

Minchu Products and Services

Portfolio



Minchu Products and Services

We Design, Develop, Market and Sell Innovative Products to the Indian Market. Our Motto is to take . the "Make in India" initiative to the next level by indigenously developing Useful and Innovative products in various industries, thereby providing jobs to local vendors.

Our aim is to focus more on producing greener products locally and exporting to different countries. We specialize in Product design and are capable of taking product design from concept to reality.



Minchu Products and Services

We list here all the notable and satisfied clients to whom we have rendered our services. They have come back to us time and again to get our expert advice/service!

We have worked with many different kinds of businesses. See a select list below

Fitkids

Pronto Networks

Kaynes Technologies

Magic Waters

Isometric Solutions

IVAPS

Legal Ease

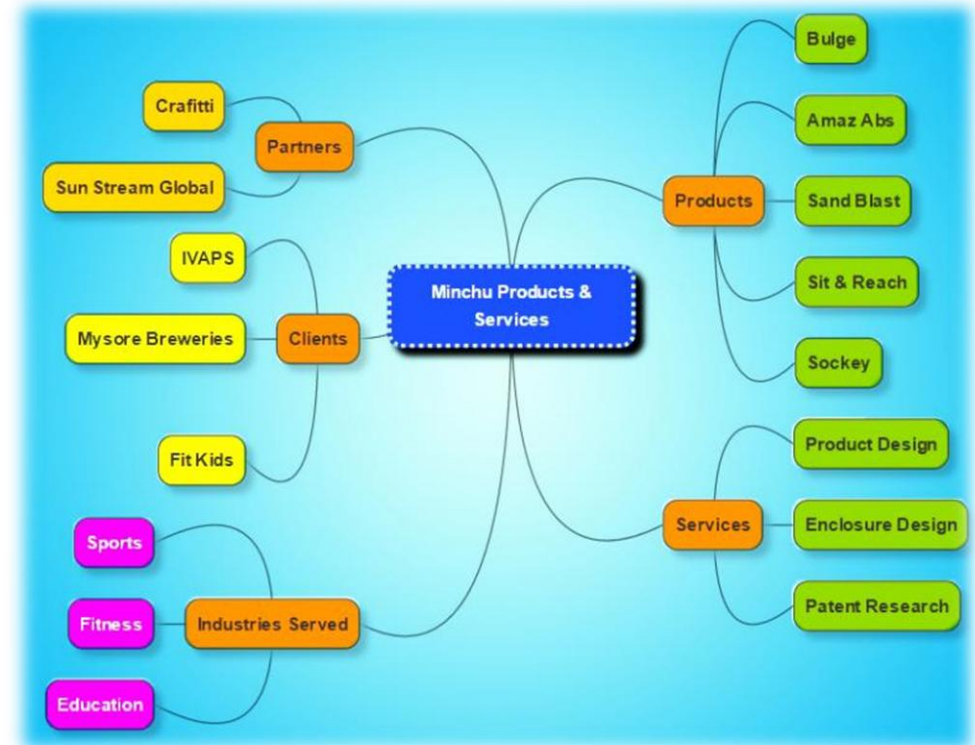
Mysore Breweries (SAB Millers)



Minchu Products and Services

Services provided for our clients are :

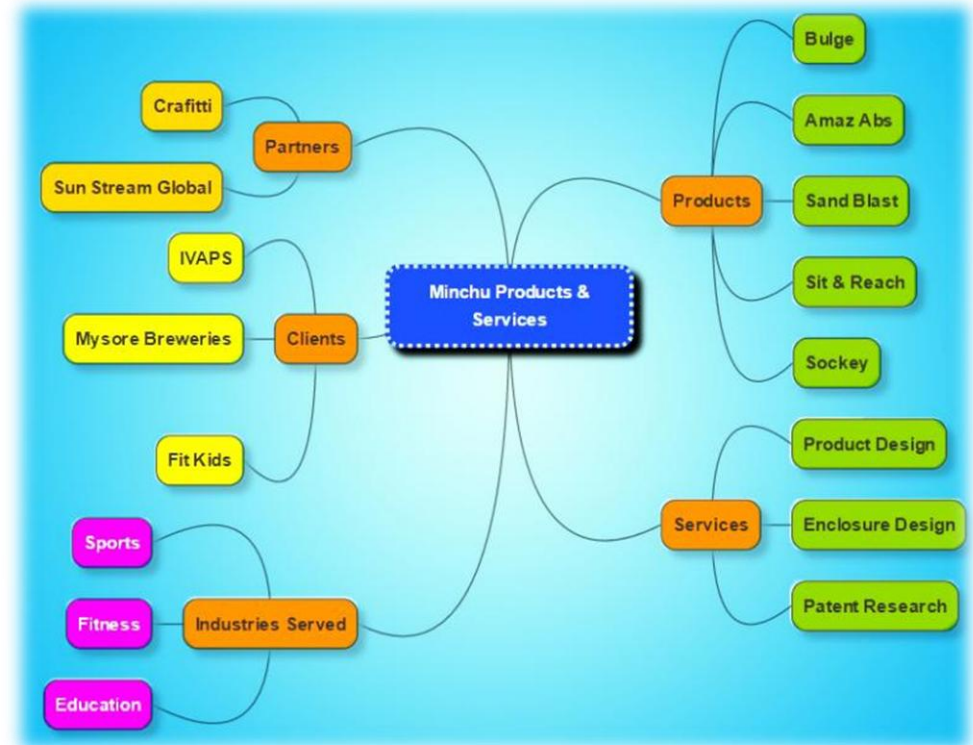
- Design, Development and Production of Sports & Fitness Equipments.
- Enclosure Design and Development for Modem.
- Prototyping of Various Enclosures for military Applications, Heat Sinks, etc.
- Prototyping of Various parts for Water Purifier Brackets , PCBs
- Prototyping of Enclosure Racks for Fitment and Initial Testing.
- Patent Portfolio Management.
- Patent Analysis and Ideas Generation Using Systematic Innovation (TRIZ)



Minchu Products and Services

Services provided for our clients are :

- Technical Illustrations & Animations.
- Prior Art Search.
- Patent Analysis.
- Creating Patent Drawings.
- Technical Publication.
- Engineering Drawings for Machines and sub Parts.
- Factory Floor & Layout Planning.



Minchu Products and Services

MINCHU TEAM

We have engineers and diploma holders in our team who are experienced and capable of handling design , modeling and drafting activities.

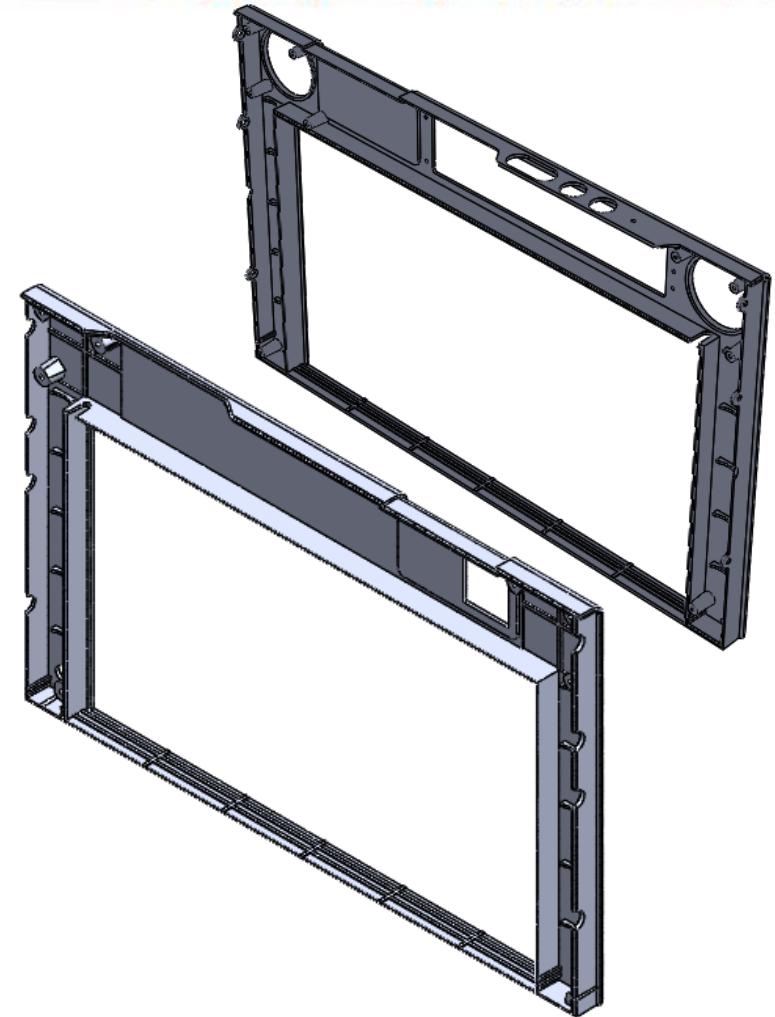
Our team has carried out numerous projects for our clients in different activities as requested from the Customer.

