



- High volume imaging
- Image enhancement
- Geometric correction
- Image editing
- CAD drawing compatibility
- Choice of output device

High volume imaging

Textual information may be typed in and drawings may be created using draughting systems on today's high powered computer systems, but there is still a need to input existing paper-based drawings more quickly and accurately than is possible using currently available digitising systems.

Image capture

Imager 40 takes its input from a latest technology flat bed scanner. This scanner has the capability of scanning drawings up to A1 in size by feeding the drawing under a fixed head containing 10,000 fibre optic elements.

For those applications where high volumes of drawings need to be digitised quickly, this scanning method has significant advantages over traditional camera based solutions.

Image enhancement and correction

Original drawings are often imperfect and may contain unwanted marks which reduce the quality of the image. Imager 40 overcomes this by applying a process of digital enhancement, as used in satellite photography, resulting in crisper line drawings.

To compensate for a drawing that is stretched or distorted, Imager 40 provides rectification procedures to produce an image that is geometrically correct. In this way measurements and positioning can be made reliably and accurately.

Image editing

Pictures may be modified using Advent's powerful interactive raster editor, which allows images to be manipulated, improved or enhanced with lines, text, circles, filled areas etc. Whole images, regardless of their size, can be panned over and zoomed for editing.

Incorporation into documents

Drawings or parts of drawings can be scaled to the desired size, and merged with text using the Advent document production system, providing a fast method of including existing paper based drawings into new literature.

Input to draughting

Imager 40 can be used to capture existing mechanical or architectural drawings, which can then be used as a background within Advent's CAD system, Designer 20. Using Imager 40 together with Designer 20 in this way means that the transition from a paper drawing office to a computerised one is easier, as new designs are based on existing drawings removing the need to start from scratch with a 'new' CAD system.

Similarly, maps may be scanned and, in conjunction with Designer 20, accurate vectors can be plotted representing cable runs, new developments, amendments etc., using the existing map as a backcloth.

Access to stored drawings

A whole library of scanned existing drawings and newly drawn CAD drawings (perhaps based on original paper drawings) can be created using Imager 40 and Designer 20. Advent's Drawing Management System provides the ability to display and edit these drawings on any workstation, while providing managers with full control over drawing access and modification, using similar procedures to those used in a conventional paper based drawing office.

Output devices

Once input, a drawing can be printed on a laser printer, at a resolution of 100, 150 or 300 dots per inch, or on an electrostatic plotter at either 100 or 200 dots per inch.

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