

COMPUTER GRAPHICS FOR MECHANICAL DESIGN

What is CADD?

Definitions

Systems

General

Hardware

Software

Networks

Procedures

Standards

Benefits

Engineering

Shorter design time

Higher accuracy

More design alternatives

Lower design verification costs

Better communication with "clients" (e.g., Marketing)

Better communication with Manufacturing

Greater loading elasticity

Better drawing quality

Manufacturing

More manufacturable designs

Better documentation

Better communication with Engineering

Direct transfer of geometry for NC

Pitfalls

- Expecting the system to systematize you**
- Expecting straightforward economic justification**
- Expecting immediate results**
- Ignoring the need for 3D**
- Not recognizing the extent of training needs**
- Not analyzing needs**
- Insufficient planning**

What to do about it

- Educate**
- Inventory needs**
- Postulate usage**
- Spec system in functional terms**
- Interview users**

The Future

Systems

- General**
- Hardware**
- Software**
- Procedures**
- Standards**

Factories

People