

# Sheet metal CAD services for

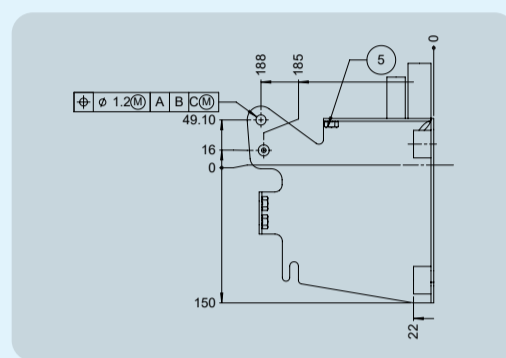
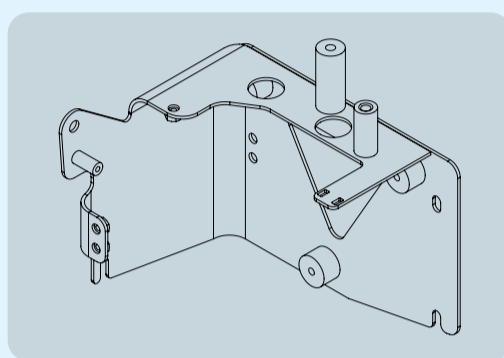
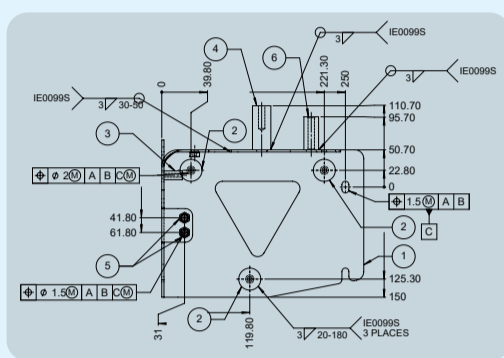
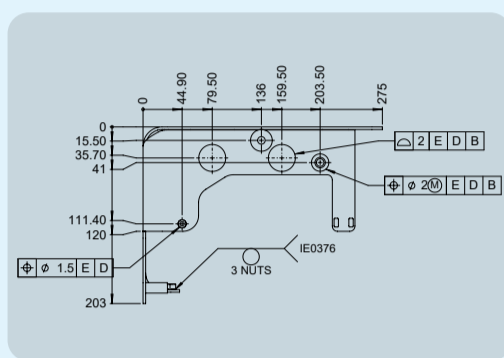
## building products to ensure quality shop drawings

Building products industry generously employs sheet metal. These metal sheets are fabricated through operations such as bending, rolling, punching, cutting etc. to develop products of desired shapes. On the shop floor, the machine operators use detailed shop drawings to understand the design intent of the products and fabricate quality products.

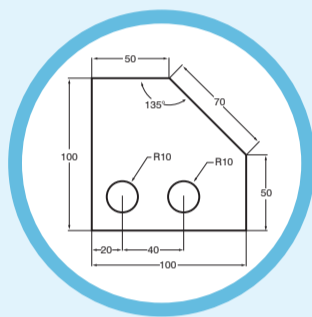
## Creating high-quality shop drawings

### 1 Fundamental details all sheet metal shop drawings should have

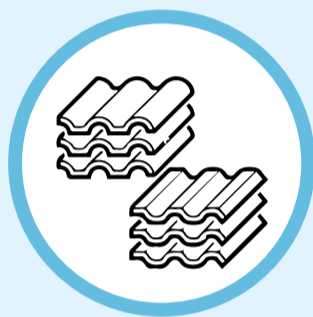
- ▶ Isometric views and exploded isometric views
- ▶ Information for weldments such as location, type, and length
- ▶ GD&Ts with manufacturing instructions
- ▶ Exact development view (Flat pattern) with bending notes & bending radius
- ▶ Assembly drawing if multiple parts are being manufactured and assembled



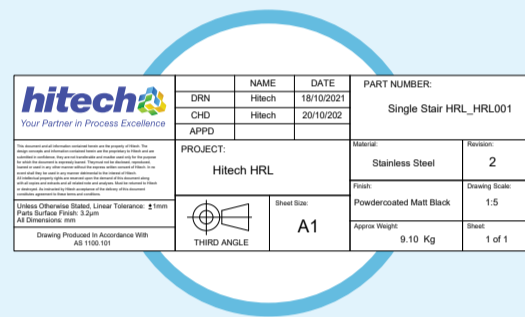
### 2 A non-negotiable checklist to perfect shop drawings



Follow standard dimensioning system



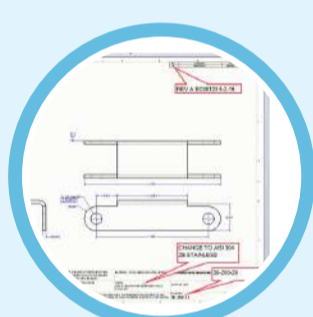
Include material details, thickness, type etc.



Clearly draw the title block with all necessary information



Understand the shop processes to avoid information clutter



Clearly indicate revisions



Know your fabricator's tooling palette

### 3 Best practices for shop drawings and drafting

- ▶ Follow Design for Manufacturability (DFM) & Design for Manufacturability & Assembly (DFMA)
- ▶ Use simplified part features to reduce the production time and costs
- ▶ Confirm the drawing formats with your fabricator to ensure there is no reading or difficulties or design interpretation challenges

## CAD platforms offer the accuracy and precision needed to create perfect shop drawings

But according to users, CAD software has unique challenges



49%

creating significant design is a big concern



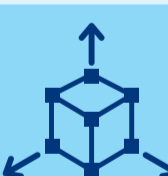
56%

find difficulties with imported CAD files



22%

collaborating with manufacturing/fabrication teams as a top challenge



34%

faced issues in system performance while working with large CAD assemblies

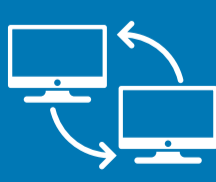
## Solutions that address all challenges



Adopting international standards like ANSI, TEMA, ASME, AWI etc.



Creating CAD files from PDF, TIFF, sketches, .rvt to .dwg to digitize data in CAD and reuse it



Creating neutral CAD files for seamless data exchange: STEP/IGES etc.



Deploy high performance systems with licensed software products from Autodesk, Dassault Systèmes etc.



Work with experienced outsourcing CAD partner

Hitech CADD Services' drafting experts are competent to deliver sheet metal fabrication drawings along with other manufacturing documents with first time right approach. We are capable to deliver SolidWorks models and drawings for a range of sheet metal building products.