In all our engagements, we focus on building trust and commitment which will establish the foundation of a long term partnership with our customers.



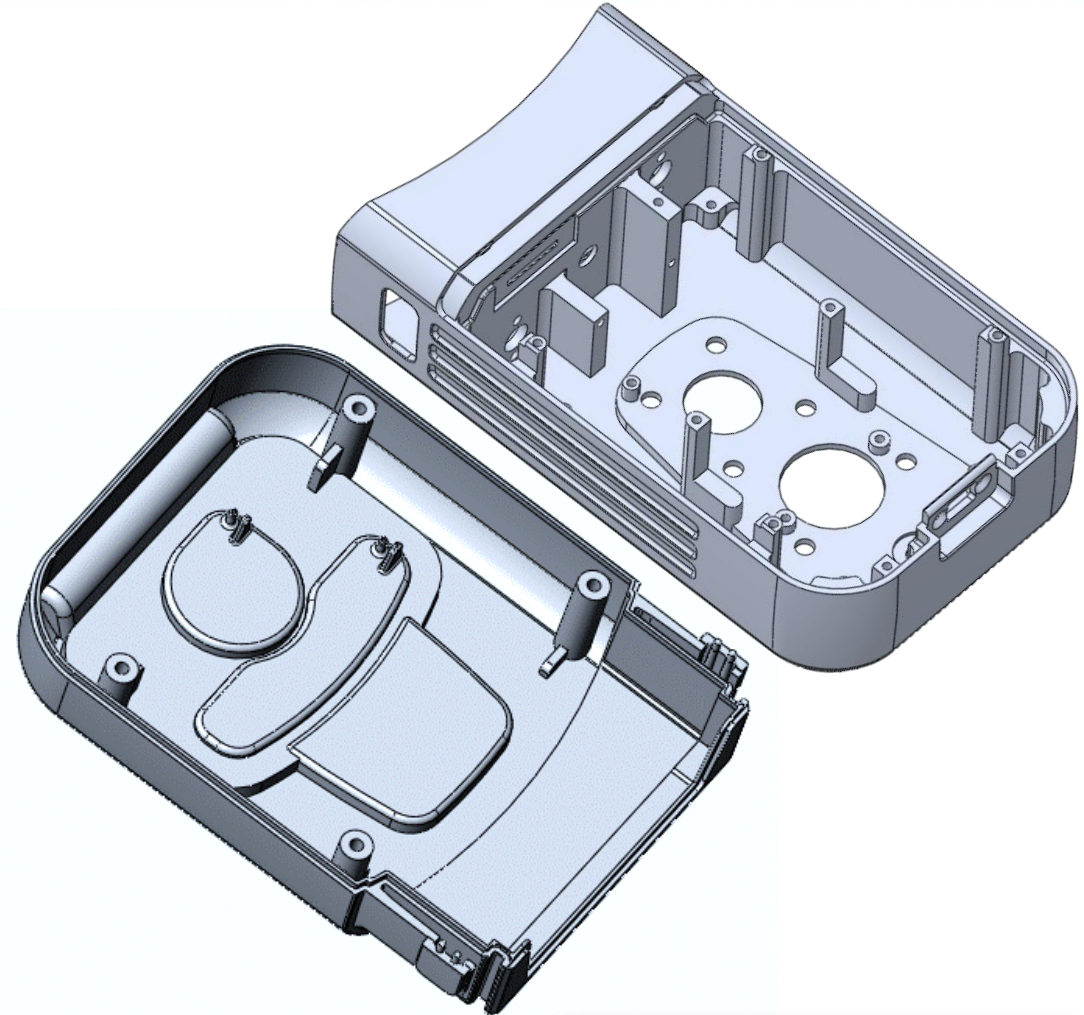
Project Sample: Bezel Design – Plastics

- ❑ **Summary:** To re-design the bezel based on customer's New Industrial Design sketches and old reference product 3d models.
- ❑ **Input:** Existing Product models, Industrial Design sketches
- ❑ **Scope:**
 - Converting Industrial Design Sketches into 3d models
 - Products should be designed for
- ❑ **Solution:** The existing design was modified to eliminate over-engineered components, without compromising the aesthetic and functionality delivering 45% reduction in enclosure cost.



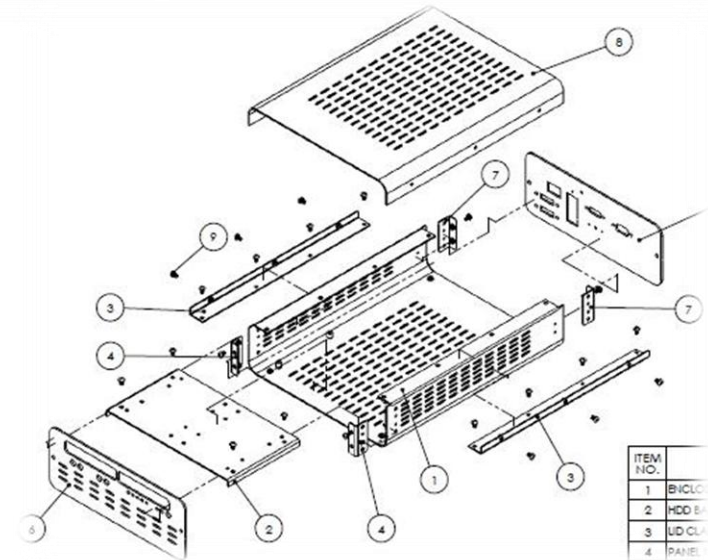
Project Sample: Enclosure Design – Plastics

- ❑ **Summary:** To design the hand held plastic enclosure that is ergonomic and easy to use. The emphasis was on ergonomics and aesthetics.
- ❑ **Input:** Reference Product and Design Files
- ❑ **Scope:**
 - Enclosure Design
 - Ergonomics
 - Prototyping
 - Tool Design - Support
 - Testing and approvals
- ❑ **Solution:** New Product Design – earlier design was larger and bulky not suitable for hand held operation.



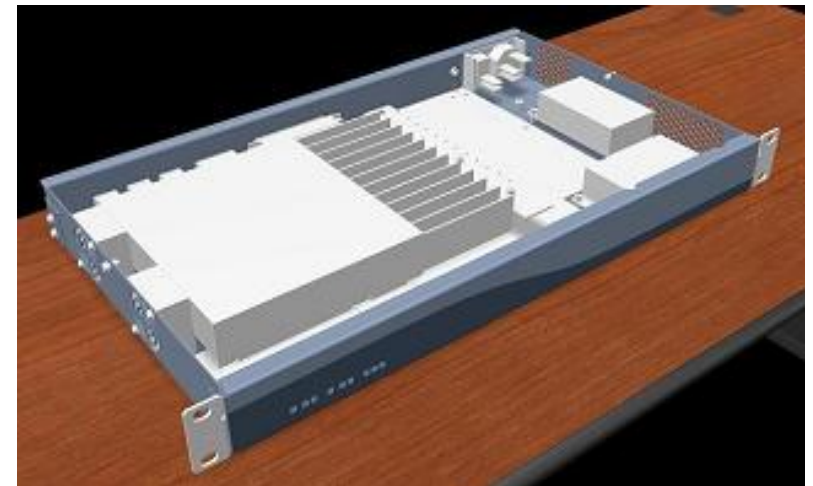
Project Sample: Enclosure Design

- ❑ **Summary:** A robust rack mountable metal enclosure for an industrial PC was required to be developed. This being a flagship product from the customer, the focus were on both product performance and aesthetic design
- ❑ **Input:**
 - PCB Design
 - Design Constraints
- ❑ **Scope:**
 - Develop a metal enclosure for industrial PC
 - Enclosure prototyping
 - Bulk supply from India.
- ❑ **Solution:** A compact rack mountable enclosure was developed considering EMI / EMC, thermal flow, and further expansion possibilities.



