Application Notes

ErgoSoft Total Ink Limit & Bleed Chart

ergosoft
rip solutions

ErgoSoft Total Ink Limit & Bleed Chart

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The **ErgoSoft RIP** is available in different editions. Therefore the description of available features in this document does not necessarily reflect the license details of your edition of the **ErgoSoft RIP.** For information on the features included in your edition of the **ErgoSoft RIPs** refer to the ErgoSoft homepage or contact your dealer.

Rev. 1.1

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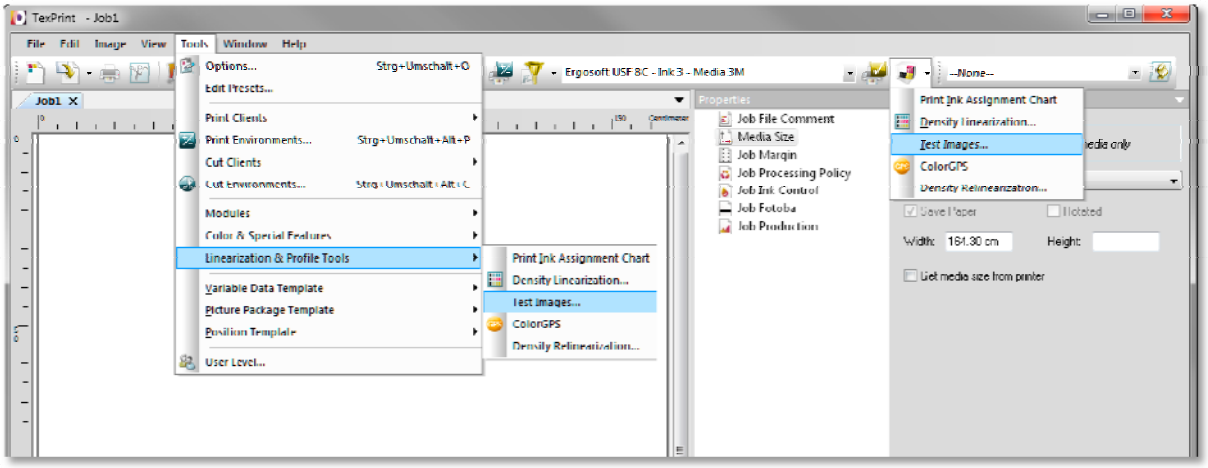
Introduction

It is necessary to determine the optimal total ink limit percentage for a specific ink, media and printer combination in order to prevent ink bleeding, ink pooling, and bronzing artifacts on printed output. Starting in February 2011, the **ErgoSoft RIP** comes with a new ***ErgoSoft Total Ink Limit / Bleed Chart*** that provides a guide to determine the total ink limit percentage based on evaluating different color combinations ranging from 200% to 400% ink coverage.

This document describes how this chart is loaded and printed as well as its examination and possible reactions on the different conditions.

Loading the Chart



The chart is loaded using menu *Tools* > *Linearization & Profile Tools* > *Test Images* or selecting *Test Images* under the *Linearization & Profile Tools* button in the *Print Environment* toolbar.

The Chart consists of two A4 files using a multicolor zig-zag pattern with white and gold-colored background, labeled **TotalInkLimit_A4White** (on the left side in Figure A) and **TotalInkLimit_A4Gold** (on the right side in Figure A).

