Revolutionary

COBALT4
Computer to Plate System

Escher Grad

Cost of Ownership...

The lowest ever!

Thermal CTP Systems

Cobalt 4 CTP System

- Lowest cost of acquisition:
  Less than an imagesetter

- Lowest cost of installation:
  No special power, or darkroom

- Lowest cost of operation:
  Uses same power as a PC
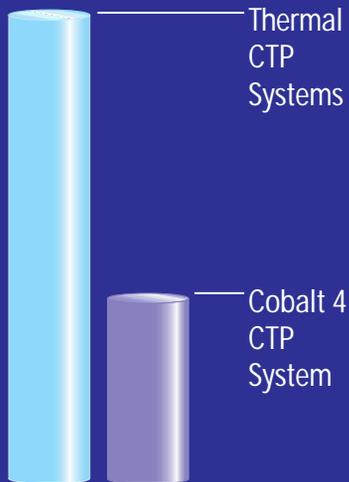
- Lowest cost of maintenance:
  Two moving parts

Escher-Grad's advanced technology delivers the lowest acquisition, installation and operational costs of any CTP system.

Our patented fiber-optic violet laser-diode technology, advanced materials and state-of-the-art electronics bring the lowest procurement and service costs the printing industry has seen.

Our 16 years of design and manufacturing experience have delivered a product that makes CTP a painless and profitable technology for any printing or prepress company. With no special power requirements, no darkrooms to build, no costly air-conditioning systems to install and no power-hungry ovens to run, the Cobalt-4 will connect to your existing prepress workflow, preserving your investment in software and manpower.

The Cobalt-4 is proving to be an indispensable tool for companies all over the world, from the largest 20 billion dollar printing corporation to the smallest single-press shop.

With a Cobalt-4 you get all the benefits of CTP at a lower cost than an imagesetter!

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High speed, quality, reliability and flexibility – without compromise.

The Cobalt-4 is the only CTP solution that images on both photopolymer and silver-halide plates. With a minimum of three plate vendors with two different technologies, you have more choices than ever before.

Escher-Grad's advanced technology delivers world-class performance at a world-beating price. How? Because the Cobalt-4 is based on a proven, 16 year old, internal drum imaging technology and fiber

Quality, Reliability, Speed

violet laser-diodes pioneered by Escher-Grad. The footprint of a Cobalt-4 is half that of other machines imaging the same size plates, saving valuable real estate. A Cobalt-4 uses the same amount of electrical power as a PC. This is between 10 and 13 times less than a thermal CTP system of the same size, not including the 24-kilowatt ovens used for thermal platesetting. All these savings add up to higher profits.

Escher-Grad redefines CTP: Computer-To-Profits!

COBALT4
Computer to Plate System

Productivity...

Cobalt 4
CTP
System

Thermal
CTP
Systems

- Connects to any prepress workflow

- RIP, image and process simultaneously

- 24 plates per hour, high-end color work

- 49 plates per hour, book work

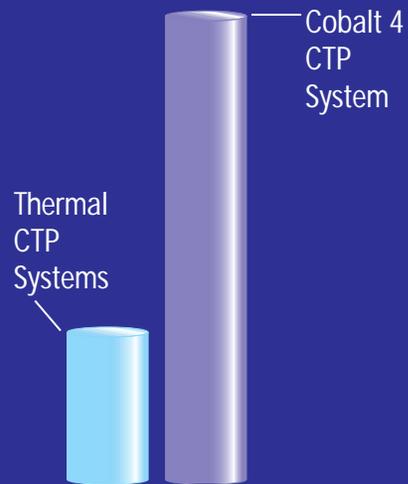- Single page to 4-up plate sizes, 6 to 20 mil plate thickness

High-end color work: 24 plates per hour.
Book work: 49 plates per hour.

The Cobalt-4 images twice as fast at 1200dpi than at 2400dpi. Thermal CTP systems cannot. With a Cobalt-4 productivity can be tuned to the type of presswork required, ensuring maximum throughput.

