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ISO/DTS 10128

<u>ISO/TC 130</u>

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Graphic technology — Methods of adjustment of the colour reproduction of a printing system to match a set of characterisation dat

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<u>Graphic technology — Methods of adjustment of the colour</u>	
<u>reproduction of a printing system to match a set of</u> <u>characterization data</u>	
<u>Technologie graphique — Méthodes d'ajustage de la reproduction de couleurs d'un système d'impression</u> pour correspondre à un ensemble de données de caractérisation	
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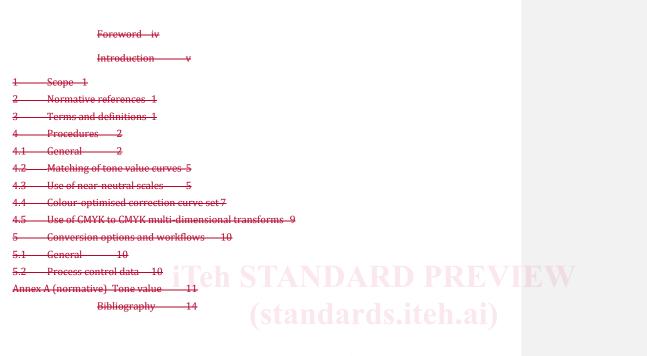
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ISO/DTS 10128

