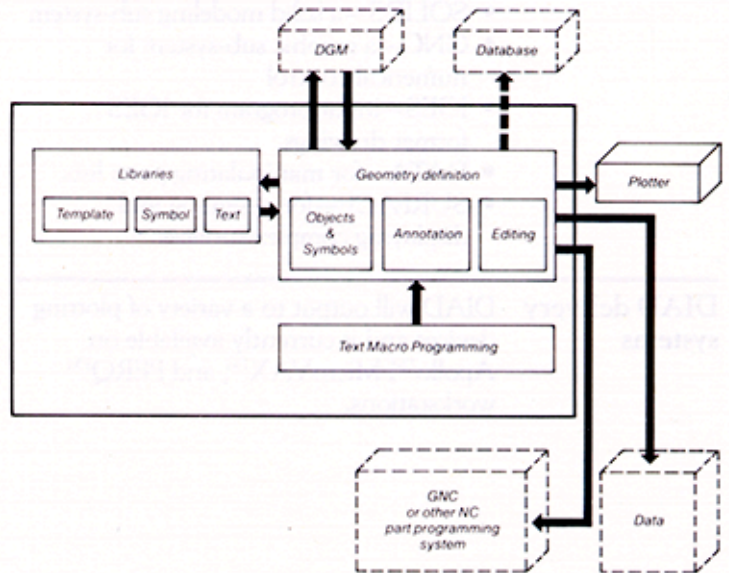# Computer-Aided Design

Introduction

Computer-Aided Design (CAD) is a term used to refer to the process of creating drawings and parts lists for use in other aspects of the manufacturing process. CAD is linked to certain computer integrated manufacturing areas and serves as a graphic input/output media.

ACCENT's DIAD solution

DIAD™ is a Computer-Aided Design system which uses the display screen for many of the techniques common in constructing a mechanical or schematic drawing as they would be drawn on a drafting table. In keeping the systems similar, many of the problems in making this transition from the drafting table to the computer are minimized. The components of the DIAD system are selectively integrated to maximize output and choice of device.

DIAD eliminates the tedious manual processes involved in the conventional construction of a drawing. Common line constructions, as well as the more complex, are created almost instantaneously. The inclusion of 3-D design and viewing, along with 2-D isometric plotting give the system high performance capabilities. Error correction is simple and alterations to a drawing can be made instantly.

The components of the DIAD system

DIAD features

For such a sophisticated system, DIAD is remarkably easy to use and inexpensive to operate. Some of the powerful and unique features include:

- fast response to most commands
- automatic redimensioning and rehatching
- define and store templates and symbols
- create parts lists with the drawing
- calculate area and center of gravity
- keyboard macro facility
- compatible with all major plotting devices
- up to 10 windows available
- a single drawing can have 30 layers
- on-line user's guide
- positions any size text
- metric units available
- grid overlay for design sketching

DIAD options

ACCENT Systems offers a selection of valuable options to enhance and expand the DIAD software, including:

- SOLIDS—a solid modeling sub-system
- GNC—a graphic sub-system for numerical control
- IGES—input program for IGES format drawings
- DATA—for manipulating parts lists
- SURFACE—for designing and displaying complex surfaces

DIAD delivery systems

DIAD will output to a variety of plotting devices and is currently available on Apollo™, MicroVAX™, and PERQ™ workstations.

ACCENT's total solution

ASC's professionals approach each CIM technology project with a goal of providing a quality and cost-effective solution. Through its broad-based knowledge of industry standards, ACCENT is able to act as a single source for all of the hardware and software required. Once installed, ASC's staff of skilled technicians can support and monitor all aspects of the system.

The ACCENT solution not only includes packaged systems for document production, but also customized hardware/software solutions based upon particular customer specifications. By providing this customized engineering service, ACCENT is not only able to meet defined output criteria, but also to blend the new CIM technology with existing customer systems.

About Accent Systems

Formed in 1985, Accent Systems Corporation is a Pittsburgh-based computer marketing service and support organization. Accent's corporate focus is the integration of proven hardware and software products into an overall computer integrated manufacturing environment. The company has brought together a group of outstanding professionals in hardware, software, engineering and applications. Combining these talents, the staff applies its knowledge of computer-aided applications to develop integrated software solutions for the aerospace, automotive and government marketplaces.

ACCENT SYSTEMS CORPORATION