

# DPX Genesis

A Purup-Eskofot White Paper  
(01.04.2000)

## Contents

<b>Introduction .....</b>	<b>1</b>
<b>True ctp Workflow .....</b>	<b>1</b>
Plates not plate material .....	1
Automated stripping process.....	1
<b>Platesetter and imagesetter in one .....</b>	<b>2</b>
Film - an option .....	2
<b>Exposure techniques .....</b>	<b>2</b>
High capacity supply.....	2
No waste of materials .....	2
No silver stripes .....	3
<b>Creating the job.....</b>	<b>3</b>
Calibration.....	3
Different resolutions and screens.....	4
<b>Processor .....</b>	<b>4</b>
Easy disposal of chemistry .....	4
Easy jam handling.....	4
Processor monitor .....	4
<b>Design.....</b>	<b>5</b>
Easy maintenance .....	5

## **Introduction**

To meet the growing demand of efficiency the world is turning digital. Purup-Eskofot, recognising this change, is also transforming its product line to support the digital demand. The DPX Genesis is an-easy-to-use Computer-To-Plate solution for the small format printer. The machine is not a modified film imagesetter but a true Computer-To-Plate system, which uses the best technology in both imagesetters and platemaking. DPX Genesis produces press-ready-plates, imaged, cut to size and dried.

We have spent considerable time and technology in developing what we feel is a very user-friendly interface. Our goal is to allow the user to easily assimilate this equipment into an existing workflow.

## **True CtP Workflow**

When talking about CtP there are some questions that are not addressed by most of the CtP suppliers in the small format market. A platesetter is not a true platesetter if it does not produce press-ready plates.

## **Plates not plate material**

Purup-Eskofot's position on imagesetters is that they do a good job producing galleys of either film or plate material. They do not, however, produce press-ready plates. Direct to press requires an automated process of creating a plate, which is ready for press. This means that when the plate exits the machine, it is cut to exactly to size, processed and dried. It is ready for a press-person to mount and run.

For a platemaker to produce plates for this process it has to be built for this purpose, otherwise it will work as an imagesetter: delivering plate materials in endless rolls, and not the expected plates. In addition, you have to add material costs and time to turn the plate into a finished product.

## **Automated stripping process**

When producing film the objective is to save film. In filmmaking, we normally produce as small a piece of film as possible to optimise film usage. When the stripper receives the film he will mount the film correctly on the plate.

DPX Genesis does all of this automatically. The printer initially sets up parameters for job positioning and the DPX Genesis positions each job consistently according to these instructions.

By doing this you are capable of making plates from files using all types of applications, even non-graphical applications like Microsoft® Word®, Microsoft® PowerPoint® etc. As long as they can produce PostScript files the DPX Genesis can produce a plate. (Note: All Windows and Macintosh applications are most likely to produce PostScript).

The set-up on the front-end is done just like printing to a laser printer but the result is a press-ready-plate.

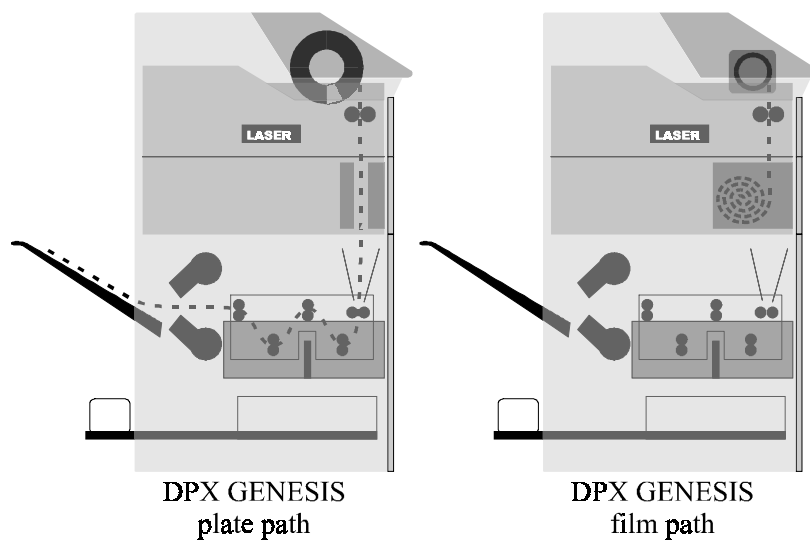
## Platesetter and imagesetter in one

The DPX Genesis can handle both film and plate materials making sure that no matter what type of material you want to run, you will have an all purpose machine.

