PROTOTYPERS
COMPANY PROFILE

2025

MASTERING COMPLEXITY

DELIVERING SIMPLICITY

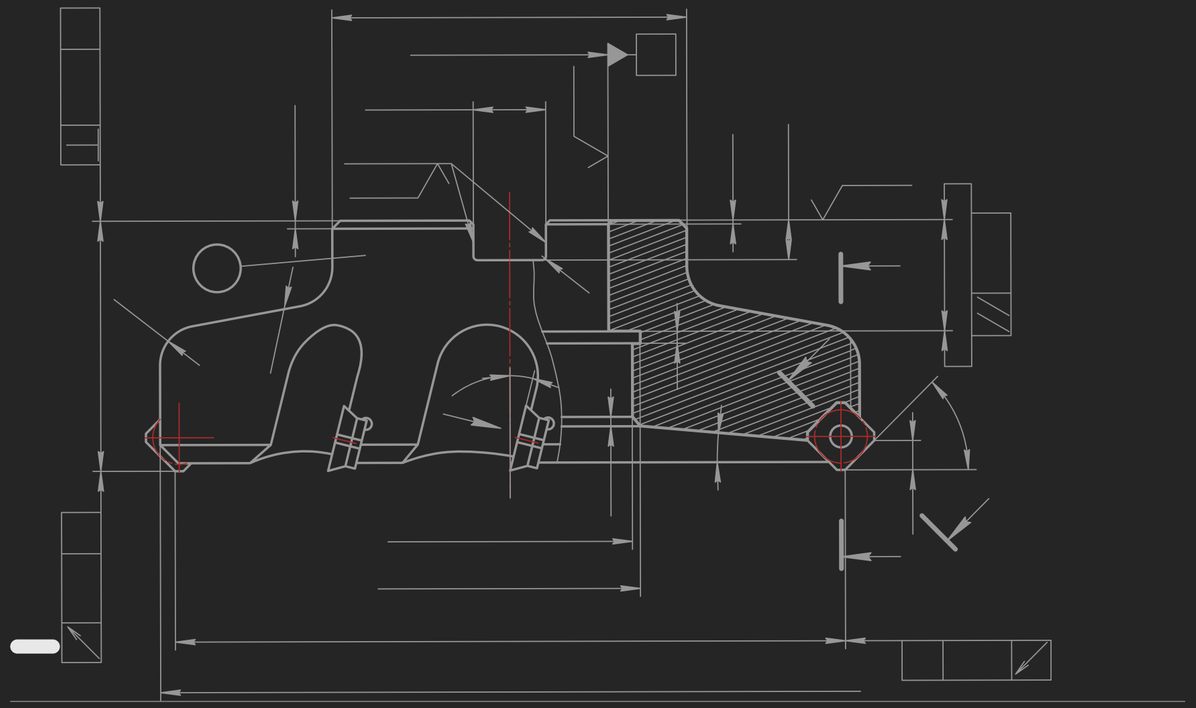
prototypers

MACHINE HUB LLC.

INTRODUCTION

Prototypers

A network of engineers and designers specializing in transforming complex ideas into a clear, organized, and executable process.
We believe that engineering challenges can be simplified into structured steps that can be executed smoothly and efficiently just like building with LEGO or following assembly guidelines.



WHO WE ARE

PROTOTYPERS is an **EPC**
(Engineering, Procurement, and Construction company)
founded in 2022 through a partnership between engineers and industrial designers with experience in the job market,
who share a common goal:

Simplifying engineering complexity and turning it into clear and efficient executable steps.

With an expert team in engineering and design, we have succeeded in developing an approach that connects deep understanding of challenges with industrial solutions.

During this period, we have completed more than **30 projects** for **7 companies** across **4 countries**, working in various fields, including:

