

ImageMaker B1 CtF – 8-up high-speed, high-resolution Computer-to-Film system

The ImageMaker B1 CtF is a highly productive 8-up, high resolution Computer-to-Film system for production of punched, plate-ready film and 4-colour polyester plates.

The ImageMaker B1 CtF is field upgradable as required to semi-automatic or automatic Computer-to-Plate production.

Impressive - at present and in future

With its modularity and flexibility ImageMaker B1 CtF fits in most prepress operations. In addition to being a high quality CtF exposure unit ImageMaker B1 CtF is the heart of a complete modular system offering custom-built configurations that exactly match the user's particular requirements. By extending the basic model with one or more options ImageMaker B1 CtF can be scaled up to a fully automatic ImageMaker B1 CtP.

In a production environment ImageMaker B1 CtF can serve as a robot, designed and constructed for three-shift operation, supplying press-ready polyester plates and plate-ready film non-stop.

The most advanced internal drum design

The internal drum design of the ImageMaker B1 CtF ensures extremely high degrees of accuracy. Made completely of cast iron, the exceptional stability of this drum protects against the effects of vibration, and avoids the effects of temperature and humidity fluctuations, resulting in improved quality and precision when exposing both polyester plates and film.

The most versatile loader system in the world

The ImageMaker B1 CtF features a 3-roll ma-

gazine that holds up to 180 metres of antistatic film and/or polyester plate material - more than enough for many hours of continuous production even at maximum output speed. The ImageMaker B1 CtF can work with both film and polyester plates - and any combination of the two, when it is equipped with the PolyPlate option. The 3-roll magazine is built directly into the cabinet and employ the Purup-Eskofot NoWaste concept to keep film use to a minimum, thus generating substantial cost savings. The use of multiple magazines allows the use of different types and sizes of film in each of the three magazines.

The MultiPunch system

In professional printing environments, the use of a built-in punch register system can be crucial for maximum efficiency. Customers can choose between more than 20 of the most popular standard punch register systems, or specify a punch register system to match their own particular requirements. The holes in the films are punched automatically as an integrated part of the workflow. Punching takes place before exposure, and the punch units remain closed throughout the entire exposure process. Hence a repeatability accuracy of ± 0.005 mm is obtained.

The unique OptoLink®

In modern CtF systems, the construction of the optical system is crucial for output quality. The patented Purup-Eskofot OptoLink principle provides greatly improved dot sharpness, featuring complete separation of laser and carriage, with a fibre optic cable transmitting the light direct-

ly and without interference.

VarioSpot™ means precision

ImageMaker B1 CtF covers three resolutions: 1270 dpi (500 pixels/cm), 2540 dpi (1000 pixels/cm) and 3175 dpi (1250 pixels/cm). With the high resolution option for AR-laser it is possible to obtain the resolutions: 3969 dpi (1563 pixels/cm) and 5080 dpi (2000 pixels/cm). The Purup-Eskofot VarioSpot ensures that the dot size is adjusted according to the resolution(s) chosen. The dot sizes of 0.010–0.026 mm is controlled automatically by a highly advanced iris mechanism. Optimal dot placement and uniform dot gain even at high resolutions are benefits of Purup-Eskofot VarioSpot.

Purup-Eskofot Commander

The ImageMaker B1 CtF is divided into more than 20 sub-systems built up around high quality motors and precision sensors to ensure maximum reliability. The easy-to-use Windows NT-based control programme, Purup-Eskofot Commander, makes it possible to maintain full control over all the ImageMaker B1 CtF functions in a simple, direct way. Purup-Eskofot Commander also features a comprehensive on-line help system which details all the functions of the ImageMaker, thus listing the appropriate maintenance procedures as well.

The Computer-to-Plate field upgrade

The CtP upgrade extends the ImageMaker B1 CtF in the field to an ImageMaker B1 CtP. When installed the load/unload system is upgraded to production of punched press-ready metal plates in thickness from 0.15 to 0.30 mm (6–12 mil). The basic model of the ImageMaker B1 CtP features semi-automatic plate load, requiring the operator to place the plate on the loading table. The process is carried out automatically from that point: load into the drum, punch, exposure and unload to an on-line processor.

The loader system of the ImageMaker B1 CtP can be extended to incorporate an optional Automatic PlateLoader whereby the ImageMaker can achieve an on-line capacity of 500 plates.