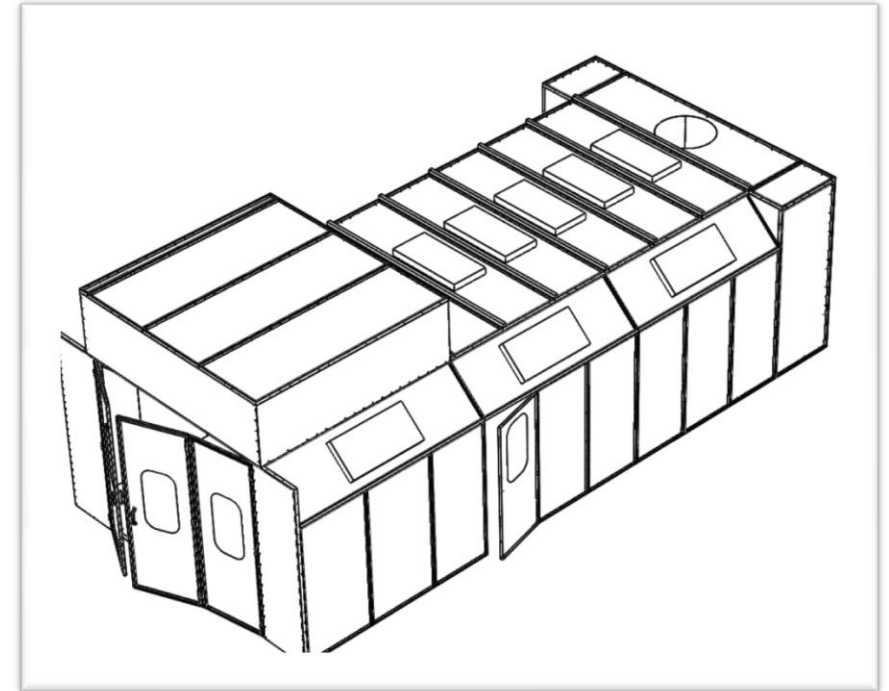
Project Sample: Enclosure re-design to reduce production cost

- ❑ **Summary:** To re-design the enclosure without affecting the brand identity, functionality and EMC parameters, resulting in substantial cost reduction.
- ❑ **Input:** Existing Product and Design Files
- ❑ **Scope:**
 - Teardown Analysis
 - Re-design
 - EMC testing and approvals
 - Prototyping
- ❑ **Solution:** The existing design was modified to eliminate over-engineered components, without compromising the aesthetic and functionality delivering 45% reduction in enclosure cost.

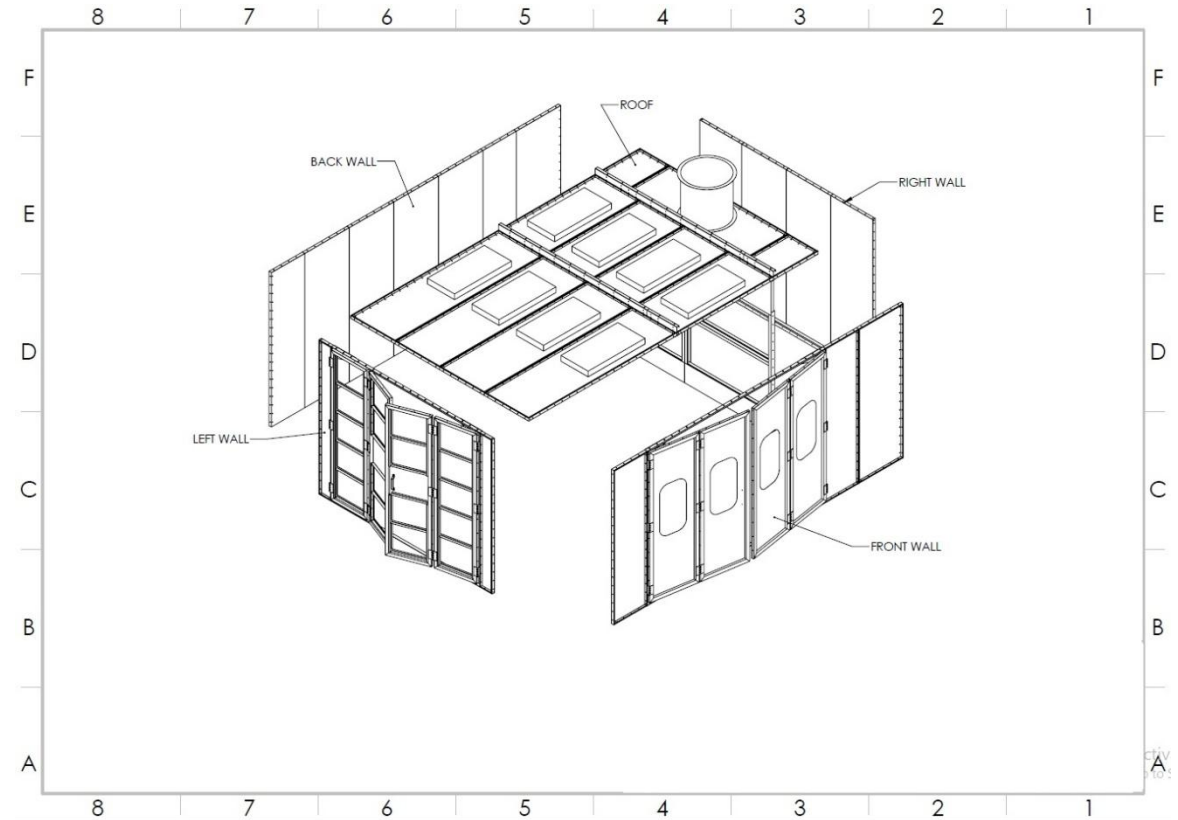
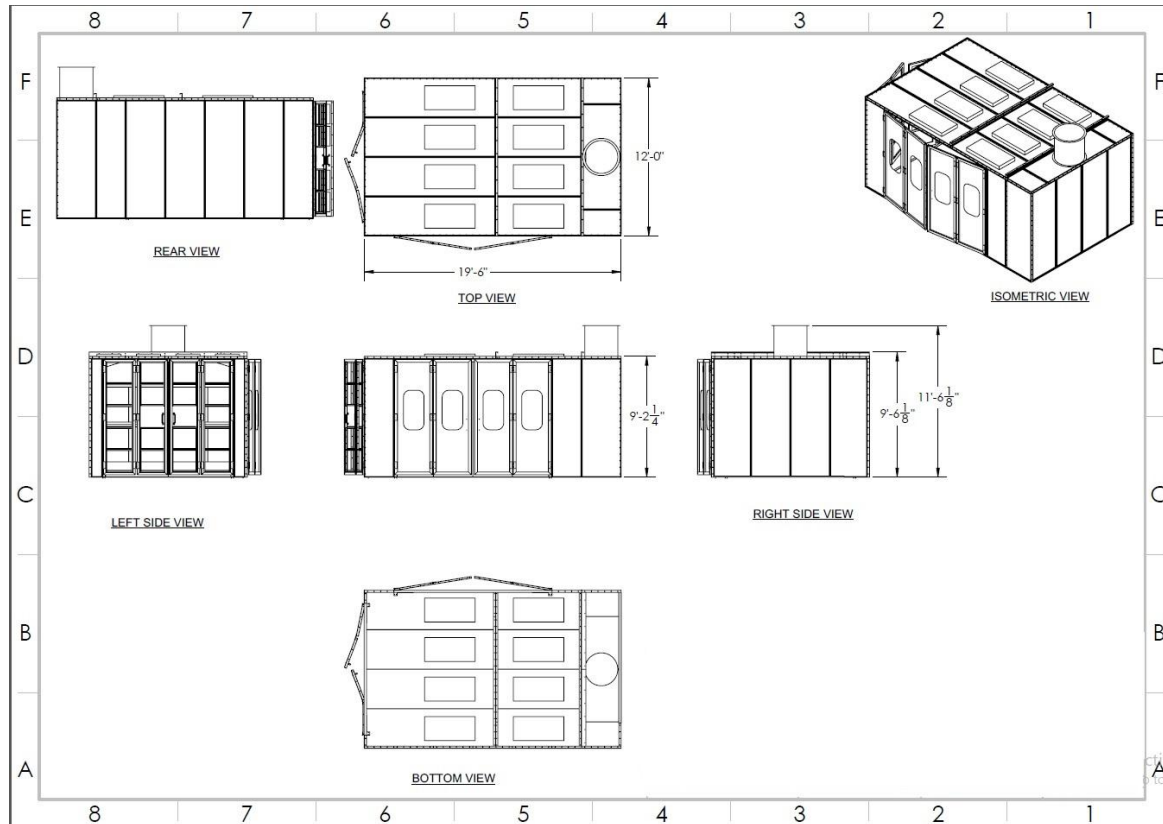


