

## **ESCHER-GRAD**

Escher-Grad was never a power in the U. S. market with its imagesetters, but has been moderately successful at building an international niche with their line of Cobalt platesetters. Their first offering was the Cobalt 8, introduced in September 1999, which used a 410 nm violet laser diode. Since violet plates were not yet available, the device imaged blue-sensitive high-speed plates.

The choice of implementing a 410 nm violet laser in the Cobalt was either dumb luck or brilliant foresight, as just one year later, violet technology was introduced to the market at Drupa 2000 with great fanfare. However, while it seems like Escher-Grad should have been perfectly positioned to capitalize on the market's new interest in violet technology, it turned out not to be the case. The main problem Escher-Grad encountered was a lack of plate availability. At the time, Agfa was the only source for violet compatible plates that could be imaged with the Cobalt's 5 mW laser. Agfa could not keep up with their own customer demand for these plates, and hence restricted sales of their violet plates only to customers using their equipment. Another issue that Escher Grad faced was the considerable interest in photopolymer plates, and the 5 mW Cobalt could not image these plates. This resulted in the introduction of a 30 mW violet diode. In 2001, Escher-Grad introduced the 30 mW laser as an option for both the Cobalt 4 and 8, and in 2003, the 30 mW laser became standard on both models. Other additions to the product line in 2003 were the Cobalt 24 with a 50 x 60" imaging format, and the Cobalt 32 with a 60 x 80" format.

It was soon discovered that even the 30 mW diode was marginal for exposing the photopolymer plates. As a result, in 2004, Escher Grad introduced a 60 mW laser diode. This adaptation proved to be a disaster, as the installation of a 60 mW laser in the Cobalt's existing engineering design was extremely unstable, resulting in high laser failure rates. Subsequent changes in the laser power components has resolved most of the initial technical difficulties. Regardless, Escher Grad plans to introduce a Cobalt with redesigned laser optics in the Fall of 2007, however as late as August 2008, the new design was not available. In addition, since the redesign is so extensive, it will not be possible to upgrade currently installed Cobalts to the newstyle 60 mW optics.

A history of Escher-Grad models can be found below.

<b>Model</b>	<b>Date</b>	<b>Max. &amp; Min. Plate Size</b>		<b>Laser- 410 nm - Fiber Optics</b>
Cobalt 8	9/1999	8-up		5 mW
Cobalt 4	2001	29.33 x 24.21	11 x 8.5	5 mW standard, 30 mW optional
Cobalt 8	2001	42.12 x 31.9	19.68 x 16.14	Added optional 30 mW violet
Aqua LHP <sup>(1)</sup>	4/2002	(obsolete)		UV 355 nm 2 W
Cobalt 4	2003	29.33 x 24.21	11 x 8.5	30 mW standard
Cobalt 8	2003	40.5 x 31.9	19.68 x 16.14	30 mW standard
Cobalt 24	2003	60 x 50	40 x 30	30 mW standard
Cobalt 32	2003	80 x 60	40 x 30	30 mW standard
Cobalt 4	2004	29.33 x 24.21	11 x 8.5	60 mW standard
Cobalt 8	2004	40.5 x 31.9	19.68 x 16.14	60 mW standard
Cobalt 24	2004	60 x 50	40 x 30	60 mW standard
Cobalt 32	2004	60 x 80	40 x 30	60 mW standard
Cobalt-4 Next	2008	31 x 24.25	11 x 8.5	60 mW standard
Cobalt-6 Next	2008	40 x 26	18 x 11	60 mW standard
Cobalt-8 Next	2008	40.5 x 31.9	19.68 x 16.14	60 mW standard

<sup>(1)</sup>This did not prove to be a successful product. If any were sold they have been withdrawn from the market.

See page 40 for productivity specs.