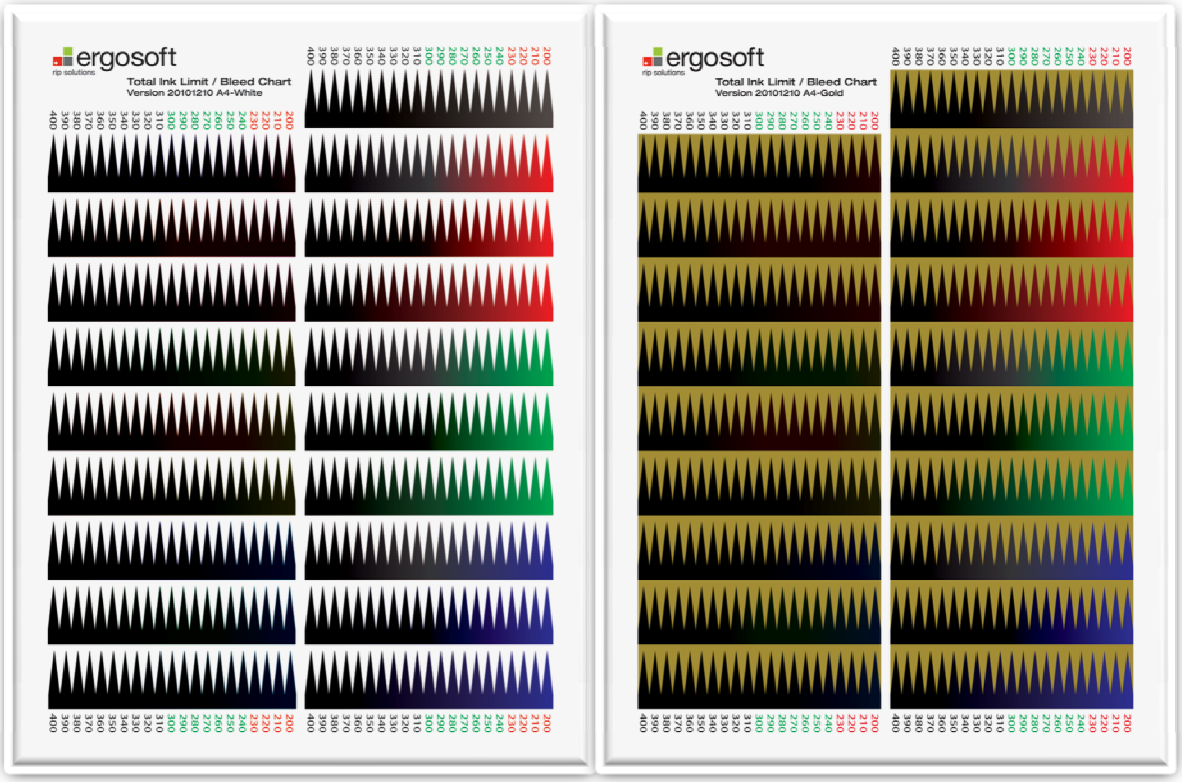
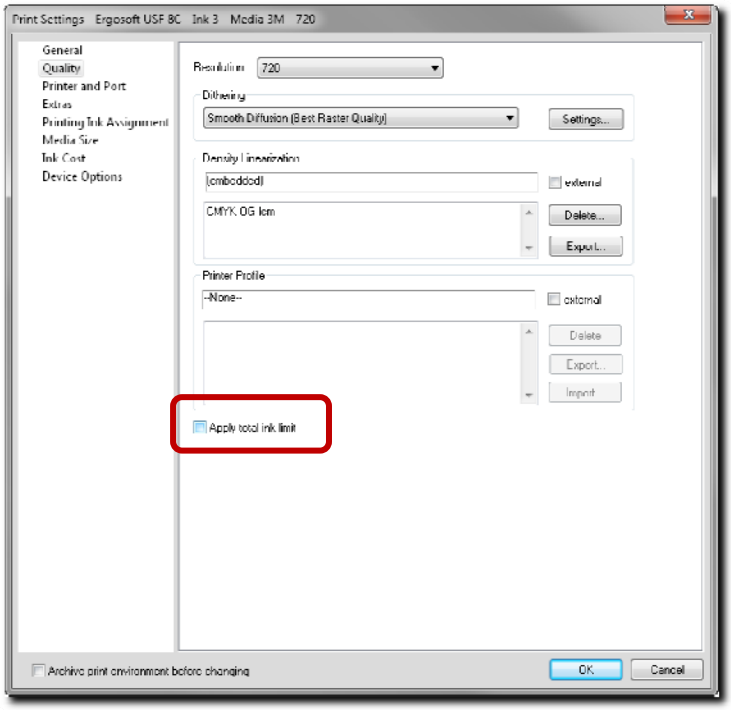


Figure A. Total Ink Limit / Bleed Chart in White and Gold Colored Backgrounds

Printing the Chart

Print one or both chart files with your desired **Print Environment** settings.

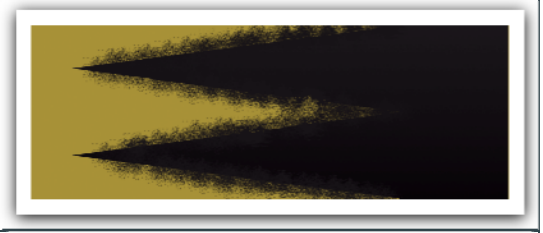
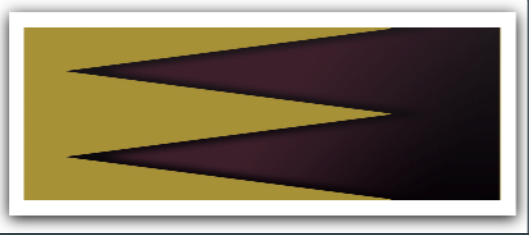
If the chart is used as part of a linearization and profiling process with the intention to find the maximum amount of ink your media can absorb, you have to print the test chart with the maximum ink possible. Therefore, uncheck **Apply total ink limit** on the **Quality** tab of your current print environment.



