

OUTSOURCING THE CNC MACHINING SERVICE FROM CHINA: EVERYTHING YOU NEED TO KNOW

With the advancement of information technology and supply-chain management, it is possible to outsource manufacturing services from any part of the world.

China has been a manufacturing Hub of the world for the last two decades. **The quality and low- cost of manufacturing makes china a suitable option for outsourcing CNC machining and other manufacturing services.** There are only a few countries that can match the standards of China in terms of quality and efficiency.

Why Outsource the CNC Machining Services?

Let's start the article with why product developers and researchers need to outsource CNC machining services from China or any other country. The cost of technology and the required expertise are the reasons behind this. CNC machines and other post-processing equipment are highly-expensive, and experienced operators are mandatory for precise machining. All start-ups and even established manufacturers cannot create the parts or products independently, and outsourcing the service becomes an excellent alternative for them.

The **manufacturing cost** is another prime reason for outsourcing CNC machining and other manufacturing services. The processing cost (labor, equipment, and raw materials) vary from country to country. It brings a big difference in manufacturing costs among the nations. For example, Production costs are 75% lower in China than in Italy ([Europe Finds It's Hard to Say Goodbye to Low-Cost China, 2020](#)).

Why Choose China for CNC Machining Services?

As previously mentioned, China is a leading manufacturing Hub in the world. In the last two decades, this has been the only country that has achieved the advancement and growth of manufacturing. Chinese manufacturers and suppliers hold all the required expertise and technology for Precise CNC machining and other manufacturing services. The Chinese manufacturing industry accounted for 30 % of the global manufacturing output in 2021, up from 22.5 % in 2012 as the sector became more extensive and powerful ([China accounts for 30% of global manufacturing output: Official, 2022](#)).

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[The Ultimate Guide to China CNC Machining Services](#)

Following are the key reasons why you should choose Chinese manufacturers and suppliers to outsource your CNC machining needs;

- **Low labor & production costs**

Low labor & production costs are important reasons why China is a popular choice for CNC machining services. The labor cost is relatively low in China compared to US and European countries. Additionally, the cost of raw materials, energy, and other inputs is lower in China, contributing to the low production cost for CNC-machined parts.

- **Advanced CNC equipment**

Many Chinese manufacturers have invested heavily in the latest CNC technology and equipment, which allows them to offer high-precision and high-quality machining services. The multi-axis CNC machines are highly-precise and can be programmed to carry out complex machining tasks with high accuracy.

- **Strong supply-chain**

China has a well-developed and efficient supply chain management system, which allows Chinese manufacturers to efficiently source raw materials, and ship CNC machined parts worldwide. It also allows manufacturers to find the best quality and price for their specific needs.

- **Wide range of suppliers**

A wide range of suppliers also allows for high flexibility in terms of cost, quality, and lead time. For example, if a manufacturer needs a specific raw material and one supplier cannot provide it, the manufacturer can easily find another supplier. It ensures that the manufacturer can meet the needs of their customers in a timely and efficient manner.

- **Expertise in various industries**

Chinese manufacturers have a large & skilled manufacturing workforce and experience in various industries, including aerospace, medical, and automotive, which makes them well-suited for different types of CNC machining projects.

- **Strict quality control**

ISO standards are international standards that ensure that products and services meet certain quality and safety requirements. Most Chinese manufacturers have obtained ISO certification, demonstrating that they implement strict quality control measures and that parts or products meet international standards.

How to Choose the Best Manufacturer for Your CNC Machining Project?

Choosing which manufacturing company is suitable for your CNC machining project might be confusing since there are thousands of service providers in China. Following are the tips you can use to find the best option.

Identify your needs: Identify your needs for the CNC machining project, including the type of parts or components that need to be manufactured, the quantities required, and the necessary level of precision and quality.

Check the certifications: You can ensure the sustainability and standards of the company by evaluating its global certification. For example, ISO certifications (such as ISO9001, AS9100, or TS16949) are an excellent way to identify the best CNC machining companies.

Check the testimonials: You can get a clear idea about the capabilities of a particular manufacturing company by examining the testimonials. Ask for references from the supplier and contact their previous customers to get an idea of their level of customer service, quality of work, and delivery times.

Consider the location and lead time: Consider the supplier's site and lead time to ensure that the parts or components can be delivered on time and that the supplier can meet your delivery schedule.

Steps Involved in Outsourcing of CNC Machining Service from China.

Once you decide to outsource [CNC machining services](#) from China for your prototyping or mass-production projects, there are several steps to follow to get the parts or products at your door.

Step1: Communicate with the manufacturer

The first step involves communicating with the service provider about the requirements of parts or products in detail. You can provide a detailed description of requirements along with [2D and 3D drawings](#). It allows a manufacturer to create a precise quote for your project.

In addition, you can also have face-to-face meetings on Skype or other platforms. It helps to understand the capability of manufacturers and their experience in related projects.

Step2: Material selection and tolerances

Choose the [suitable material](#) for your project according to your needs and specifications. Material selection is a crucial step in any manufacturing project. You must consider desired properties, [machinability](#), cost, and other factors while choosing the material. Another thing that you need to choose or finalize is [tolerances](#), which determine how precise your parts will be. So, Specify all dimensions and tolerances while creating the drawing and 3D model. In addition, you can also specify the desired surface roughness and surface finishing.

Step 3: Ensure that the design meets all machining requirements.

Complex designs sometimes have features that are difficult to achieve with CNC machining. Therefore, make sure there are no sharp edges, small radii (>0.8mm), Impractical hole diameter, and pockets.

Step4: Compare and analyze the cost

There might be more than one manufactures that can fulfill your requirements. Comparing the CNC machining cost of those manufacturers can save some bucks. However, does not negotiate with the quality and standards while analyzing the manufacturing cost. For example, if you consider the lowest price but tolerance will be down, that does not make sense.

Step5: Negotiate and place the order

Once a supplier has been selected, the next step is negotiating prices and terms. This includes the parts or components cost, the delivery schedule, and the terms and conditions.

Once the terms and price are negotiated, manufacturers want advance payments. Make the payment and provide all detailed information regarding the project.

Step6: Continuously track the process

Although you cannot monitor the production process physically, be in touch with the manufacturer and track the progress of your project through solid communication.

Step 7: Get your parts or products.

Before shipping the parts or products, ask for the final inspection report and check the quality. Then, provide the shipping address and deposit the due payments. In some cases, manufacturers might be okay to proceed with the remaining amount after you receive the delivery.

Final Thought

In conclusion, outsourcing CNC machining services from China can be a cost-effective and efficient solution for product developers and researchers. China has a well-developed manufacturing industry with advanced technology and equipment, a skilled workforce, and efficient supply chain management. It is essential to conduct proper research and evaluation before choosing a supplier to ensure that the supplier can meet the project's specific needs.

ProleanTech is an excellent example of a Chinese manufacturing company that offers [high-quality CNC machining services](https://proleantech.com/) with 50+ material options. We specialize in prototyping and mass production and can deliver your parts within a few days. If you need outsourcing of any CNC machining service(milling, routing, turning, drilling, laser cutting, water jet cutting, and more) from china at a competitive price, Prolean is the best

option. So, send us your design, and we will get back to you with a detailed and accurate quotation.

Prepared by: [Er. Dikendra Acharya](#), Manufacturing Industry Engineer, Kathmandu University