Project Sample: Spray Booths

- ❑ **Summary:** Spray Booths are enclosed structures that are used for the painting and finishing of manufactured items.
- ❑ **Input:** Existing Product and Design Files
- ❑ **Scope:**
 - Design & Modeling
 - Drafting
 - Installation manual

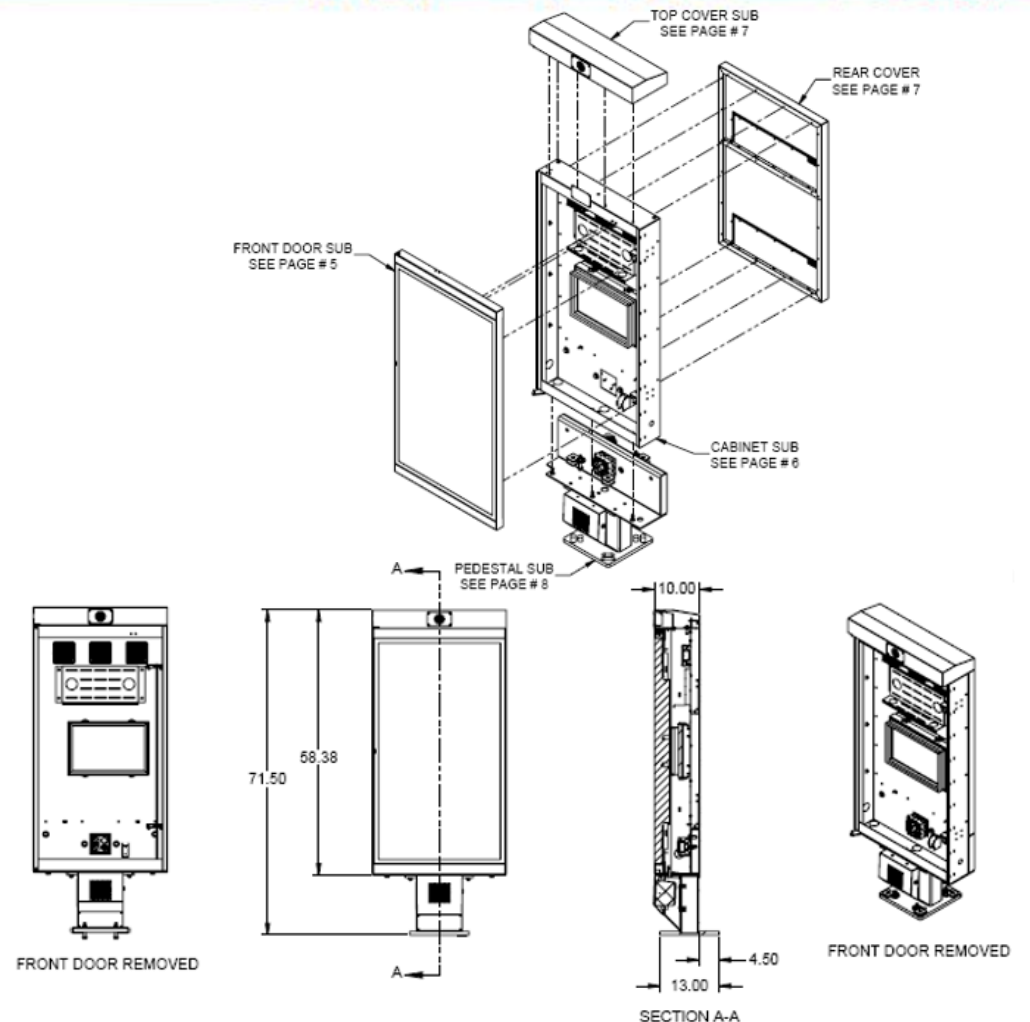


Project Sample: Engineering Drawing Services

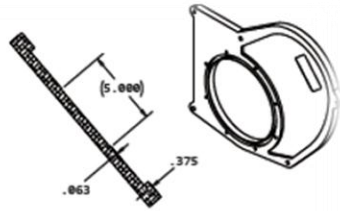
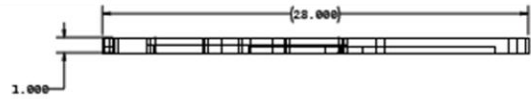
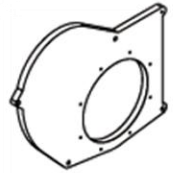


Project Sample: Engineering Drawing Services

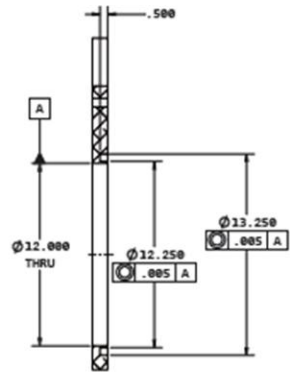
- ❑ **Summary:** To create clutter free, engineering drawings that adheres to Standards such as ASME, etc. per customer request.
- ❑ **Input:** 3d Assemblies, sub-Assemblies and parts, Company templates.
- ❑ **Scope:**
 - Create Exploded views
 - Manufacturable engineering Drawings of parts.
 - Quality Assurance and Checking.
 - Create Inspection drawings.
- ❑ **Solution:** Create drawings per customer standards or reference drawings given by them. Aim is to provide maximum information in least possible views/sheets and keeping it clutter free.



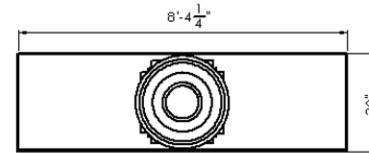
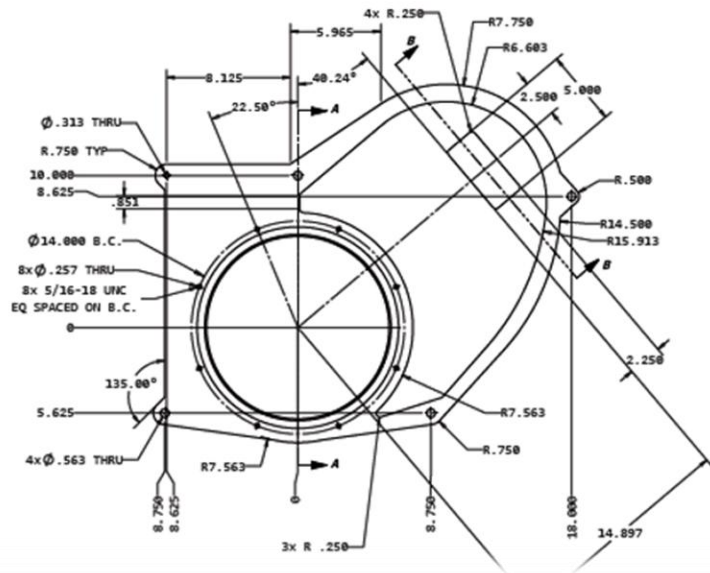
Project Sample: Engineering Drawing Services