Poreword vi Introduction vi 1 Scope 2 Normative references 3 Terms and definitions 4 Procedures 4.1 General 4.1.1 Overview 4.1.2 Printing specifications 4.1.3 Ink specifications 4.1.4 Establishing printing conditions 4.1.5 Characterization data and ICC Profiles 4.1.6 Determination of tone value 4.2 Matching of tone value curves 4.2.1 General 4.2.2 Press calibration 4.3 Use of near-neutral scale 4.3.1 General 4.3.2 Reference near-neutral scale 4.3.4 Colour-optimised correction curve set 4.4.4 Orection fest of colours 4.4.4 Press calibration 4.5 Use cif (MVK to CMVK multi-dimensional transforms 4.5 Press calibration 4.5 Press calibration 4.5 Press calibration 4.6 Colour-optimised correction curve set	Cont	tents	
1 Scope	<u>Forev</u>	vordvii	1
2 Normative references. 3 Terms and definitions. 4 Procedures 4.1 General. 4.1.2 Printing specifications. 4.1.3 Ink specifications. 4.1.4 Establishing printing conditions. 4.1.5 Characterization data and ICC Profiles. 4.1.6 Determination of tone value. 4.2.1 General. 4.2.2 Press calibration. 4.2.3 Press calibration. 4.3.1 General. 4.3.2 Reference near-neutral scales. 4.3.3 Use of near-neutral scale. 4.3.4 Press calibration. 4.3.5 Press calibration. 4.4.6 Colour-optimised correction curve set. 4.4.1 General. 4.4.2 Set of colours. 4.4.3 Press calibration. 4.5.4 Press calibration. 4.5.5 Press calibration. 4.6.5 Use of CMYK to CMYK multi-dimensional transforms 4.6.5 Use of CMYK to CMYK multi-dimensional transforms 4.7.5 Conversion options and workflows.	<u>Intro</u>	ductionis	c
3 Terms and definitions 4 Procedures 4.1 General 4.1.1 Overview 4.1.2 Printing specifications 4.1.3 Ink specifications 4.1.4 Establishing printing conditions 4.1.5 Characterization data and ICC Profiles 4.1.6 Determination of tone value 4.2 Matching of tone value curves 4.2 Matching of tone value 4.2.1 General 4.2.2 Press evaluation 4.3 Use of near-neutral scales 4.3.1 General 4.3.2 Reference near-neutral scale 4.3.3 Press evaluation 4.4 Colour-optimised correction curve set 4.4.4 Press calibration 4.4.2 Selection of set of colours 4.4.3 Press evaluation 4.5.1 General 4.5.1 General 4.5.2 Press evaluation 4.5.3 Press evaluation 4.5.4 Press evaluation 4.5.5 Dress calibration 4.5.1 General 4.5.1 General 4.5.2 Press evaluation 4.5.3 Press evaluation 4.5.4 Press calibration 5.5 Use of CMYK to CMYK multi-dimensional transforms 5.6 Lise of CMYK to CMYK multi-dimensional transforms 5.1 General 5.2 Process control data 5.1 General 5.2 Process contr	1	Scope	
4 Procedures 3 4.1 General 3 4.1.1 Overview 3 4.1.2 Printing specifications 3 4.1.3 Ink specifications 3 4.1.4 Establishing printing conditions 3 4.1.5 Characterization data and ICC Profiles 3 4.1.6 Determination of tone value 3 4.2 Matching of tone value curves 3 4.2.1 General 3 4.2.2 Press calibration 3 4.2.3 Use of near-neutral scales 3 4.3 Use of near-neutral scale 3 4.3.1 General 3 4.3.2 Reference near-neutral scale 3 4.3.3 Press calibration 3 4.4 Colour-optimised correction curve set 3 4.4.3 Press evaluation 3 4.4.4 Press calibration 3 4.4.4 Press calibration 3 4.5.1 General 3 4.5.1 General 3 4	2	Normative references	
4.1 General. 4.1.1 Overview. 4.1.2 Printing specifications. 4.1.3 Ink specifications. 4.1.4 Establishing printing conditions. 4.1.5 Characterization data and ICC Profiles 4.1.6 Determination of tone value. 4.2 Matching of tone value curves. 4.2.1 General. 4.2.2 Press calibration. 4.3 Use of near-neutral scales. 4.3.1 General. 4.3.2 Reference near-neutral scale. 4.3.3 Press calibration. 4.4 Colour-optimised correction curve set. 4.4.1 General. 4.4.2 Selection of set of colours. 4.4.3 Press calibration. 4.4.4 Press calibration. 4.4.5 Selection of set of colours. 4.4.3 Press calibration. 4.5.1 General. 4.5.2 Press calibration. 4.5.3 Press calibration. 4.5.4 Conversion options and workflows. 5.1 General. 5.2 Process cont	3	Terms and definitions	
