

# Overview of Computer-to-Plate (CTP) Technology

## INTRODUCTION

Over the last 27 years, the staff at Bob Weber, Inc. (BWI) has witnessed numerous “revolutions” transpire in the prepress segment of the printing industry. During that 27 year journey, we have witnessed the evolution of platemaking technology from a multi-stepped process that involved paper, cameras and film, to the current technology of imaging directly to the printing plate. This journey has resulted in a wealth of knowledge. Through this paper, we wish to impart as much of that knowledge as possible. Although by no means comprehensive, this knowledge should prove useful to those who are considering purchasing CTP equipment but have not been exposed to the progress and trends of CTP technology.

The information contained herein was obtained from manufacturers’ brochures, subscription information services, web sites, our own experience with equipment, and our many contacts and informants throughout the industry. We welcome any corrections, additions, or critique that readers may have, so that we can improve upon the content or accuracy of this paper and remove any elements of unintended bias.

We have included information that is not readily available to those not immersed in the imaging equipment business. We strongly believe that “It’s not what they tell you but what they don’t tell you” that you must be most concerned about. We hope this paper can help you identify what “they” are not telling you. We hope to provide you with the information that will enable you to make the best decision to not only fulfill your existing needs, but to position yourself properly for future technology changes and growth, regardless of whether that final decision results in business for BWI. We feel that the information contained in this paper will arm you with the knowledge to ask the right questions and, hopefully, help you make the best choice possible for your company.

We have segmented this paper into the sections listed below. Please note that we have not addressed platesetters specifically designed for the newspaper and flexo markets in this paper, as we possess little to no knowledge or experience with the vast majority of these machines.

### CTP EVOLUTION

With a rather broad brush, we cover major elements in the evolution of CTP from its inception.

### LASER AND PLATE TECHNOLOGY

The transition of imaging from film to plate has at its core the evolution of laser technology. There are a variety of factors that influence the use of laser technology in CTP equipment. These factors include laser type, power, design, life, operating cost, and plate sensitivity. We address each of these in separate sub-sections. We also address corresponding evolution in plate technology.

### VIOLET VERSUS THERMAL

We summarize the pros and cons of the two dominant technologies in the market.

### MEASURES OF PLATESETTER PRODUCTIVITY

In this section, we present an objective measurement of the productivity of various platesetters on the market.

### MANUFACTURERS’ PRODUCT OFFERINGS

This section attempts to provide insight into the evolution of product development by the major players in the U.S. marketplace. This section in particular should prove useful in clarifying the various and often confusing product lines offered by platesetter manufacturers.

### TRADE PRACTICES

We address some of the common tactics and policies of the major equipment manufacturers in their sale and support of platesetters and related peripherals.

## CONCLUSION