SECTION B-B
SCALE 1 : 4



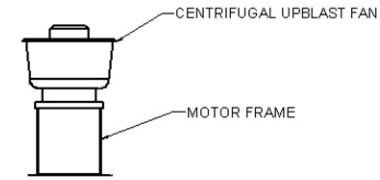
SECTION A-A
SCALE 1 : 4



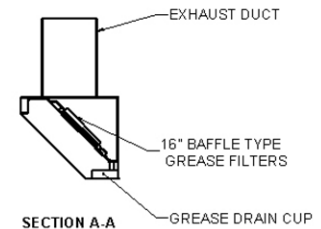
TOP VIEW



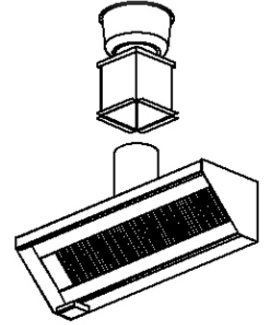
SIDE VIEW



FRONT VIEW



SECTION A-A
SCALE 1 : 16



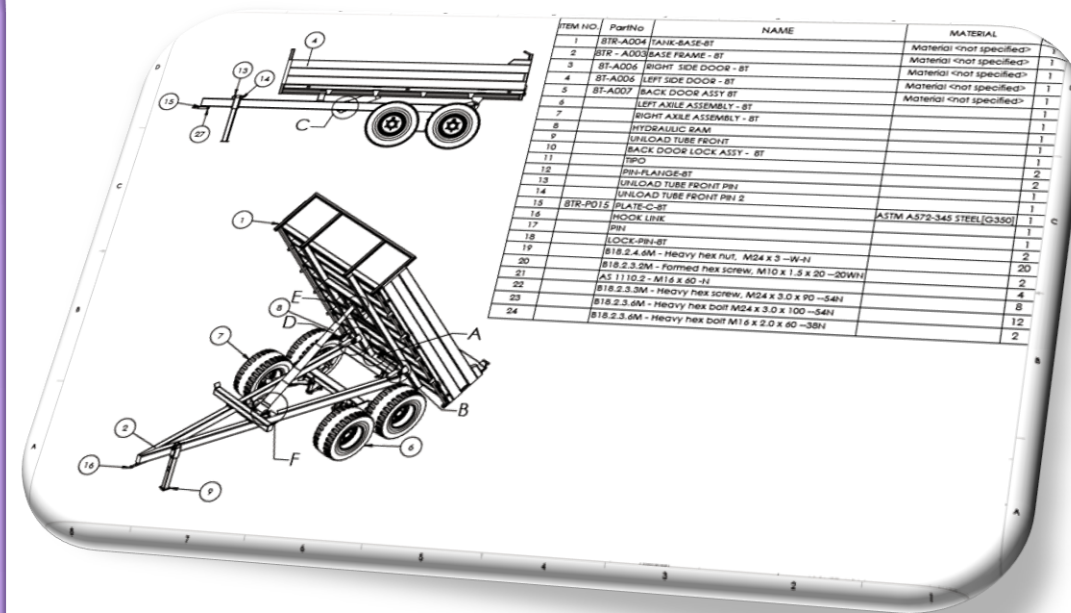
ISOMETRIC VIEW

NO.	DESCRIPTION	QTY	UNIT	REVISION
1	Commercial Kitchen Vent/Bo System			
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				

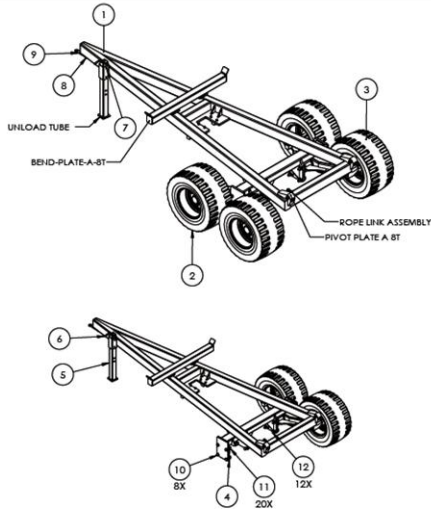


Project Sample: Agricultural machinery Engineering Design & Drawing Services

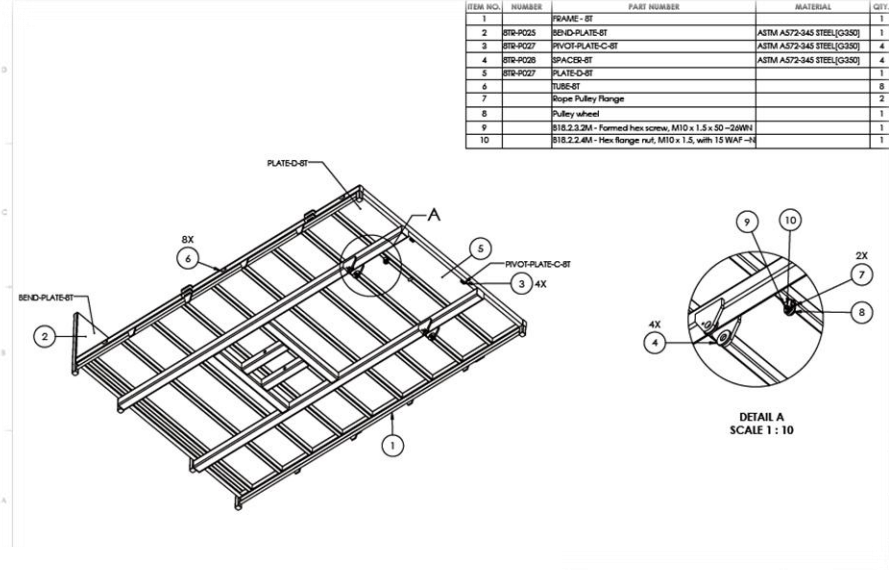
- ❑ **Summary:** To create clutter free, engineering drawings that adheres to Standards such as ASME, etc. per customer request.
- ❑ **Input:** Specifications , Drawings, Company templates.
- ❑ **Scope:**
 - Create 3d Assemblies, sub-Assemblies & parts,
 - Manufacturable engineering Drawings of parts.
 - Quality Assurance and Checking.
 - Create Inspection drawings.
- ❑ **Solution:** Create drawings per customer standards or reference drawings given by them. Aim is to provide maximum information in least possible views/sheets and keeping it clutter free.



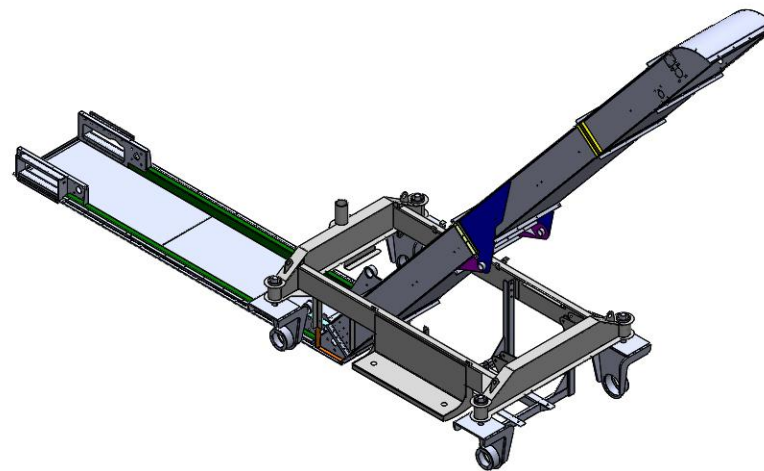
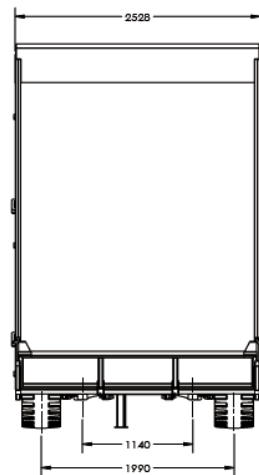
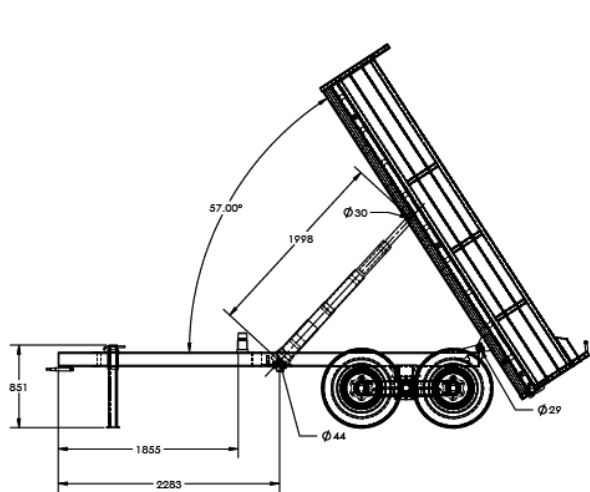
Project Sample: Agricultural machinery Engineering Design & Drawing Services