4.1.1 Overview 4.1.2 4.1.2 Printing specifications 4.1.3 4.1.3 Ink specifications 4.1.4 4.1.4 Establishing printing conditions 4.1.4 4.1.5 Characterization data and ICC Profiles 4.1.5 4.1.6 Determination of tone value 4.2 4.2 Matching of tone value curves 4.2 4.2.1 General 4.2 4.2.2 Press evaluation 4.2 4.3.3 Press calibration 4.3.4 4.3.4 General 4.3.4 4.3.5 Press evaluation 4.3.4 4.3.6 Press calibration 4.3.4 4.3.7 Press evaluation 4.3.4 4.3.8 Press calibration 4.4 4.4.4 Colour-optimised correction curve set 4.4.1 4.4.1 General 4.4.2 5.4.3 Press calibration 1.4.4.4 4.4.4 Colour-optimised correction curve set 4.4.1.1 4.4.2 Selection of set of colours 4.4.3.5 4.5.1 General 1.4.5.1	4	Procedures	
4.1.2 Printing specifications 4.1.3 Ink specifications 4.1.4 Establishing printing conditions 4.1.4 Establishing printing conditions 4.1.5 Characterization data and ICC Profiles 4.1.6 Determination of tone value 4.1.7 General 4.2.8 Press calibration 4.3 Use of near-neutral scale 4.3.1 General 4.3.2 Reference near-neutral scale 4.3.3 Press calibration 4.4 Colour-optimised correction curve set 4.4.1 General 4.4.2 Selection of set of colours 4.4.3 Press calibration 4.4.4 Press calibration 4.5.1 General 4.5.2 Press calibration 4.5.3 Press calibration 4.5.4 Press calibration 4.6 Golden and transforms 4.7 Selection of set of colours 4.8.	<u>4.1</u>	General	
4.1.3 Ink specifications 4.1.4 Establishing printing conditions 4.1.5 Characterization data and ICC Profiles 4.1.6 Determination of tone value 4.1.7 General 4.2 Matching of tone value curves 4.3 General 4.3.1 General 4.3.2 Press evaluation 4.3.3 Press calibration 4.3.4 Press calibration 4.3.3 Press evaluation 4.3.4 Press calibration 4.3.4 Press calibration 4.3.4 Press calibration 4.3.4 Press calibration 4.4.4 Press calibration 4.5.1 General 4.5.2 Press calibration 4.5.3 Press calibration 4.5.3 Press calibration 4.5.3 Press calibration 4.5.3 Press calibration 4.5.4 Press cali	<u>4.1.1</u>	Overview	
4.1.4 Establishing printing conditions. 4.1.5 Characterization data and ICC Profiles. 4.1.6 Determination of tone value. 4.2 Matching of tone value curves. 4.2.1 General 4.2.2 Press evaluation. 4.3 Press calibration 4.3.1 General 4.3.2 Reference near-neutral scales. 4.3.3 Press evaluation. 4.3.4 Press calibration 4.3.3 Press evaluation. 4.4.4 Colour-optimised correction curve set 4.4.1 General 4.4.2 Selection of set of colours 4.4.4 Press calibration 4.5.3 Press calibration 4.4.4 Press calibration 4.5.1 General 4.5.2 Press calibration 1 1 4.5.3 Press calibration 1 1 5.1 General 4.5.3 Press calibration 1 1 5.1 General 1 1 5.2	<u>4.1.2</u>	Printing specifications	
4.1.5 Characterization data and ICC Profiles 4 4.1.6 Determination of tone value 5 4.2 Matching of tone value curves 5 4.2.1 General 5 4.2.2 Press evaluation 5 4.2.3 Press calibration 5 4.3 Use of near-neutral scales 5 4.3.1 General 5 4.3.2 Reference near-neutral scale 5 4.3.3 Press evaluation 7 4.3.4 Press calibration 7 4.4 Colour-optimised correction curve set 8 4.4.1 General 8 4.4.2 Selection of set of colours 8 4.4.4 Press calibration 10 4.5.1 General 10 4.5.2 Press evaluation 10 4.5.2 Press calibration 11 5.1 General 11 5.1 General 11 5.2 Process control data 11 5.3 Press control data 11 5.4 <td><u>4.1.3</u></td> <td>Ink specifications</td> <td></td>	<u>4.1.3</u>	Ink specifications	
41.6 Determination of tone value 5 4.2 Matching of tone value curves 5 4.2.1 General 5 4.2.2 Press evaluation 5 4.2.3 Press calibration 5 4.3 Use of near-neutral scales 5 4.3.1 General 5 4.3.2 Reference near-neutral scale 6 4.3.3 Press evaluation 7 4.4 Colour-optimised correction curve set 8 4.4.1 General 6 4.4.2 Selection of set of colours 8 4.4.4 Press calibration 10 4.5.4 Press calibration 10 4.5.1 General 10 4.5.2 Press evaluation 10 4.5.3 Press calibration 11 5.4.3 Press evaluation 10 4.5.1 General 10 4.5.2 Press evaluation 11 5.3 Press calibration 11 5.1 General 11 5.2 Process co	<u>4.1.4</u>	Establishing printing conditions	