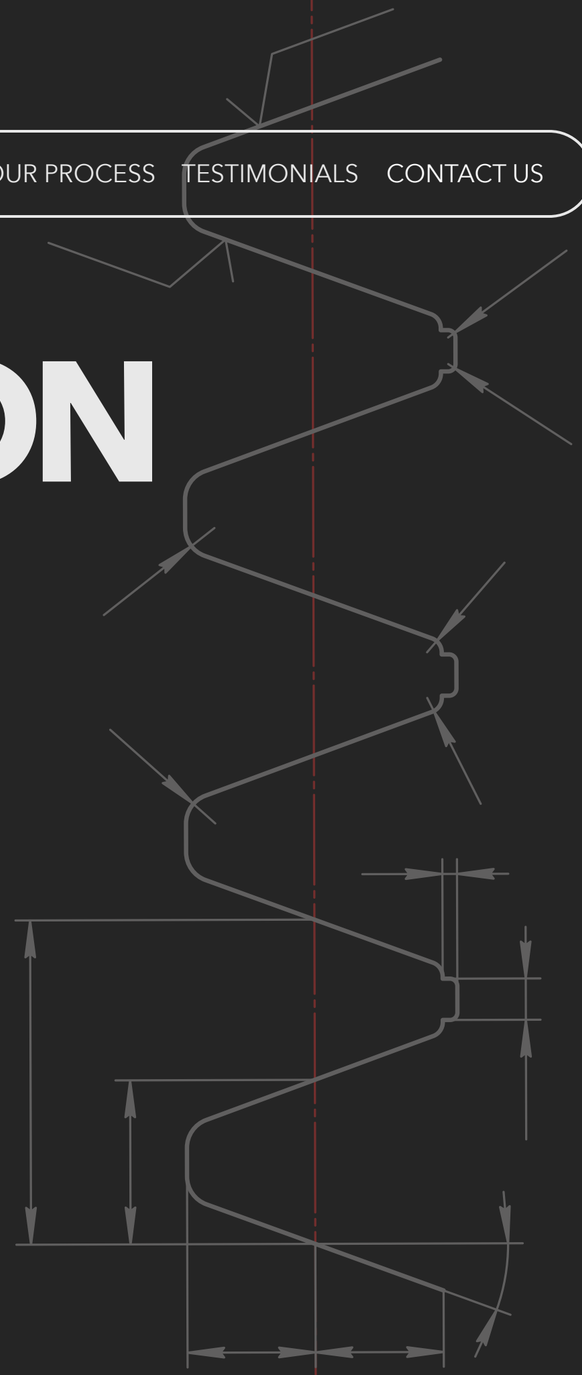
- **Fertilizers and chemicals production**
- **Building materials industries**
- **Metal structures sector**
- **Mechanical machinery sector**
- **Cosmetics production sector**
- **Molded products design sector**

Prototypers. Machine Design And Manufacture

prototyers

OUR VISION

To turn engineering complexity into a simplified path, where every project becomes a set of clear, executable steps that ensure results with minimal risks and losses, while opening the door for our clients to innovate and continuously develop.



MISSION

We simplify and organize the project execution process from the first idea to the last bolt.

By providing well-studied practical solutions supported by clear execution plans, we aim to increase efficiency, reduce waste, and achieve the highest return on investment for every project.

- WHY CHOOSE US -

We work to create added value.

We develop practical solutions that make manufacturing and assembly easier for you, reduce waste, and enable you to achieve measurable results in both time and cost.

We Win When You Win

Our real success is measured by how much your industrial operations improve and how much your profits increase.

prototyperg

OUR SERVICES

Service 01

Steel Structure Detailing

Service 02

Production Line Modeling

Service 03

Molded Products Design

Service 04

Consultation Sessions

STEEL STRUCTURE DETAILING

Detailed Steel Structure Drawings are an execution system based on the following:

- Accurate Bill of Materials (BOM) calculations that reduce waste.
- Subassembly Drawings for all structure components and how they are assembled and cut.
- Part Drawings that enable you to prepare all pieces in the workshop for direct installation on-site, without the need to fabricate parts and beams on-site.
- Nesting Layout drawings for higher accuracy and to reduce losses caused by cutting leftovers.

These services help companies execute their projects in a shorter time, with the lowest error rate, and with reduced costs for materials, labor, crane rentals, and equipment.

COMPARISON EXAMPLES BETWEEN THE TRADITIONAL METHOD AND OUR METHOD

1. Execution Duration:

- With the traditional method, a project of **1,000** square meters weighing **50** tons may take **3-4** months to complete, due to the time required for on-site fabrication, measurement errors, or lack of proper pre fabrication.
- Fabrication in workshops is better in terms of quality, with the presence of proper equipment, dedicated work areas, and specialized technicians. Therefore, it is faster and more cost-effective.
- The ability to prepare all parts in the workshop so they are ready for direct installation ensures minimal on-site fabrication or welding, which saves at least **20%** of on-site execution time.

