



Fraunhofer
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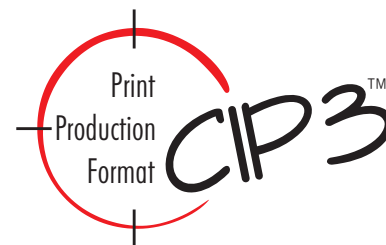
CIP3™
Print Production Format

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CIP3 Group

In an international cooperation, well-known manufacturers from prepress, press, and postpress areas formed the CIP3 group. CIP3 stands for International Cooperation for "Integration of Prepress, Press, and Postpress". The result of this cooperation is a vendor-independent interface called Print Production Format (PPF), which has been developed by the Fraunhofer Institute for Computer Graphics in close collaboration with the CIP3 member companies. Using this vendor-independent interface, a digital link spanning all production processes from prepress to press and postpress can be realized. This results in a reduction of time and materials used during the print production, and consequently in a reduction of costs.



CIP3 Member Companies
 (August 1999)

- Adobe
- Agfa
- Baldwin Technology Company
- Barco Graphics
- Creo
- DALiM Software
- Ekotrading-Inkflow
- Eltromat Polygraph
- Ewert Ahrensburg Electronic
- Fujifilm Electronic Imaging
- Gallus Ferd. Rüesch AG
- Graphics Microsystems
- Hagen Systems
- Harlequin
- Heidelberger Druckmaschinen AG
- Impresse Corporation
- Kolbus
- Komori
- MAN Roland
- Mitsubishi Heavy Industries
- Müller Martini
- Nth Degree Software
- Optimus
- Polar-Mohr
- Quad/Tech, Inc.
- R.R. Donnelley & Sons Company
- Ryobi
- Sakurai Graphic Systems
- ScenicSoft
- Scitex
- Screen
- Shinohara Machinery Company
- Toshiba Machine Co., Ltd.
- Ultimate Technographics
- Xerox
- Yamatoya

The History of the
CIP3 Print Production Format

The CIP3 group was founded as an initiative from Heidelberger Druckmaschinen AG assisted by the Fraunhofer Institute for Computer Graphics (IGD). This initiative led to the development of the so-called Print Production Format and its acceptance by well-known manufacturers. Meanwhile the CIP3 group has grown to 36 companies.

The Content of the CIP3 PPF

The CIP3 Print Production Format is a container for the exchange of data

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between prepress, press, and postpress processes. Currently the PostScript language, which is well established in prepress, is used as the encoding method. In an ideal case a PPF file describes a complete product, e.g. a brochure. This includes information for each single sheet as well as a description of the manufacturing process, i.e. the so-called product definition. A CIP3 PPF file does not contain the high resolution data required for printing.

The data stored in a CIP3 PPF file contains the following information:

- administrative data, for example job name, copyright, application name, etc.
- particulars for tools in web presses, like longitudinal and cross applications (e.g. for perforating units)
- preview images for each color separation, that enable automatic ink key presetting at the press
- transfer curves, which are needed to calculate the real area coverage
- color and density measuring fields and color control strips
- register marks
- cut data
- folding data
- "private data", which can be used to store application-specific or vendor-specific data (e.g. machine settings that can be used for repeat jobs)
- product definition data, e.g. information about collecting, binding, stitching, or trimming

The Benefits of Using CIP3 PPF

The consistent usage of the CIP3 Print Production Format results in several advantages:

Productivity benefits:

- acquisition of the same data only once
- quicker machine setup
- shorter production cycles
- better quality control
- less error-prone production through automation
- streamlined production

Ecological benefits:

- less waste by quicker presetting of press and postpress equipment and thereby less consumption of paper, ink, and water
- support of computer-to-plate systems and thereby avoidance of film processing chemicals

Altogether the employment of CIP3 PPF results in an improved productivity at lower costs. But in order to be able to use these advantages, a complete digital prepress is required.

CIP3 Workflow

The CIP3 Print Production Format is not a workflow system on its own. But it is very suitable for the integration in a digital workflow. The information created at the different production steps can be stored in a CIP3 PPF file, which can then be passed on from one processing step to the other.

Already at order entry some administration data is recorded, which is needed later. In prepress, a lot of information will be added. Thus the collected data is available at the following processing steps without time-consuming and labor and cost intensive re-acquisition of data. In addition, the risk of

errors can be reduced. Archived CIP3 PPF files can be used directly for re-runs.

With CIP3 PPF, a basis has been established for the definition and practical use of a complete digital workflow.

We Offer

The Fraunhofer Institute for Computer Graphics (IGD) provides consulting and support for the development of CIP3 PPF based solutions. Furthermore the CIP3 Parser Library (CPL) and the CIP3 Editing Library (CEL) developed at IGD can be licensed. Integrated in an application program, these libraries can be used to parse CIP3 PPF files. The information stored in the files can then be retrieved by the application via an application programmers interface (API). By using the CIP3 Editing Library (CEL) it is even possible to modify a CIP3 PPF file, or to create a completely new one.

More information about the CPL/CEL libraries is available on the World Wide Web at the following address:

[http://www.igd.fhg.de/
www/igd-a1/projects/cplcell/](http://www.igd.fhg.de/www/igd-a1/projects/cplcell/)

Further Information about CIP3 and the Print Production Format (PPF)

Further information about CIP3 and the Print Production Format, as well as about the CIP3 membership is available on the World Wide Web. There you will also find the current version of the CIP3 PPF specification document.

<http://www.cip3.org>