Cobalt-4 is an extremely productive platesetting solution that allows you to output up to forty-nine 4-up plates per hour in bright yellow safelight conditions. This high level of productivity is made possible by a multi-level pipeline — which allows you to RIP, image, and process simultaneously.

The Cobalt-4 is very simple to operate, there's only one button!

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The Cobalt-4 has been designed, from the ground up, to integrate into any prepress workflow.

Cobalt-4 works seamlessly with front-end software and hardware solutions from all of the major vendors including; Adobe, Agfa, Barco, CreoScitex, Dainippon Screen, Fuji, Harlequin, Heidelberg, PCC/Artworks, Rampage and others. With this capability we enable printers to preserve their investment in manpower training and transfer those skills into plate making.

Cobalt-4 will image on a full range of plate sizes and thicknesses.

From single page (216mm x 279mm) to 4-up (615mm x 745mm), the Cobalt-4 can automatically adjust focus to handle different plate thicknesses from 6 to 20 mils. A Cobalt-4 can serve multiple presses with different plate technologies, ranging from silver-halide to photopolymer.
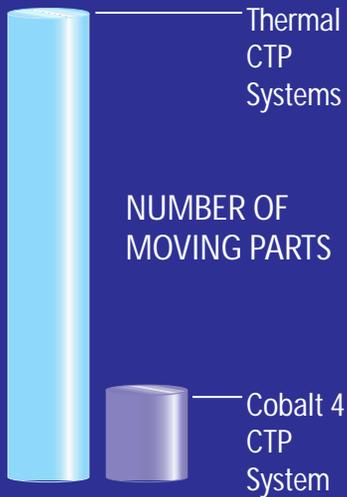
Flexibility!
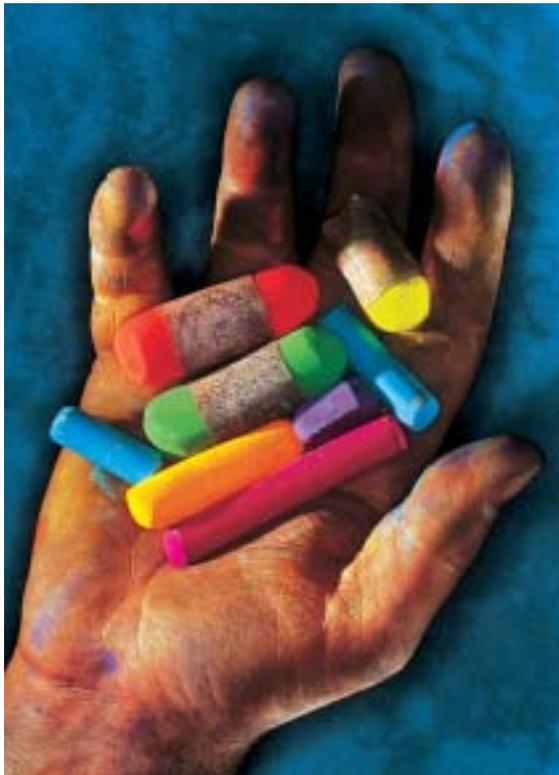
Choice of plate technology, choice of vendors, only with the Cobalt-4!

COBALT4
Computer to Plate System

Design…

We keep it simple!

NUMBER OF MOVING PARTS

Thermal CTP Systems

Cobalt 4 CTP System

- First violet plate CTP system
- Simple: Two moving parts in imaging engine
- PC-based control system
- Composite drum

Our advanced technology delivers simplicity while imaging at the highest quality and speed.
Escher-Grad's patented violet laser-diode replaces complex optics with one optical fiber. This not only reduces the number of components but also increases the power available, and brings the benefit of being able to exchange lasers without optical alignment.