2. Structure Size and Weight

- With the traditional method, the cost of steel used can be higher due to waste and leftover pieces that are sold at a very low price at the end of the project, unlike raw materials.
- By using nesting layouts and detailed drawings, we reduce the weight of raw steel by 5–15%, which means lower costs for transportation and installation.

3. Total Costs

- In a traditional project, you may face unexpected cost increases of **15-20%** due to errors or rework.
- We ensure accurate quantity calculations and reduced waste, which saves approximately **10-15% of the final costs.**

prototypers

COMPARISON BETWEEN WORKSHOP EXECUTION AND ON-SITE EXECUTION

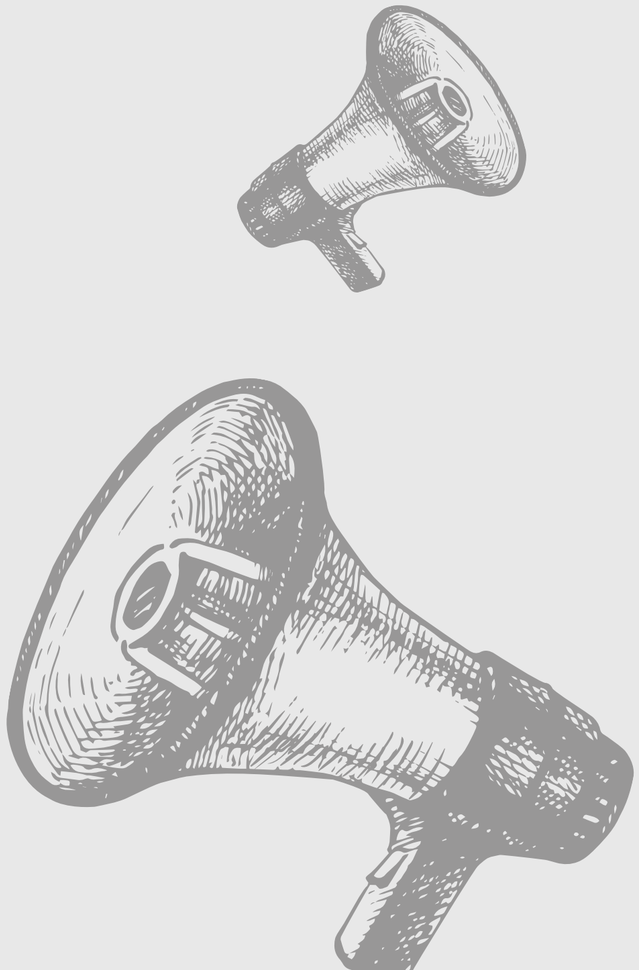
STEEL STRUCTURE DETAILING

Activity	Workshop	On-Site
Welding	(Automated / Robotic / Stick / CO_2) Higher quality, faster performance, and lower cost	(Stick Weld) Lower quality / Weather-dependent
Parts Handling	Easy when using a fixed winch in terms of flipping, mobility, and lower cost.	Crane costs are high, and their speed is lower compared to the workshop.
Drilling the parts	Drills and machines are specialized and greater in number, allowing the work to be completed faster and with higher accuracy.	The cordless drill is slower, less accurate, and more costly in terms of working hours.
Cutting the beams	Cutting beams using a beam saw (Beam Saw) is more accurate, faster, and does not require as much labor as the portable cutting tool (Angle Grinder).	Limited to using the portable cutting tool (Angle Grinder) only, with lower accuracy, higher cost, and more time required.
Cutting the plate	By using laser cutting or plasma cutting (CNC Laser Cutting or CNC Plasma Cutting), which provides greater speed, accuracy, ease, and reduces waste.	By using a portable cutting machine or oxy-fuel cutting (Grinder or Oxy-Fuel Cutting), which is costly, slow, inaccurate, and causes a lot of waste and rust.
Painting and Sandblasting	Higher quality, as the parts are prepared away from weather conditions.	Lower quality

THE SOLUTION WE PROVIDE

By applying our method of detailed drawings and pre-fabrication inside workshops, we are able to reduce the project execution time by 20% and lower the overall project cost by approximately 15%.

