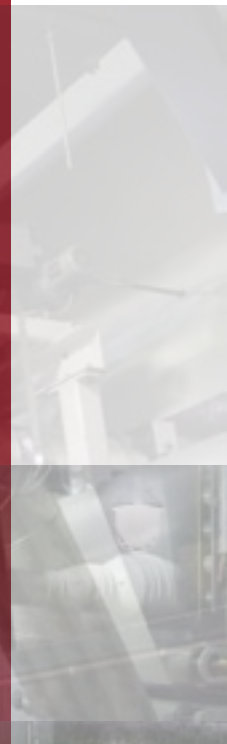


# Engineering solutions for the printing and converting industry



Advanced Engineering Systems



# Company Profile

**A**dvanced Engineering Systems Pty Ltd, (AES), are engineering specialists, dedicated to servicing the printing and converting industry. Our services range from the supply of new equipment to total project management of custom designed upgrades of existing equipment. AES represent some of the worlds leading manufacturers of machinery and accessories servicing the flexible packaging and folding carton industries. We have successfully completed major machinery upgrades for many of Australia's leading printing and converting companies. AES and our mechanical manufacturing and electrical business partners, have a machine building background with a wealth of experience in continuous web printing and converting machinery. Our wide ranging expertise, covers such processes as rotogravure and flexographic printing, UV and air impingement drying, extrusion and adhesive lamination, printing registration systems, web turner bars and a range of finishing systems, such as rotary die cutting, embossing, creasing, punching, sheeting and slitting. Having designed and built high speed web fed machines, capable of non-stop production of flexible packaging and folding carton substrates, AES has unique technology relating to flying splice unwinding and rewinding systems and associated web tension control. Whether you are processing 7 micron aluminium foil or 400gsm carton board, AES has the know-how to service your needs.

The vision of Advanced Engineering Systems is to draw on the collective expertise of its owners, employees, suppliers and business partners to create an engineering design centre of excellence, servicing the printing and converting industry.

## Engineering Services

### **Project Management**

- AES offer a complete Project Management service, to manage special projects from the design stage, through manufacture, to final commissioning.
- AES engineers have years of Project Management experience in machine building, special projects and production plant management. The experience gained by AES in all these areas, allows our project management procedures to work around the production requirements of our customers.
- AES engineers have in-depth technical knowledge, specifically dedicated to the printing and converting industry.

### **Design**

- The design team at AES are highly qualified technical personnel who have extensive

experience in conceptual design and preparation of manufacturing drawings for new printing and converting machinery.

- Our design engineers are equally skilled in custom designing enhancements and modifications to existing printing and converting machines, to meet new and challenging demands of production, as market trends dictate.

### **Manufacture**

- AES has an extensive network of high quality manufacturing suppliers. Outsourcing manufacture, allows AES to process more manufactured parts in the shortest period of time, thereby reducing lead times.
- Outsourcing component supply, enables AES to maintain competitive pricing, resulting in more cost effective manufacture.



### **Installation**

- All aspects of site works relating to machinery installation and commissioning can be professionally undertaken by skilled mechanical and electrical technicians employed by AES and their strategic partners.

# Product Overview

## New Machinery



**Printing Presses**



**Slitting Machines**



**Coating and Laminating Machines**



**Unwinders and Rewinders**



## Engineered Solutions

- Registration Systems
- Web Tension Control
- Printing Sleeve Technology
- Air Impingement Drying Systems
- Ultra Violet Drying Technology
- Rotary Embossing, Creasing and Cutting Systems
- Web Turner Bars
- Layon Rollers
- Cold Rollers (Low Friction)
- Chambered Doctor Blades

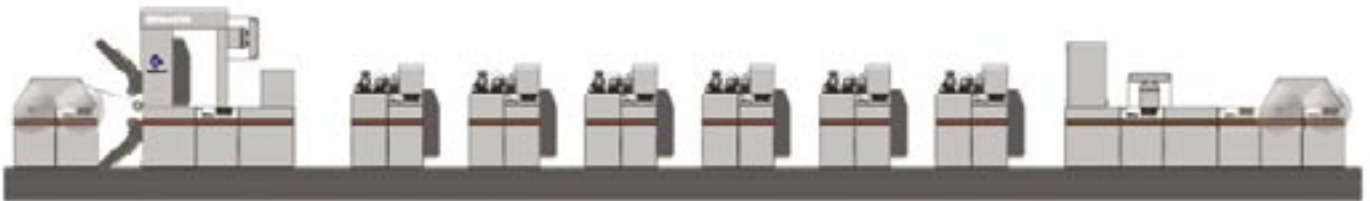


# Business Partners



AES has formed a strategic alliance with CNC Design Pty Ltd, thereby combining “state of the art” Siemens electronics technology, with the innovative mechanical development programs of AES. This partnership offers the clients of AES, a complete mechanical and electrical turnkey approach to individual projects, ensuring that the servicing of AES machinery is supported by Siemens international servicing network.

AES has also formed a business partnership with the Sung An Machinery Co., (SAM), the largest producer of rotogravure printing, laminating and converting machinery in South Korea. Under the umbrella of this partnerships, AES, SAM, and CNC are designing and developing the “Hiflex 650” program of flexographic printing machines, the most advanced in-line flexographic printing machines on the international market.



## Hiflex

The Hiflex 650 in-line, servo driven, flexographic printing machine, answers the needs of packaging printers world wide, facing shorter and shorter print runs dictated by “just in time” production. The unique features of the Hiflex machine, will enable the printer to return profits on print runs previously considered non commercial on traditional flexographic and rotogravure printing machines.

The in-line construction of the machine enables printing stations to be added at any time, as customers request more colours and more complex structures on a wider variety of substrates. Subject to the selection of “bolt on” modules, the printing stations can be configured to print by UV flexo or air drying flexo, utilising both water based and solvent based inks. Modules for rotogravure printing, cold seal application and adhesive and solventless lamination are also available. As a result of the modular design, the press specification can be changed at any time as production trends dictate, allowing the machine to grow with your business.

Depending upon press specification, the Hiflex machine can be configured for flexible packaging or in-line folding carton production. A wide selection of unwinding, rewinding and in-line converting systems are available to meet every requirement.

The Hiflex in-line machine can efficiently process both long and short production runs. This is possible, due to the machines extremely quick make ready and low waste start-up. An eight colour job, changing plates, anilox rollers and ink, can be achieved in approximately 15 minutes, with low waste, in-register start-up.

The robust construction and precision engineering of the Hiflex will guarantee the highest quality of printing reproduction is maintained, even after many years. The machine utilises a fully integrated Siemens servo drive and control system, developed in Australia by CNC Design Pty Ltd.