

CAD - Changing Landscape of Manufacturing Industry

Product design development calls for collaboration between designers & manufacturers for design intent. This exchange of ideas has seen a big transition from paper to CAD and to model sharing integrated CAD platforms.

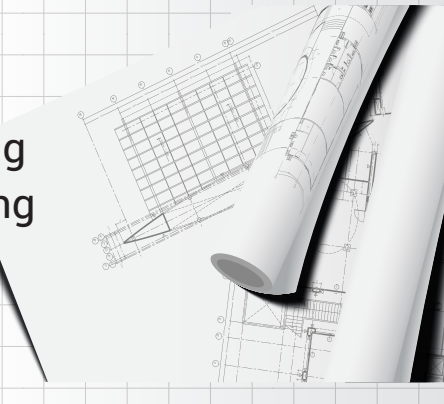
How CAD platforms changed manufacturing industry practices



Drawing Complexity

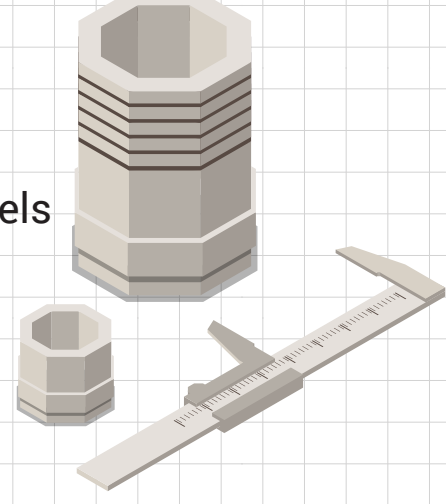
Simple Drawings:

Clumsy to show markups using drafting tools and large drawing sheets



With CAD Platforms:

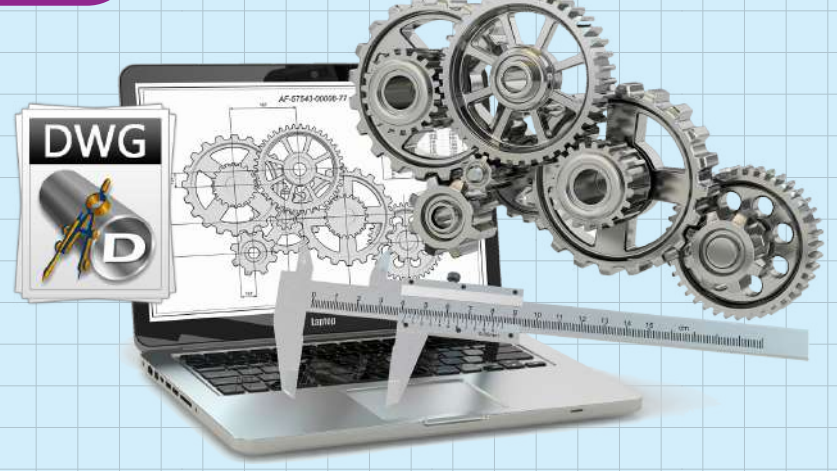
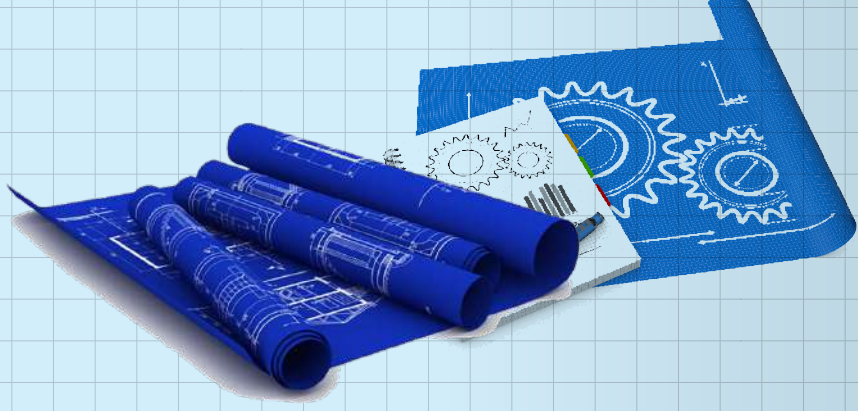
Single software creates seamless drawings and models with neat footnotes



File Sharing

With drawing sheets:

File sharing meant carrying paper sheets and damaging design intelligence



With .dwg files:

Share files across teams and platforms without limitations using IGES/STEP files

Design Data Management



Piles of papers:

Heavily detailed paper drawings need storage space with limited upgradation in design

CAD library:

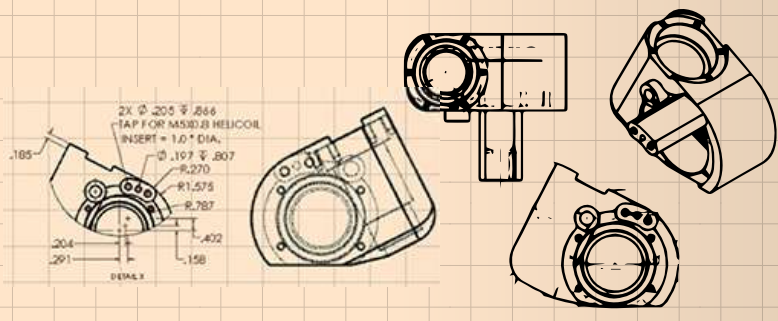
Digitized CAD allows developing libraries where drawings can be saved, updated and reused



Proofs of Design Concepts

Physical tests:

Developing prototypes for new design testing and adding to project costs



Virtual prototypes:

3D CAD models act as virtual prototypes for design validation at no additional costs

Product Marketing

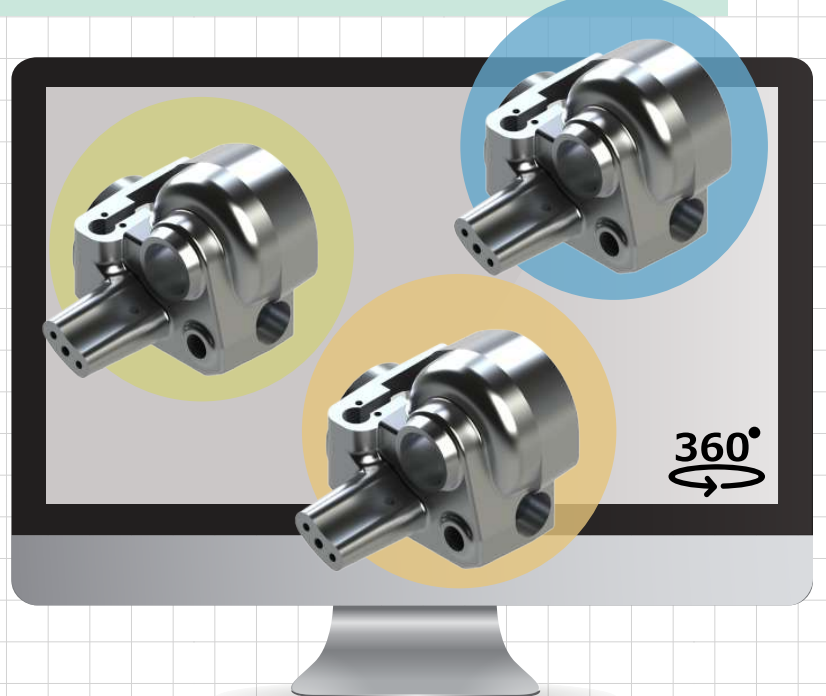
Photography:

Investing heavily in photography for product marketing and sales brochure



Photorealistic rendering:

Use cost effective photorealistic rendering for marketing collaterals



Product Re-engineering

Without CAD:

Without digital designs, remanufacturing a part becomes difficult

With CAD:

Laser scanning and CAD model with value engineering helps easy remanufacturing

Collaborative CAD eases design communication

With the digital revolution, evolved CAD platforms now offer collaborative design approach for shared design data. The centralized CAD database empowers better decision making with free flow of information. Siloed information in ERP, CRM, PLM can be integrated and maintain data under one platform.

Integrated CAD offers

CNC machine-ready 3D models

Optimizing designs while modeling

Easy mass customization

Enhance quality control with AI

Adoption of AR/VR technologies

Manufacturing industry looks for new revolution ever since the adoption of digital designs. Major breakthroughs with CAD platforms also bring along changeovers in the process.

A revolution coming your way, embrace it, adopt it, and use it right to stay profitable!

Client speaks:

"We need the projects drawn so the customer can see what they will look like and the installers can follow plans. The drawings were good. We will send more as the jobs come through."

S.B., Design manager,
Material handling equipment