STEEL STRUCTURE DETAILING



IN THE MARKET TODAY

There is a clear increase in costs due to the gap in experience between the engineering office and the contractor, as well as the amount of details that may be overlooked by the contractor, which reduces efficiency or increases calculation errors. Therefore, detailed drawings must be provided for every piece or part of it to reduce waste and speed up execution.

PRODUCTION LINE MODELING

We model the entire existing production line in 3D, with detailed drawings for every component—regardless of its size—from the largest machine to the smallest mechanical part.

The Production Line Modeling service is specifically designed for factories that want to have complete control over their production lines.

THE GOAL IS FOR YOU TO HAVE ALL THE DATA YOU NEED SO YOU CAN CARRY OUT THE FOLLOWING ACTIONS AS YOU WISH:

- Facilitating the modification or customization of any part of the line to suit your operational or developmental requirements.
- The ability to fabricate spare parts for worn-out or damage-prone components before they are needed, thereby reducing the expected downtime of the equipment as much as possible.
- Repairing current malfunctions or preventing future ones.
- Adding or removing any equipment in a well-planned manner.
- Reducing dependence on the production line manufacturer.
- Expanding or improving productivity based on your plan, reducing technical and knowledge limitations.
- In the end, you receive a complete 3D model and an engineering detailed map for every part of the production line, placing you in **full control of your industrial operations.**

THE SERVICE INCLUDES

1. Complete 3D modeling for all components of the existing production line.
2. Detailed drawings for every part of the line, with documented specifications and measurements.
3. Preparing a comprehensive database that enables you to understand how each component works and how it connects to the rest of the line.

PRACTICAL BENEFIT

1. Independence from the machine manufacturer.
2. The ability to handle malfunctions and technical issues internally.
3. Flexibility to develop or customize the line according to market or operational requirements.
4. Reducing long-term costs associated with the parent company's support and maintenance.

PRODUCTION LINE MODELING

MOLDED PRODUCTS DESIGN

We provide **molded product design** services of all types, along with everything related to mold production and ensuring the product is ready for commercial manufacturing.

The service includes:

- Designing the product in its final form, ready for manufacturing.
- Designing the appropriate mold for plastic injection.
- Preparing detailed drawings for the mold and the product.

The service is intended for companies and factories that wish to develop a new product or improve the design of an existing one.

CONSULTATION SESSIONS

Specialized engineering consultation sessions in industrial design and execution.

This service is limited and directed toward those who want to reduce risks and gain clarity before starting.

INDUSTRIES WE SERVE

OUR EXPERIENCE HAS COVERED SEVERAL INDUSTRIAL SECTORS LOCALLY AND INTERNATIONALLY, ALLOWING US TO UNDERSTAND THE PRACTICAL CHALLENGES EACH INDUSTRY FACES AND TO PROVIDE SOLUTIONS THAT FIT THEIR NEEDS.

Sector
Molded Products

Sector
Metal Structures

Sector
Mechanical Machinery

Sector
Fertilizers and Chemicals Production

FERTILIZERS AND CHEMICALS PRODUCTION SECTOR

Designing and developing production lines and structures for chemical industries, covering pre-production stages such as raw material processing, and post-production stages such as waste treatment and recycling.

MECHANICAL MACHINERY SECTOR

We design and manufacture machines specialized in the following functions:

- Material Handling Systems
- Material Storage Systems
- Solid-Liquid Separation
- Solid-Air Separation
- Mixers
- Particle Forming
- Rotary Drums