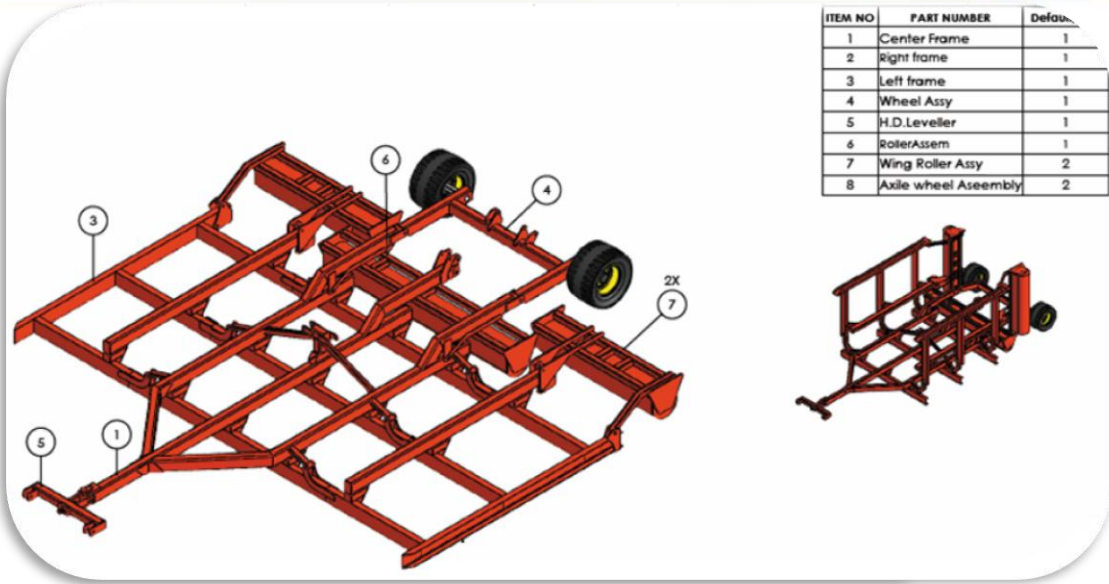
ITEM NO.	DESCRIPTION	QTY.
1	BASE FRAME - BT	1
2	LEFT AXLE ASSEMBLY - BT	1
3	RIGHT AXLE ASSEMBLY - BT	1
4	F315 UC315 BEARING HOUSING	2
5	UNLOAD TUBE FRONT	1
6	UNLOAD TUBE FRONT PIN	1
7	UNLOAD TUBE FRONT PIN 2	1
8	PLATE-C-BT	1
9	HOOK LINK	1
10	Ø18.2.3.3M - Heavy hex screw, M24 x 3.0 x 90 -S4H	8
11	Ø18.2.4.6M - Heavy hex nut, M24 x 3 -W4H	20
12	Ø18.2.3.6M - Heavy hex bolt M24 x 3.0 x 100 -S4H	12



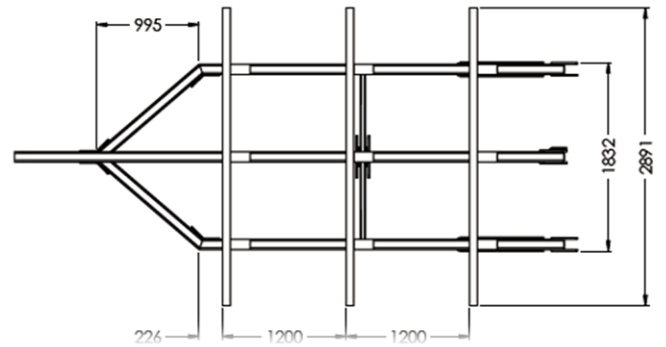
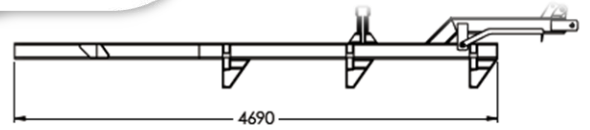
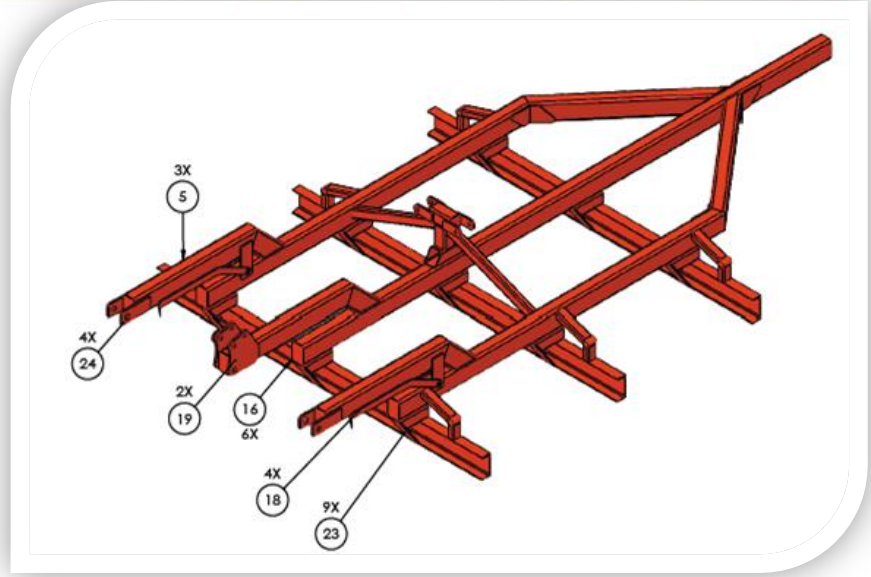
ITEM NO.	NUMBER	PART NUMBER	MATERIAL	QTY.
1		FRAME - BT		1
2	BT-P025	BEHD-PLATE-BT	ASTM A572-345 STEEL[C550]	1
3	BT-P027	PIVOT-PLATE-C-BT	ASTM A572-345 STEEL[C550]	4
4	BT-P028	SPACER-BT	ASTM A572-345 STEEL[C550]	4
5	BT-P027	PLATE-C-BT		1
6		TUBE-BT		8
7		Rope Pulley Flange		2
8		Pulley wheel		1
9		Ø18.2.3.2M - Formed hex screw, M10 x 1.5 x 80 -2AWN		1
10		Ø18.2.2.4M - Hex Range nut, M10 x 1.5, with 15 WAF -H		1