Our internal drums are formed from a composite of granite, quartz and resins, eliminating complex machining and the effect of temperature variations and vibrations. Forming drums results in high tolerances of less than 0.001 inch without retouching. You benefit through guaranteed register and backup, reducing make-ready time.

Central to Cobalt-4's control electronics is a world-standard Intel™ PC; this replaces custom electronics found in other systems. The PC provides the Cobalt-4 with enhanced functionality such as built-in remote diagnostics, error logging, ease of operator training and low cost of service.

## Simplicity ensures: reliability, ease of maintenance and lower costs.

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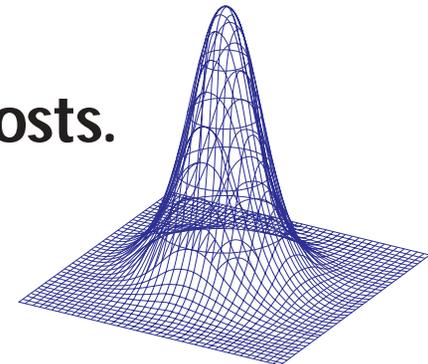
It doesn't get more stable!

The Cobalt-4's drum is cast from a proprietary mix of granite, quartz and resins.
Cobalt-4's imaging system is designed to expose every plate with the greatest precision. All components—the laser, air-bearing scanner, linear motion system and more—are carefully coordinated and monitored by the Cobalt-4's on-board computers, which communicate key information directly to the operator. In each area of the optical and electronic systems, you'll find innovations that make Cobalt-4 the most advanced platesetting system available.

Once in the drum, a plate is positioned with a unique 3-point registration system that allows you to match your current (and future) notching and bending systems. This flexible solution increases quality and supports the specific requirements of any press. The result? Superior image registration throughout the production process to the printed sheet.

Built like a Rock
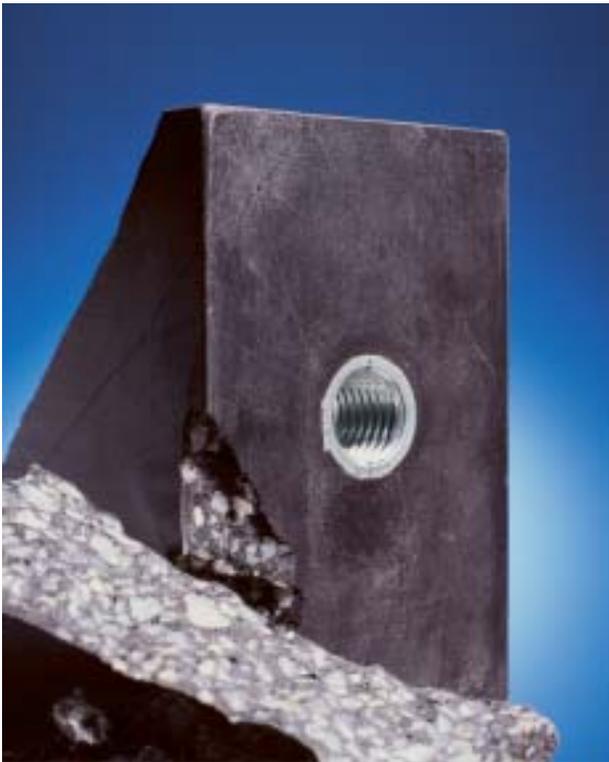
Simply the most advanced platesetter available.

COBALT4
Computer to Plate System

Reliability...

Cobalt 4
CTP
System

Thermal
CTP
Systems

• Only two critical
  moving components

• Long life, over 10,000 hours
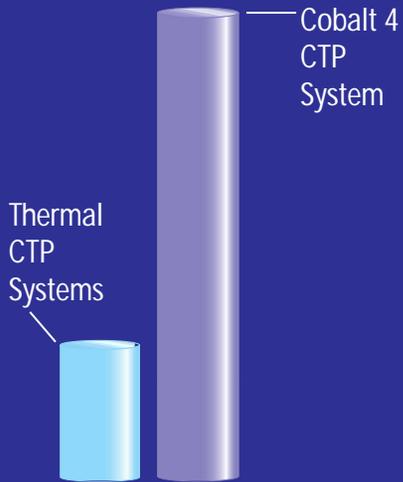 MTBF laser diode

• Air-bearing scanner

The Cobalt-4 imaging engine has only two moving parts. That's it!