42 Matching of tone value curves 42.1 General 42.2 Press evaluation 42.3 Press calibration 4.3 Use of near-neutral scales 4.3.1 General 4.3.2 Reference near-neutral scale 4.3.3 Press evaluation 4.3.4 Press calibration 4.3.4 Press calibration 4.4.4 Colour-optimised correction curve set 4.4.1 General 4.4.2 Selection of set of colours 4.4.3 Press evaluation 4.4.4 Press calibration 4.5.1 General 4.5.2 Press evaluation 4.5.3 Press calibration 4.5.1 General 4.5.2 Press calibration 10 4.5.3 5.1 General 4.5.1 General 4.5.2 Press calibration 5.1 General 5.1 General 5.1 General 5.1 General 5.1 General	<u>4.1.5</u>	Characterization data and ICC Profiles	
42.1 General 5 42.2 Press evaluation 5 4.3 Use of near-neutral scales 5 4.3.1 General 5 4.3.2 Reference near-neutral scale 6 4.3.3 Press evaluation 7 4.4 Colour-optimised correction curve set 8 4.4.1 General 8 4.4.2 Selection of set of colours 8 4.4.3 Press calibration 10 4.5 Use of CMYK to CMYK multi-dimensional transforms 10 4.5.1 General 10 4.5.2 Press calibration 11 5.1 General 11 5.1 General 11 5.1 General 11 5.1 General 11 5.2 Press calibration 11 5.1 General 11 5.2 Press calibration 11 5.1 General 11 5.2 Press calibration 11 5.1 General 11 6.1 11 <td><u>4.1.6</u></td> <td>Determination of tone value</td> <td>;</td>	<u>4.1.6</u>	Determination of tone value	;
4.2.2 Press evaluation 5 4.3 Use of near-neutral scales 5 4.3.1 General 5 4.3.2 Reference near-neutral scale 6 4.3.3 Press evaluation 6 4.3.4 Press calibration 6 4.3.4 Press calibration 6 4.4.1 General 6 4.4.2 Selection of set of colours 6 4.4.3 Press evaluation 6 4.4.4 Press evaluation 6 4.4.4 Press evaluation 6 4.5.1 General 10 4.5.2 Press evaluation 10 4.5.3 Press evaluation 11 4.5.3 Press calibration 11 5.1 General 11 5.1 General<	4.2	Matching of tone value curves	
42.3 Press calibration 5 4.3 Use of near-neutral scales 5 4.3.1 General 5 4.3.2 Reference near-neutral scale 6 4.3.3 Press evaluation 7 4.3.4 Press calibration 7 4.4 Colour-optimised correction curve set 8 4.4.1 General 8 4.4.2 Selection of set of colours 8 4.4.3 Press calibration 10 4.5 Use of CMYK to CMYK multi-dimensional transforms 10 4.5.1 General 10 4.5.2 Press calibration 10 4.5.3 Press calibration 11 5 Conversion options and workflows 11 5.1 General 11 5.2 Process control data 11 5.1 General 11 5.2 Process control data 11 5.1 General 11 5.1 General 11 5.2 Process control data 11 5.1	4.2.1	General	HW
4.3 Use of near-neutral scales 5 4.3.1 General 5 4.3.2 Reference near-neutral scale 6 4.3.3 Press evaluation 7 4.4 Colour-optimised correction curve set 8 4.4.1 General 8 4.4.2 Selection of set of colours 8 4.4.3 Press evaluation 7 4.4.4 Press calibration 8 4.4.3 Press evaluation 8 4.4.4 Press calibration 10 4.5 Use of CMYK to CMYK multi-dimensional transforms 10 4.5.1 General 10 4.5.2 Press evaluation 10 4.5.3 Press calibration 11 5 Conversion options and workflows 11 5.1 General 11 5.2 Process control data 11 5.1 General 11 5.2 Process control data 11 5.1 General 11 5.1 General 11 5.1 <t< td=""><td>4.2.2</td><td>Press evaluation</td><td></td></t<>	4.2.2	Press evaluation	
4.3.1 General	4.2.3	Press calibration	
4.3.2 Reference near-neutral scale 6 4.3.3 Press evaluation 7 4.3.4 Press calibration 7 4.4 Colour-optimised correction curve set 8 4.4.1 General 8 4.4.2 Selection of set of colours 8 4.4.3 Press evaluation 8 4.4.4 Press calibration 10 4.5 Use of CMYK to CMYK multi-dimensional transforms 10 4.5.1 General 10 4.5.2 Press evaluation 10 4.5.3 Press calibration 11 5 Conversion options and workflows 11 5.1 General 11 5.2 Process control data 11 5.2 Process control data 11 5.2 Process control data 11 5.1 General 11 5.2 Process control data 11 5.3 Process control data 11 5.4 General 11 5.7 General 11 5.8 <td>4.3</td> <td>Use of near-neutral scales</td> <td></td>	4.3	Use of near-neutral scales	
4.3.3 Press evaluation 7 4.3.4 Press calibration 7 4.4 Colour-optimised correction curve set 8 4.4.1 General 8 4.4.2 Selection of set of colours 8 4.4.3 Press evaluation 8 4.4.4 Press evaluation 8 4.4.3 Press evaluation 8 4.4.4 Press calibration 10 4.5.1 General 10 4.5.2 Press evaluation 10 4.5.3 Press calibration 11 5 Conversion options and workflows 11 5.1 General 11 5.2 Press control data 11 5.2 Press control data 11 5.2 Press control data 11 5.3 Press control data 11 5.4 General 11 5.1 General 11 5.2 Process control data 11 5.3 France of the top o	<u>4.3.1</u>	General	