Project Sample: Agricultural machinery Engineering Design & Drawing Services

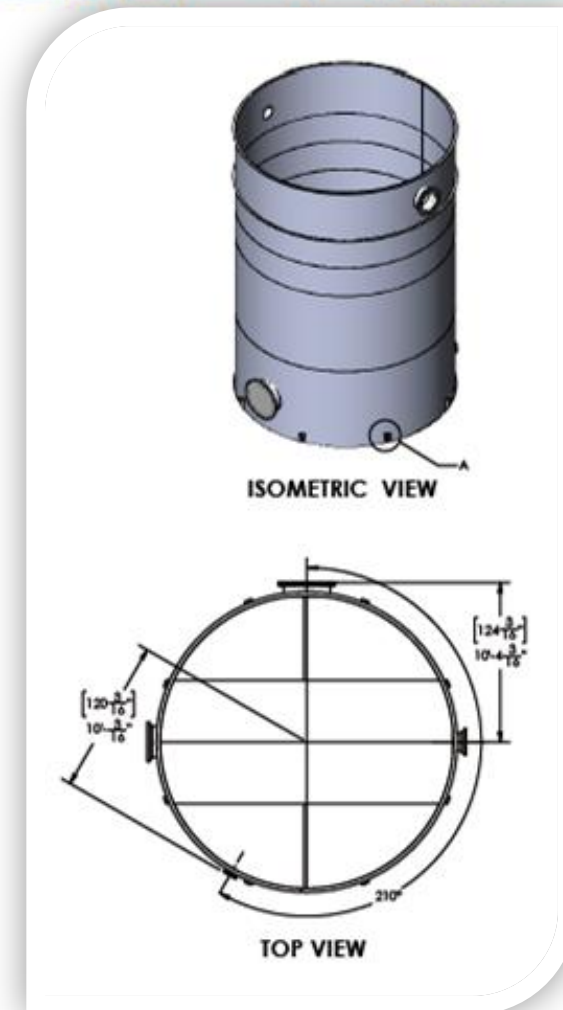


ITEM NO	PART NUMBER	Default
1	Center Frame	1
2	Right frame	1
3	Left frame	1
4	Wheel Assy	1
5	H.D. Leveler	1
6	Roller Assem	1
7	Wing Roller Assy	2
8	Axle wheel Assembly	2

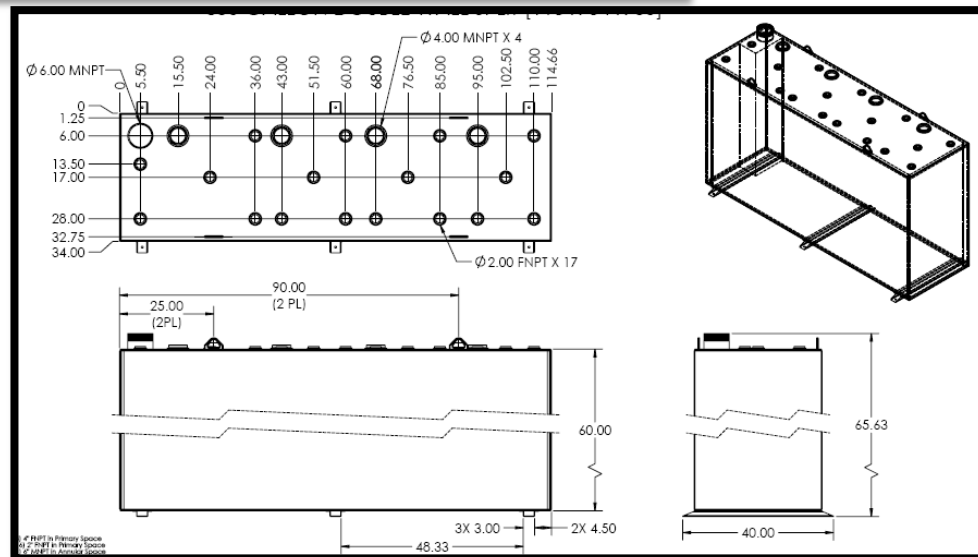
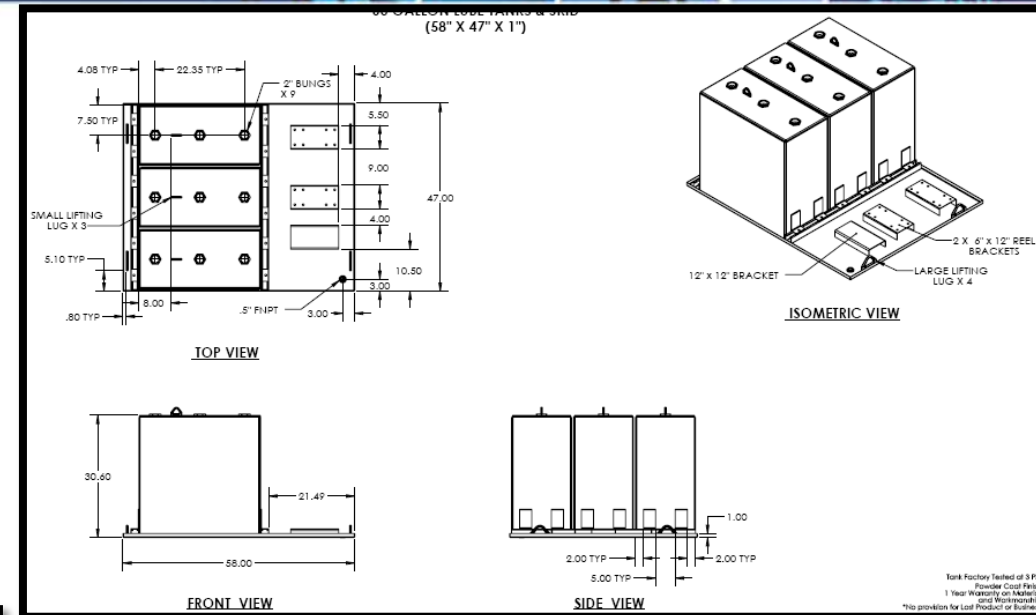
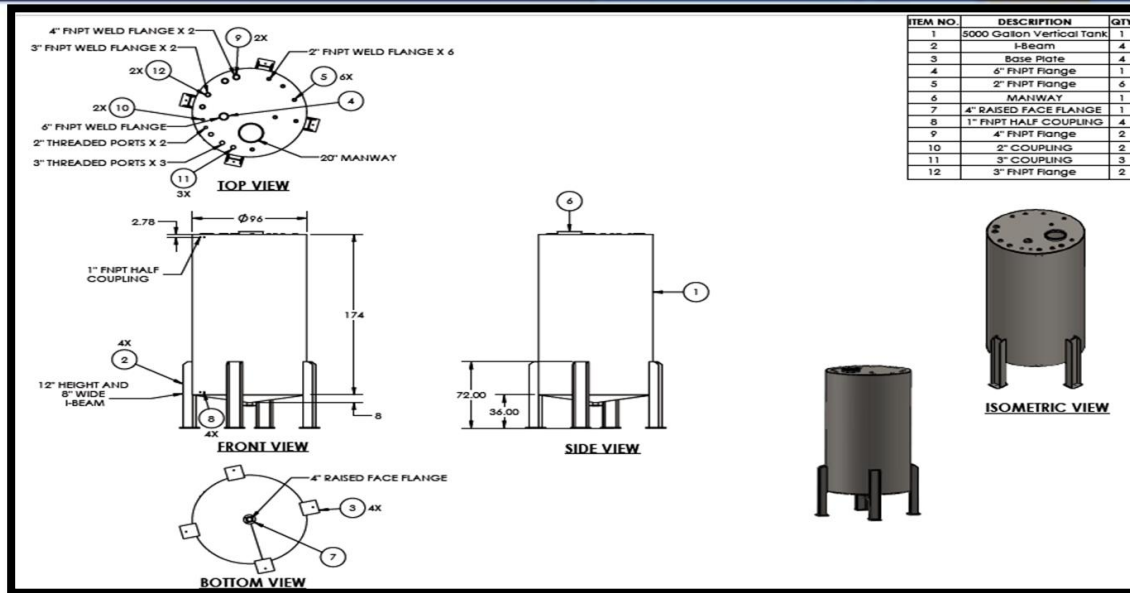


Project Sample: Tanks Modeling & Drawing Services

- ❑ **Summary:** To create clutter free, engineering drawings that adheres to Standards such as ASME, etc. per customer request.
- ❑ **Input:** Specifications , Drawings, Company templates.
- ❑ **Scope:**
 - Create 3d Assemblies, sub-Assemblies & parts,
 - Manufacturable engineering Drawings of parts.
 - Quality Assurance and Checking.
 - Create Inspection drawings.
- ❑ **Solution:** Create drawings per customer standards or reference drawings given by them. Aim is to provide maximum information in least possible views/sheets and keeping it clutter free.