Examining the Chart

Checking Pattern Conditions

Read the chart by scanning the Zig-Zag patterns and look for the following conditions shown in the table below:

Pattern Conditions	Description	Example Image
Normal	Pattern without ink limit issues.	
Bleeding Type I	Distorted pattern with ink bleeding along fibers or media.	
Bleeding Type II	Distorted and blurred pattern. Tips of Zig-Zag pattern are rounded.	
Ragged Edges	Pattern edges are jagged.	
Ink Pooling	Color inside pattern is not uniform and blotchy in appearance.	
Bronzing	Color of pattern has a two-color or oily appearance.	

Finding the Total Ink Limit

1. Starting from 200% find the last line where all Zig-Zag patterns are normal, make note of the number on the edge of the pattern (See Figure B).

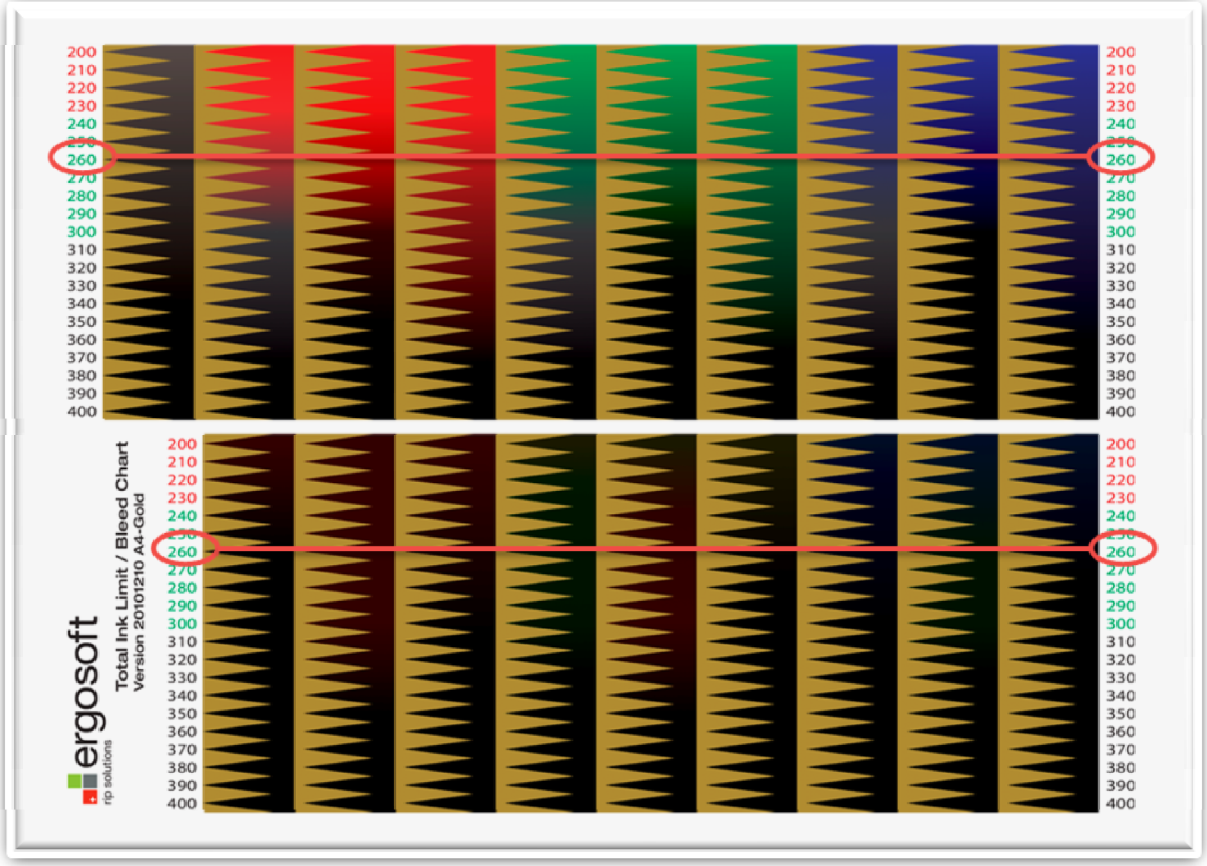


Figure B. In Example, 260% is the selected total ink limit percentage

2. The total ink limit is typically between 240% and 300%. The total ink limit percentage may be higher if the printer has internal ink limits. If the selected total ink limit is less than 230% (red numbers), the limitation in the density linearization should be checked.

3. If the total ink limit is being used for linearization and profiling, check **Apply total ink limit** on the **Quality** tab in the **Print Environment** settings and enter the value you found by examining the Total Ink Limit Chart.