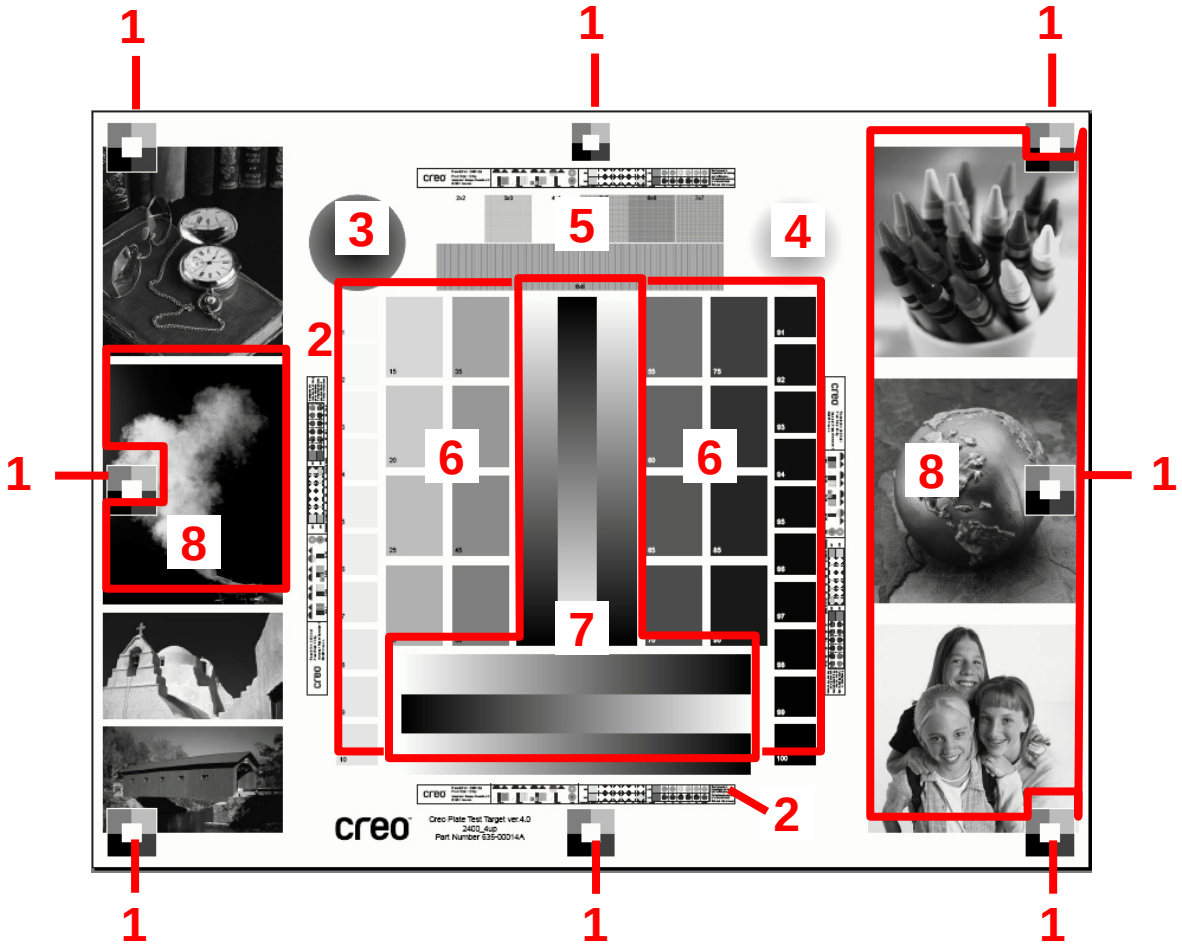


Figure 1: Creo Plate Test Target—Image Quality Test Elements for Plates

Note: Figure 1 shows the CPTT file in panorama format. The CPTT file in broadsheet format is identical except that is contains only test elements 1–7 (the photographs for test element 8 are excluded due to lack of space).

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 the image quality of the checkerboard patterns
6. Tone scales	Visual test to confirm the Staccato screening quality is acceptable with tone scales
7. Vertical and horizontal vignettes	Used to ensure no shade-stepping is present (a smooth transition from 0% to 100%)
8. Grayscale images	Used to give the customer an idea of what they can expect when they run their jobs using Staccato screening

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