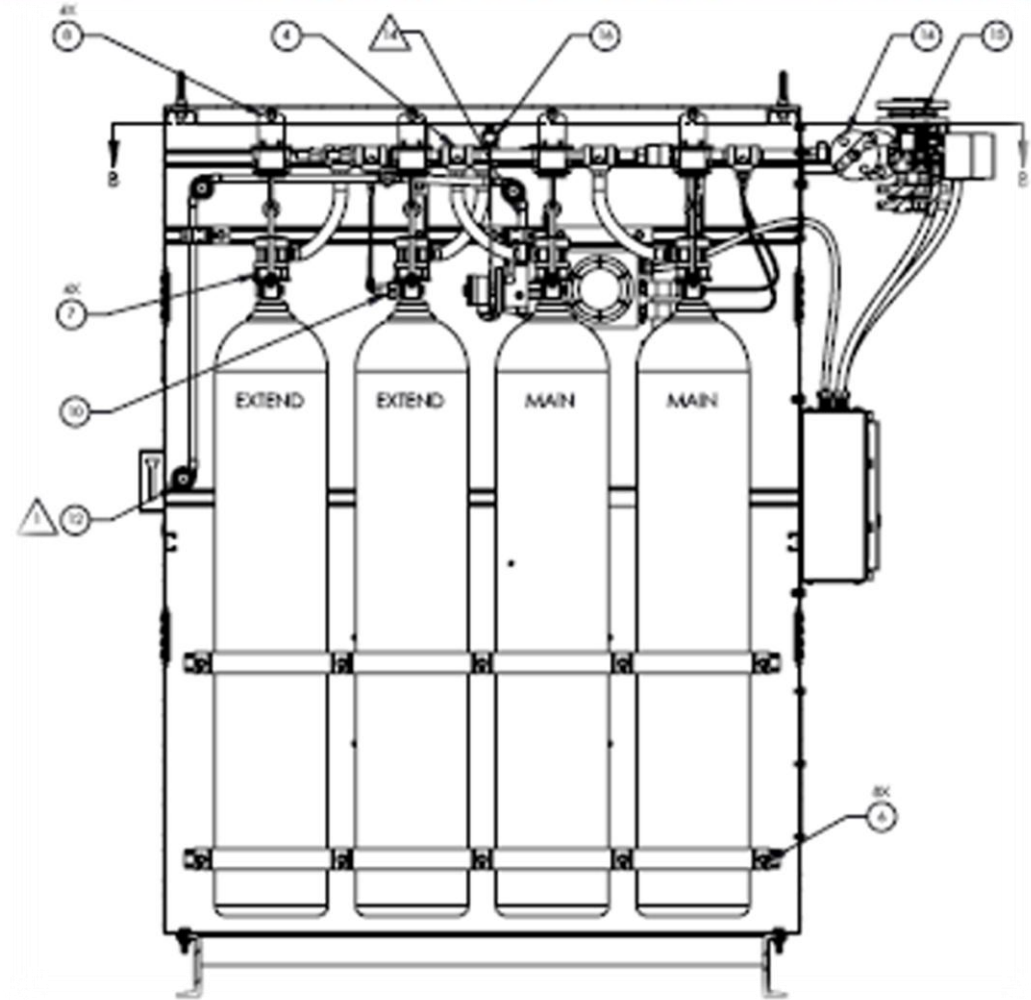


Project Sample: Tanks Modeling & Drawing Services

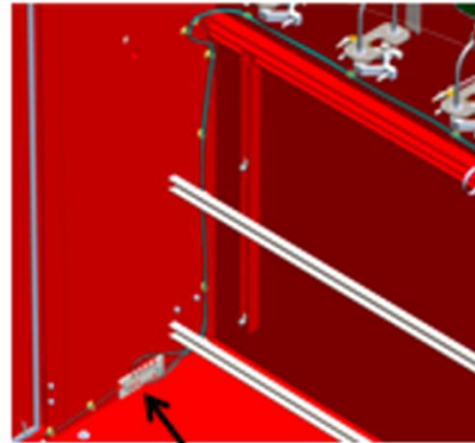
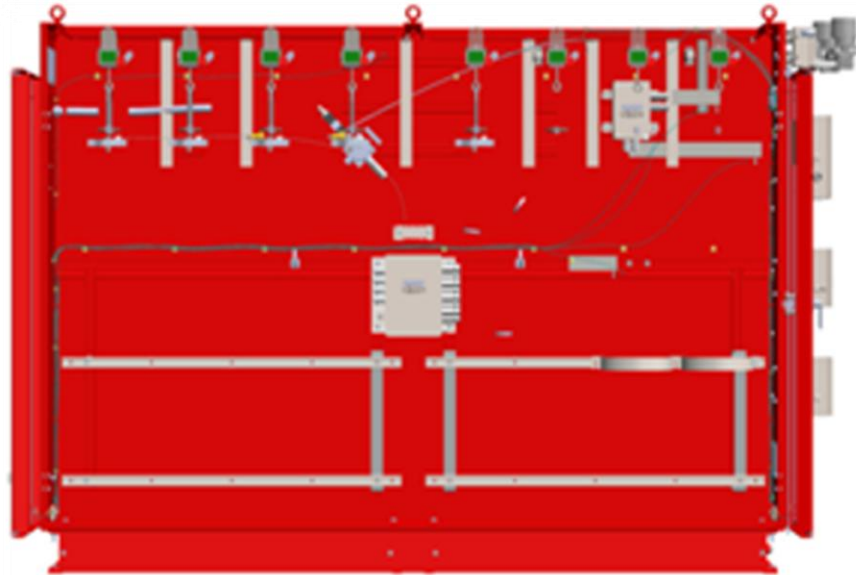


Project Sample: Assembly Instructions – Electrical Cable & Pneumatic Tubes Routing

- ❑ **Summary:** To Design and draft Electrical cable routing and Pneumatic harness or tube routing.
- ❑ **Input:** P& ID or electrical circuit diagrams, 3d Assemblies, sub-Assemblies and parts.
- ❑ **Scope:**
 - Create Electrical Cable Libraries, harnesses and cables.
 - Create Pneumatic tubes routing based on P& IDs.
 - Create drawings for it.
 - Creates Step by Step assembly instructions for physical routing of cables and tubes.
- ❑ **Solution:** Based on the input the library for all sizes of wires, harnesses and cables are created. Then end connectors, lugs, etc. are modelled and stored in library. Similarly, library for pneumatic components and tubes are created and then routed on the 3d model.



Project Sample: Assembly Instructions – Electrical Cable & Pneumatic Tubes Routing

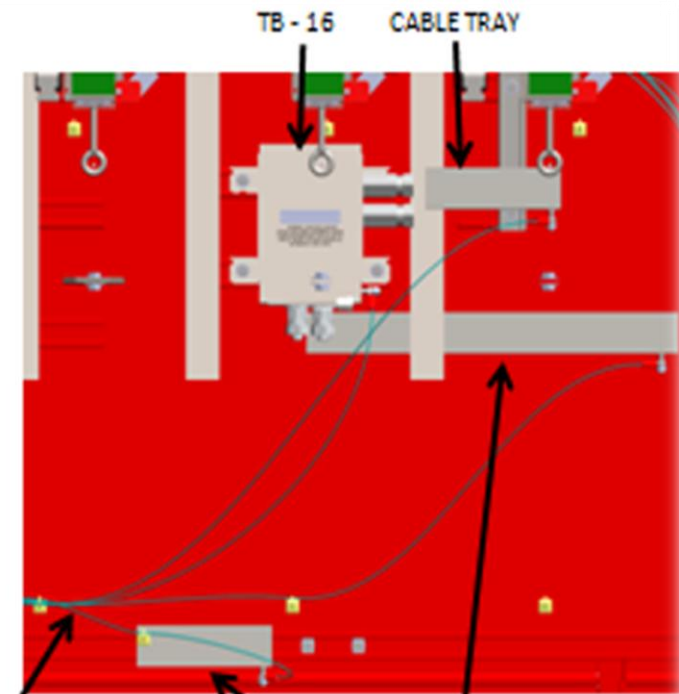


CYLINDER GROUND

Step 1

Grounding Cables from the CYLINDER GROUND (Left Side) is Connected to TB-16 & Cable trays respectively.

Tools Required



GROUNDING CABLE

CABLE TRAYS

Thank You