The Cobalt-4 has two critical moving parts: a small, optically perfect mirror and a precision bearing to carry the optics across the drum.

The Cobalt-4 is designed to meet the real-world platesetting requirements of printing operations. That means delivering perfectly registered plates, plate after plate after plate.

Although the Cobalt-4 is a revolutionary product from Escher-Grad, it benefits from 16 years of industry experience, a global installed base and an enviable reputation for accuracy and repeatability; guaranteeing reliability.

Cobalt-4 CTP systems have reliability built-in.

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When did you last change your CD-player's laser?

Every violet laser-diode installed in a Cobalt-4 is good for over 10,000 hours of plate exposure. Unlike other CTP systems, including thermal, the Cobalt-4's laser is switched off between plates, ensuring a reliable and longer life span.

If, after several years, there is a need to change lasers, then it can be done for one tenth the cost of thermal systems and in just a few minutes.

The imaging system consists of an air-bearing scanner that does not wear and an internal drum that does not move.
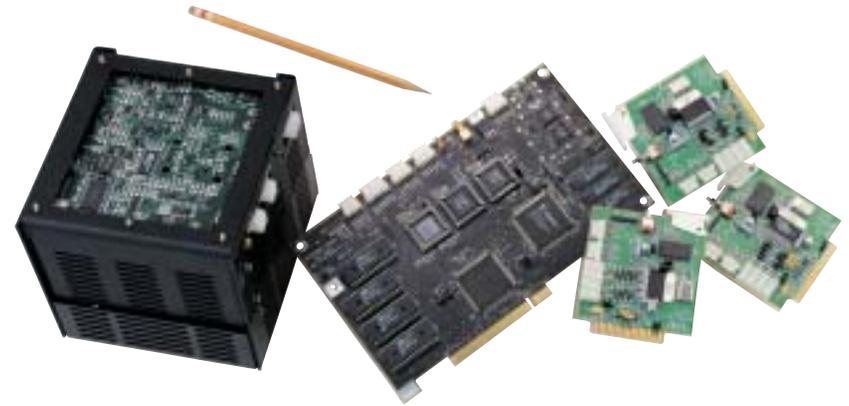
Built-in

A violet laser-diode, a drum and a single beam – Less really is more in a Cobalt-4.

COBALT4
Computer to Plate System

Support...

Thermal
CTP
Systems

COST OF SERVICE

Cobalt 4
CTP
System

- Remote diagnostics

- 24 x 7 International
  Support Center

- Custom support options

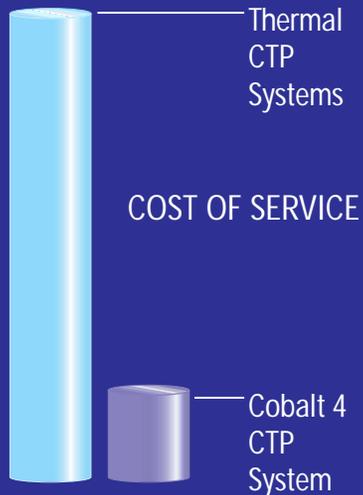## Simplicity of Design = Ease of Maintenance.

Our support infrastructure serves 36 countries.

We provide 24/7 phone support and a web site for immediate access to our technical staff. If and when required, we provide full on-site field service with guaranteed response time.

For users capable of providing their own front-line support, we offer factory training and a spare parts kit. We have a support solution for every situation.

Unlike other vendors, we offer this flexible approach to support because we don't believe in tying our customers to never-ending, expensive service contracts, which are often hidden in the early procurement process. We do believe in the reliability of our Cobalt-4, and underscore that confidence with the widest range of support programs available.