### Film - an option

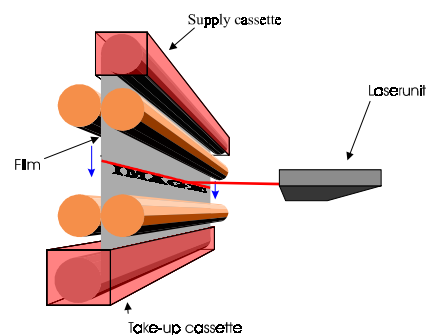
The versatility of the DPX Genesis allows you to image film with an optional roll holder and take-up cassette. Film can be processed in an offline processor while plate material is processed in the on-line processor.

Changing from film to plate material takes less than 5 minutes. Just replace the Pass-through Cassette with the Take-up Cassette, change media, and the DPX Genesis is ready to go.



### Exposure techniques

The DPX Genesis uses Capstan exposure technology. Capstan means that the material is moving in front of the laser while being exposed. Capstan devices are known for their high productivity and the DPX Genesis is extremely productive at up to 38 plates per hour. The material is exposed by means of a laser (760nm).



### High capacity supply

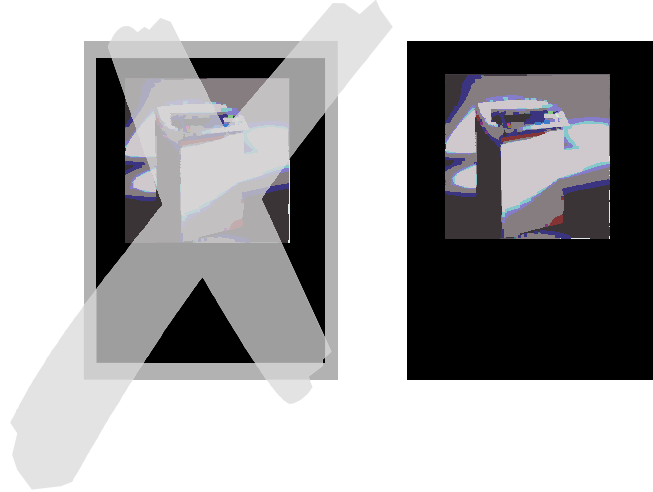
Plate material is delivered in high volume rolls with 61m (220 ft) on one roll which can deliver up to 150 plates uninterrupted.

### No waste of materials

Using the DPX Genesis one plate starts where another ends. This means that there is no material waste when producing plates. Unlike imagesetting devices, which don't detect the beginning and end of each plate, the DPX Genesis ensures that there will be no silver lines on each plate, which have to be trimmed off later.

## No silver stripes

Imagesetters often create a silver stripe caused by the non-image area. This has to be removed otherwise it will carry ink onto the press. Normally this silver stripe is between 10-30% of the total plate, meaning that a plate on other imagesetter systems costs between 10-30% more to produce.



## Creating the job

Printing to the DPX Genesis is as easy as printing to a laser printer. All applications capable of creating PostScript can be used to create the job. This is due to the fact that the DPX Genesis has built-in electronic stripping.

Create the job as it were to be printed on a laser printer or an imagesetter. Select the DPX Genesis printer driver and hit the print button. The PostScript driver will then ask for a name and store the PostScript file in the folder for the DPX Genesis.

If the file is received electronically, you either use the same application as the one used to create the original file and then print; or if it is received as a PostScript file, you simply select to print this file directly from the DPX Genesis.

On the RIP you can choose to output files manually (one at a time) or create a "hot folder" from which files will automatically spool to the RIP.

## Calibration

Calibration is an important part of the DPX Genesis. As with other types of platemaking, we want to ensure that our images are perfect in both the highlight and shadow areas. This is done by outputting a screen range from 0 - 100% and then measure the actual values. These values simply adjusted so that next plate produced will be close to perfect.

This method can also be used to correct dot gain on the press by printing the screen range on press, measuring the values and key them in.

## Different resolutions and screens

A variety of resolutions can be selected to meet the varying demands for speed and quality. Resolution is user customizable between 600 - 2400 DPI.

Different dot shapes can be selected either for effect or for better printing results. Among the dot shapes that can be selected are round, square, FM1, FM2 etc.