4.3.4 Press calibration 7 4.4 Colour-optimised correction curve set 8 4.4.1 General 8 4.4.2 Selection of set of colours 8 4.4.3 Press evaluation 8 4.4.4 Press calibration 10 4.5 Use of CMYK to CMYK multi-dimensional transforms 10 4.5.1 General 10 4.5.2 Press evaluation 10 4.5.3 Press calibration 11 5 Conversion options and workflows 11 5.1 General 11 5.2 Process control data 11 Annex A (informative) Tone value 12	4.3.2		i la
4.4 Colour-optimised correction curve set 8 4.4.1 General 8 4.4.2 Selection of set of colours 8 4.4.3 Press evaluation 8 4.4.4 Press calibration 10 4.5 Use of CMYK to CMYK multi-dimensional transforms 10 4.5.1 General 10 4.5.2 Press evaluation 10 4.5.3 Press calibration 11 5 Conversion options and workflows 11 5.1 General 11 5.2 Process control data 11 Annex A (informative) Tone value 12	4.3.3	Press evaluation	9 <mark>c0f-6317bde398ee/is</mark>
4.4.1 General 8 4.4.2 Selection of set of colours 8 4.4.3 Press evaluation 8 4.4.4 Press calibration 10 4.5 Use of CMYK to CMYK multi-dimensional transforms 10 4.5.1 General 10 4.5.2 Press evaluation 10 4.5.3 Press calibration 10 4.5.3 Press calibration 11 5 Conversion options and workflows 11 5.1 General 11 5.2 Press calibration 11 5.2 Press calibration 11 5.2 Press calibration 11 5.1 General 11 5.2 Press calibration 11 5.1 General 11 5.2 Process control data 11 5.2 Process control data 11 5.2 Process control data 11 5.3 Process control data 11 5.4 General 11 5.5 Process control data<	4.3.4	Press calibration	,
4.4.2Selection of set of colours84.4.3Press evaluation84.4.4Press calibration104.5Use of CMYK to CMYK multi-dimensional transforms104.5.1General104.5.2Press evaluation104.5.3Press calibration115Conversion options and workflows115.1General115.2Process control data115.2Process control data11111115.2Process control data115.1General115.1Tone value12	<u>4.4</u>	Colour-optimised correction curve set	1
4.4.3Press evaluation84.4.4Press calibration104.5Use of CMYK to CMYK multi-dimensional transforms104.5.1General104.5.2Press evaluation104.5.3Press calibration115Conversion options and workflows115.1General115.2Process control data115.2Process control data11111115.2Process control data115.1General115.2Process control data115.310115.411115.511115.111115.211115.311115.411115.511115.611115.711115.811115.911115.111115.111115.111115.111115.211115.311115.412	<u>4.4.1</u>	General	8
4.4.4Press calibration104.5Use of CMYK to CMYK multi-dimensional transforms104.5.1General104.5.2Press evaluation104.5.3Press calibration115Conversion options and workflows115.1General115.2Process control data115.2Process control data111115.2Process control data11 </td <td>4.4.2</td> <td>Selection of set of colours</td> <td>8</td>	4.4.2	Selection of set of colours	8
4.5 Use of CMYK to CMYK multi-dimensional transforms 10 4.5.1 General 10 4.5.2 Press evaluation 10 4.5.3 Press calibration 11 5 Conversion options and workflows 11 5.1 General 11 5.2 Process control data 11 Annex A (informative) Tone value 12	4.4.3	Press evaluation	8
4.5.1General104.5.2Press evaluation104.5.3Press calibration115Conversion options and workflows115.1General115.2Process control data11Annex A (informative) Tone value12	<u>4.4.4</u>	Press calibration1	
4.5.2 Press evaluation	4.5	Use of CMYK to CMYK multi-dimensional transforms1	
4.5.3 Press calibration 11 5 Conversion options and workflows 11 5.1 General 11 5.2 Process control data 11 Annex A (informative) Tone value 12	4.5.1	General1	
5 Conversion options and workflows 11 5.1 General 11 5.2 Process control data 11 Annex A (informative) Tone value 12	4.5.2	Press evaluation1	
5.1 General	<u>4.5.3</u>	Press calibration1	
5.2 Process control data	5	Conversion options and workflows1	
Annex A (informative) Tone value	5.1	General11	
	5.2	Process control data11	
Bibliography15	Anne	x A (informative) Tone value12	
	<u>Biblic</u>	ography1	