The optional Dual Processor makes it possible to extend the production facilities offered by the ImageMaker B1 CtP to include the on-line production of film. With this option, the ImageMaker B1 CtP can be linked directly to both an on-line plate and an on-line film processor.



 **Purup·Eskofot**

I M A G I N E S T R A I G H T F O R W A R D P R E P R E S S

www.purup-eskofot.com/imagemaker

ImageMaker B1 CtF – Continued

Technical Specifications

Exposure

Technology:

- Internal 243' drum

Format:

- 820 x 1080 mm (32.3 x 42.5")

Productivity

Throughput (load/unload time included):

- 1270 dpi: 18 films / hour (8-up A4 format)
- 2540 dpi: 12 films / hour (8-up A4 format)
- 3175 dpi: 6 films / hour (8-up A4 format)

Spinner speed:

- 24,000 rpm at 1270 and 2540 dpi
- 12,000 rpm at 3175 dpi

Imaging speed:

- 1270 dpi: 5184 cm²/min (804 sq in/min)
- 2540 dpi: 2592 cm²/min (401 sq in/min)
- 3175 dpi: 1037 cm²/min (161 sq in/min)

Light source

Available laser light sources:

- Argon Ion, 488 nm (1270/2540/3175 dpi)
- Helium Neon, 633 nm (1270/2540/3175 dpi)

Laser spot size:

- Spot size is automatically adjusted to the selected resolution:

26 µm at 1270 dpi

13 µm at 2540 dpi

10 µm at 3175 dpi

Screen ruling:

- All laser types support screen rulings from 15–400 lines/cm (37–1000 lpi) at all resolutions

Mechanical accuracy of exposure

Overall accuracy: ±15 µm (0.6 mil)

Repeatability: ± 5 µm (0.2 mil)

Film/polyester plate handling and transport

Automatic loading, punching, cutting and unloading of exposed material to an on-line film processor.

Photographic material

ImageMaker B1 CtF handles antistatic film/polyester plates (optional).

Film/polyester plate formats:

- minimum 355 x 450 mm (14 x 17.7")
- maximum 820 x 1080 mm (32.3 x 42.5")

Film/polyester plate thickness:

- 0.10–0.2 mm (4–8 mil)

Curl:

- 0 to +6 according to ISO4330, 1994 Method A

Capacity of film magazine:

- Stores up to 3 rolls of film or polyester plate

Capacity of media rolls:

- 60 metres / 200 feet (0.10 mm / 4 mil)
- 30 metres / 100 feet (0.18 mm / 7 mil)

Operator console

The ImageMaker is operated from the dedicated control software: Purup-Eskofot Commander, accessible from any local or remote Windows NT/Windows 95 workstation.

Options

- MultiPunch customer specified register system, head and/or tail punch
- High Resolution Option for AR-laser, which includes 3969 and 5080 dpi
- Polyester plate production

- Built-on climate control

- On-line film/polyester plate processors

- CtP upgrade to ImageMaker B1 CtP, max. format 820 x 1080 mm (32.3 x 42.5")

- Automatic PlateLoader for ImageMaker B1/B2CtP, which allows on-line capacity of up to 500 printing plates, designed for full daylight operation

- Dual Processor for ImageMaker B1/B2CtP, which allows the unit to be linked directly to both an on-line plate processor and on-line film processor

Power to ImageMaker B1 CtF

3 x 208–240 VAC, 50/60 Hz.

Consumption: Max. 3.2 KVA

Operating environment

The ImageMaker B1 CtF operates in full daylight.

General operating conditions:

Temperature: 15–28° (59–82°F)

Humidity: 20–80% RH, non-condensing, max. 17g water/kg air

Film/polyester plates requirements for optimum quality:

(room conditions or using built-on climate control)

Temperature: 18–22°C (64.4–71.6°F)

Humidity: 45–55% RH, non-condensing

Storage environment

Temperature: – 5–50°C (23–122°F)

Humidity: max. 80% RH, non-condensing

Acoustic noise

Max. 55 dBA

Safety

CE approved

Dimensions of ImageMaker B1 CtF

Height: 1400 mm (55.1")

Width: 2170 mm (85.4")

Depth: 800 mm (31.5")

Weight: 1160 kg (2598 lbs)

(climate control unit included)

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