Up to 100 different combinations of resolution, dot shape and linerization curves can be stored in the RIP for easy retrieval when needed.

## Processor

The processor is based on the latest technology within polyester plate processing. The new concept was developed from Purup-Eskofot's well known technology that has been used in our camera platemakers as well as in our other CtP systems (DPX SYSTEM and DPX 5080).

The processor is a 2-bath design with active replenishment. Using the new concept of two very small containers reduces the amount of chemistry used. Active replenishment ensures that there is sufficient fresh chemistry daily, even when an abundance of plates has been processed.

## Easy disposal of chemistry

In the processor is an overflow pipe that controls the chemistry level in the containers. Surplus chemistry will run into a waste chemistry container. When the chemistry waste container is full a warning signal will be given to empty the container.

By attaching the supplied hose onto the container and pushing a button, a pump will empty the effluent container without having an operator even touch the chemistry.

## Easy jam handling

If a jam occurs, a warning signal will appear on the screen, signalling that there is something wrong in the processor. All further exposure and processing will be stopped until the jam is cleared.

The processor is on rails meaning that it can be pulled out for easy access when cleaning or removing jams. If a jam occurs just open the processor door and pull out the processor unit, find the jam, and remove it - and you are back in production again.

## Processor monitor

A monitor on the RIP constantly shows the status of the processor. If anything goes wrong a pop-up window instantly advises of a problem. When doing heavy production this is your security that you will not process useless plates.

## **Design**

Functional design is of great importance to Purup-Eskofot when designing prepress equipment. The DPX system is no exception. With its beautiful contemporary Danish design, it matches the Purup-Eskofot product line. The design is simple and easy to access and it allows fast maintenance saving the customer both time, costs, and non-productive hours.

## **Easy maintenance**

Because the DPX Genesis is very simple and service is almost non-existent, it will become every Service Manager's nightmare. Even though many principles are new (e.g. processor and exposure) the system is based on well-known parts that are known for their reliability.

# **“Imagine Straightforward Prepress”**

“Imagine Straightforward Prepress” is the mission, the marketing concept and the promise Purup-Eskofot makes to its customers.

Purup-Eskofot’s objective is to support the growth and competitive advantage of the company’s customers by supplying the necessary prepress technology and technical assistance.

“Imagine Straightforward Prepress” is the umbrella for the five-point concept to which Purup-Eskofot is devoted:

## **Products**

The driving force in Purup-Eskofot’s development process is the concept of “plug in for productivity”. The products are designed with and for the customer. Easy to use and maintain. Strong in application flexibility.

## **Service**

Customers would prefer Purup-Eskofot to have its offices right next door. For ease of access. The aim is to get as close to this ideal as possible by deploying the whole range of digital technologies. Proactive service is the Purup-Eskofot way of ensuring trouble-free prepress.

## **Workflow**

Straightforward prepress solutions are the ultimate aim of Purup-Eskofot. The workflow forms the core activity in bridging the excellent input and output solutions from Purup-Eskofot. The aim is to design workflows that make it easier to transport the work to the press. Prepress solutions from Purup-Eskofot help professional printers and newspapers implement new business models.

## **Knowledge**

Customers talk to each other every day. Purup-Eskofot wants to offer a network with a structured approach to learning from one another. The aim is to be the customer’s ultimate partner in the exchange of knowledge. Small enough to be listening and creating flexible solutions. Large enough to make those solutions exceptional and unique.

## **Digital future**

Purup-Eskofot wants to redefine and lead the professional prepress industry into the digital world. Purup-Eskofot sees its role as being that of customer’s link to the digital future.

## **The Purup-Eskofot product line**

Purup-Eskofot – one of the world’s leading suppliers to the prepress industry – provides a comprehensive range of products, including scanners, imagesetters, complete Computer-to-Plate systems, RIPs, servers, and a whole range of advanced software products. Every item in the range is designed to ensure the best possible combination of quality and productivity – a policy that applies equally to single, stand-alone products and to complete prepress systems.

## **Be ready for tomorrow – “Imagine Straightforward Prepress”**

© Purup-Eskofot 2000

All registered and unregistered trademarks used herein are the exclusive property of their respective owners. Product features and specifications are subject to change without notice. Purup-Eskofot is owned by the Kirkbi Group, associated with the LEGO Group.