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This second edition cancels and replaces the first edition (ISO- <u>/</u> TS 10128:2009), which has been technically revised. The main changes compared to the previous edition are as follows:	Formatted: Foreword Text
Addition The main changes are as follows:	
— <u>addition</u> of colour tone value (CTV) as a measure of printed tone ,	Formatted: List Continue 1
<u>—Additionaddition</u> of colour-optimised correction curve set method for press calibration, and;	
— Updates updates to the Introduction and Bibliography.	
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I

Introduction

Today, with digital data input, it is recognized that modification of that digital data can be used to compensate (adjust) for some of the differences in press, ink and paper between various printing sites and between the actual conditions at a specific site and the reference or standard printing condition.

As part of the introduction of digital technology, the printing industries (and its standards activities) have established reference characterization data corresponding to various printing specifications and conditions.-Characterization data is generally defined as the relationship between the CMYK digital input values (in the data file exchanged) and the measured colorimetric values for the colour printed in response to these values.

Four general methods have been identified by which compensation for differences in printing conditions can be accomplished. -Three of these make use of individual one-dimensional transforms (also known as plate curves) for each printing channel but differ in the method by which these transforms are determined. -These are referred to as matching of tone value curves, use of near-neutral scales and colour optimised correction curve sets. -The fourth method makes use of multi-dimensional transforms such as International Color Consortium (ICC) device-link profiles.

The features and general methodology for use of these adjustment techniques is the subject of this Technical Specification. document. The goal is to provide a common understanding of these procedures across the industry, to allow consistency between implementations, and to facilitate communication of the adjustments used/desired in particular workflows.

It must be recognized that these are not competitive solutions, but each have different strengths and weaknesses in individual workflow applications. It is the choice of the individual print facility and/or the involved trade associations to decide how to best apply these capabilities, made possible through the use of digital data.

The basic assumption behind the use of characterization data and these correction techniques is that a printing process can be repeatedly restored to a prior printing condition and that condition can be maintained both within a run and between runs. A variety of process control methods can be used to achieve this repeatability. -Solid ink density and tone value increase based on the specific materials involved, and tied back to the conditions established during characterization, are common process control tools that are used in addition to the data adjustment techniques described in this document. These adjustment techniques work together with process control to achieve the printing quality desired.

Patent statement

The International Organization for Standardization (ISO) draws attention to the fact that it is claimed that compliance with this document may involve the use of a patent concerning recalibrating a multi-colour imaging system given in 4.3.

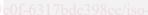
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xi

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