## Choose from the widest range of service options, individually tuned to your requirements.

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Remote diagnostics:
A standard feature with every Cobalt-4.

The Cobalt-4 is equipped with the most advanced on-line diagnostic capabilities of any product available. Remote diagnostics keep the Escher-Grad team in close contact with every Cobalt-4 installation— ensuring that the system is always in optimal order. The PC-based communications software allows our engineers to have the same control over a system as if it were in our manufacturing facility.

We have you covered
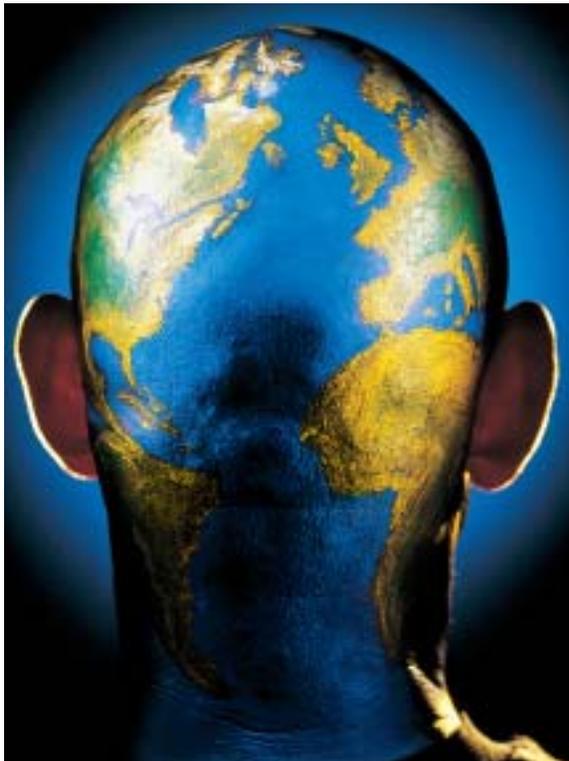
Following our design philosophy, the Cobalt-4 has very few proprietary components. Apart from the laser and two printed circuit boards, all other components are industry standard parts. Resulting in the smallest spares kit possible.
Escher-Grad's responsive support completes our Cobalt-4 solution.

Enjoy the advantages of CTP
while spending less
on equipment and running costs.

COBALT4
Computer to Plate System

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Specifications

Media Type	Violet-sensitive metal plates 6 to 20 mil thickness Silver-halide and photopolymer plates
Media Size	Min. 8.5 x 11 inches (216 x 279 mm) Max. 24.21 x 29.33 inches (615 x 745 mm)
Image Size	Same as Media Size
Laser	Violet laser-diode, 410 nm 5mW standard, 30mW optional
Imaging Speed	400 scan lines per second 2.4 min @ 2400 dpi at maximum image size
Addressability	Variable
Spot Size	10 to 20 microns
Repeatability	± 0.0002 inch (± 5 microns)
Interface	SCSI Optionally, any PCI-based network interfaces
Power	110/220 Volts, 15/8 Amps, 50/60 Hz
Environment	Yellow safelight
Temperature	15-25° C (60-80° F)
Humidity	40% - 60%
Size	52.5 x 35 x 55 inches (1340 x 895 x 1405 mm)
Weight	1200 lbs. (545 Kgs)

Note: Specifications subject to change without notice. Escher-Grad and Cobalt-4 are trademarks of Escher-Grad Technologies Inc. Other product names mentioned may be trademarks or registered trademarks and are the sole property of their respective owners.
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Simply Revolutionary!

Escher Grad

Escher-Grad Technologies Inc.
1375 - 32nd Avenue
Montreal, Qc, Canada
H8T 3H2

INFO@Escher-Grad.com
www.Escher-Grad.com
Telephone +1 (514) 636-3195
Fax +1 (514) 636-4119

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