METAL STRUCTURES SECTOR

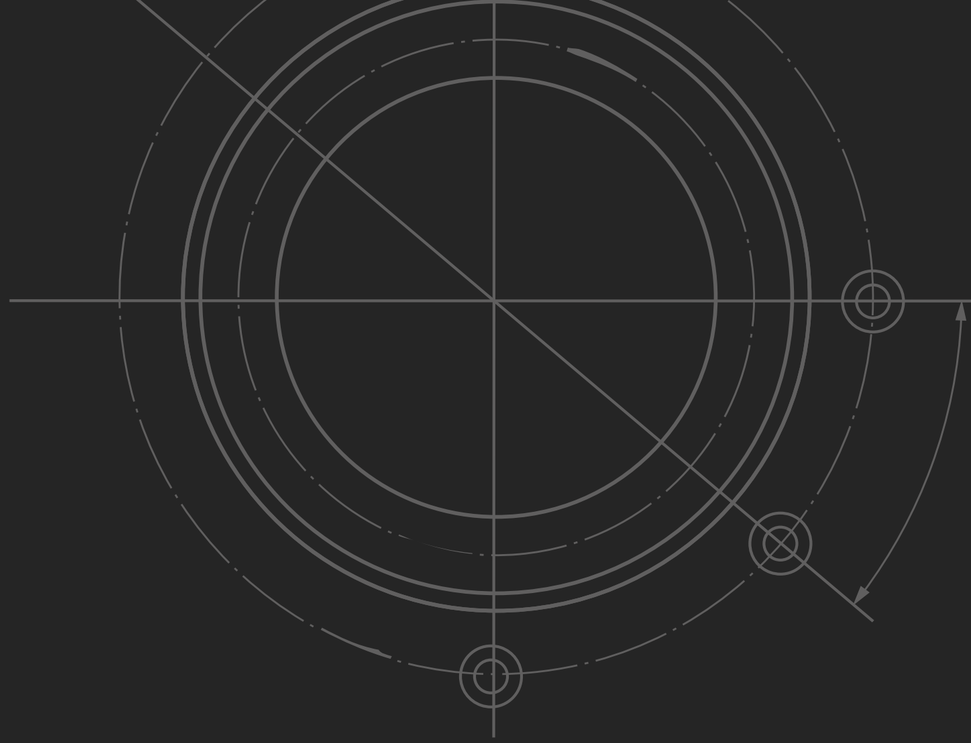
Designing and executing metal structures of all types:

- Steel Building Structures
- Production Line Structures
- Industrial Hangars

MOLDED PRODUCTS SECTOR

We design and develop molded industrial products using various forming and manufacturing techniques, while taking into account production ease and cost efficiency.

HOW WE WORK



Understanding Requirements

We meet with the client to fully understand their needs and define the technical and engineering foundations on which the project will be built.

Engineering Study

We analyze the requirements and create a well-studied engineering concept based on the given data and required specifications.

Modeling & Design

We prepare the finalized 3D designs along with all detailed technical drawings.

Delivery & Execution

- **Initial Submission**:

The design is presented in its semi-final form to receive your feedback, allowing your technical team to provide any notes before we begin preparing the official drawings.

- **Final Submission**:

A session is held to formally deliver the project to the executing engineer or to the contractors appointed by us or by you.

Follow-up and Support

We provide the option of on-site supervision to ensure that contractors and executors adhere to the details and plan that were previously prepared.

We have offered this service to many of our clients, and they have observed its direct impact on improving execution quality, monitoring accuracy, and ensuring that work progresses according to the specified schedule.

Supervision by our engineers ensures that what has been designed is executed exactly as planned, with efficiency and professionalism.

AVAILABLE DELIVERABLES

- 3D Model
- Detail Shop Drawings
- Cutting List
- Nesting Layout
- Foundation Layout

CLIENT TESTIMONIALS

Our clients' testimonials are the clearest proof of the value of the work we deliver. Every project we have executed has made a positive impact on our clients' operations and helped them achieve better results in both performance and cost.

Ammar Mansour

Owner of a metal fabrication workshop

"Easier and more comfortable to work with. Execution speed is definitely higher.
All parts are detailed, and during assembly everything goes smoothly. There is no waste. Honestly, comparing old plate-work methods to working with detailed drawings—there is simply no comparison."

Eng. Mahmoud Al-Salhi

Projects Manager for Chemical Production Lines

"The work is more detailed now; every part has its specifications. I hand it over to the technician and he doesn't need to come back to me as much as before because all the measurements are there."

Eng. Samer Abed Rabbo

Maintenance Department Manager at a major industrial company

"Things are better than before. When you have drawings for every single part, it definitely makes a difference in installation speed."

Eng. Ahmad Hassouna

Head of the Engineering Department at a major industrial company

"Of course there is a difference, because in the end there is organization.
When you rely on memory, everyone starts depending on their own recollection if nothing is documented on paper. Naturally, this makes the process harder.
And if the employee in charge is absent, on leave, or leaves the job and someone new comes in, having a documented basis keeps the operation running.
But when this documentation doesn't exist, if someone leaves, everyone starts thinking in their own way, and it becomes personal judgment."

CONTACT US

+962 779 415 153

info@prototypersjo.com

prototypersjo.com

prototypersjo

prototypers.jo