









and honed our techniques so far. We can make whatever you want! But that doesn't mean we skip something. We check EVERYTHING!

of **Truth**

JINYOUNG PROTO co., Itd. Prototype Provid

Under the slogan of "Absolute Premium Quality & Value Creation", Jin Young Proto was founded to provide our customers with the prototypes that are superior to the mass produced. Combining art and technology, Jin Young Proto has acquired unparalleled craftsmanship in wooden pattern and cast products and is willing to contribute to helping the industry grow bigger and better. Jin Young Proto will never cease to amaze you with the state of the art quality products which are the results of our constant R&D and insatiable passion.

WE ALWAYS CHECK

SCAB — WASH ------CRACK — CAVITY — BUCKLE — OVERFLOW ------BLOW-HOLE — SEGREGATION — DEFORMATION —



C.E.O. MESSAGE

C.E.O. Sung-Chul Kim

76Mmh)



FORMULA OF PROTOTYPE





IN-HOUSE PRODUCTION SYSTEM

FEATURES WHAT WE CAN DO BETTER THAN OTHERS

With the full in-house production system, we do all the work from designing to post-processing on the premises. If a problem ever occurs, we can correct them quickly and efficiently.

LOW COST

Our molds are made of sand, which makes our process cost-effective and soft. It is easy to modify the design. Our system is suitable for pilot products or small quantity batch production.

📈 HIGH QUALITY

We provide high-end products that can be put into use right away. You can realize the full functionality that you have had in mind from the start. What you dream becomes reality with us.

➤ QUICK DELIVERY

We can deliver your product faster than any other competitors in the market. Our capability minimizes your loss and keeps you focused on your R&D projects at all times. JINYOUNG PROTO co., ltd. Precision Prototype Provider

OUR ONE-STOP PROCESS



EQUIPMENT LIST

| CATEGORY | MACHINE | MAKE | MODEL | Ω ΎΤΥ | CATEGORY | MACHINE | MAKE | MODEL | Ο΄ΤΥ |
|-----------|--------------------------|----------|----------|--------------|-----------|-------------------------------|----------|-----------------------------|-------------|
| PATTERN | V-MCT | DOOSAN | NR-700 | 3 | MACHINING | 5-AXIS | MAZAK | i-700 | 1 |
| PATTERN | V-MCT | YS | 1,200 | 1 | MACHINING | 4-AXIS | MAKINO | A61NX | 1 |
| PATTERN | V-MCT | KAFO | BMC3116 | 1 | MACHINING | 4-AXIS | MAZAK | NEXUS 4000-III | 1 |
| CASTING | FURNACE | JUNGEUN | 700kg | 1 | MACHINING | 4-AXIS | WIA | 63G | 1 |
| CASTING | FURNACE | JUNGEUN | 400kg | 1 | MACHINING | 4-AXIS | WIA | 50G | 3 |
| CASTING | SAND MIXER | DM | 5L/sec | 2 | MACHINING | 3-AXIS | WIA | KF5600 | 2 |
| CASTING | RECLAIMER | НКС | 5ton/hr | 1 | MACHINING | 3-AXIS | WIA | KF760BM | 1 |
| CASTING | HOT CHAMBER QUENCHING | JUNGEUN | 1m³ | 1 | MACHINING | 3-AXIS | DOOSAN | Mynx | 2 |
| CASTING | HOT CHAMBER AGING | JUNGEUN | 1m³ | 1 | QA | СММ | ZEISS | CONTURA G2 | 2 |
| CASTING | SHOT BLAST | DONGYANG | 20HP | 2 | QA | СММ | MITUTOYO | CRYS- TA-Apex S122010 | 1 |
| CASTING | CORE BLOWER | JYP | 500kg/hr | 3 | QA | 3D SCANNER | ZEISS | COMET L3D | 1 |
| MACHINING | 5-AXIS | MAKINO | D500 | 1 | QA | SHAPE /ROUGHNESS TESTER | MITUTOYO | SV-C3200 | 1 |

SAND-CAST PROTOTYPE

- We provide samples for renowned automobile companies and mechanical parts research institutes all around the world.
- We specialize in sand-casting complex and difficult parts that can not usually be achieved by our competitors.
- Our engineers have decades of experiences and top notch techniques. We give you value by improving the function and performance of your products.





HIGH PRECISION SAND CASTING

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- We do the 3D modeling process first, make molds with the CNC machine and then cast the prototype.
- •We can undertake difficult projects with multi core molds. We have RP machines that irradicate LASER on the sand coated with phenol resin.
- Our product line-up includes various parts for hybrid cars, hydrogen cars, eletric cars, dental equipment and diagnostic medical equipment.







CEASELESS INNOVATIONS

• We have exerted our efforts to lower the defect rate in the last decade through constant and ceaseless innovations. We deliver the products not only perfect in dimensions but also perfect in designed functions.

WE CAST YOUR DREAMS

•When our dreams come true, we end up living in an advanced, more comfortable and developed world. We owe our current life style to the pioneers who would never stop at any risk.

We are always on the side of those pioneers who make our dreams reality. Your imagination can take form and shape with Jin Young Proto co., ltd.

PRODUCT LINE-UP











AUTO PARTS

 Transmission Case, Water Pump, Oil Pump, Converter Housing, Engine Block, Intake Manifold, Exhaust Manifold, Hybrid-Car Parts, Electric-Car Parts, Hydrogen-Car Parts, Balance Shaft Carrier, Cylinder Head, Gearbox, Pinion Housing, Rack Housing, MDPS, Working Mock-Up

SMALL QUANTITY BATCH PRODUCTION

• Blower Pump, Medical Equipment, CT, DR, Semiconductor Equipment, Marine Engine Parts, Aircraft Parts, Railroad Vehicle Parts, Communication Equipment Parts, Custom-made Parts

ETC.

• Wooden Pattern, Mock-Up, Resin Pattern, Cell Pattern, Gravity Casting, Sand Casting, MCT

Power Train Parts

Highest Precision Parts

JY PROTO has been producing the most difficult parts.







Transmission Cases

High precision is required for transmission cases, for it is a highly complicated part as well as a system of systems. Hydraulic system, electronic system, and mechanical system is integrated at the same time for the transmission to be able to function properly. The current projects with JY PROTO is 8-speed DCT and 10-speed DCT. We are proud to tell you that we have been a realiable and trustworthy partner for the top class automobile makers of the world.

Cylinder Heads

Making use of the dynamic energy of intake air flow, cylinder heads are the key part that decides the performance of the engine.







Turbochargers

Nowadays, the turbine housing is made of high-temperature material such as D5S or nickel alloy.Dual Turbocharge is often required for the purpose of performance and it is so-called "state of the art."

Balance Shaft Modules

Electric Vehicle Parts

Green Car Parts

JY PROTO is capable of producing urgent and important prototype manufacturing, which often occurs in the process of R&D process of the top-class technology companies.





Cooling Fins



Fuel Cell Housing

Electric Motor Housing with Cooling Channels

As the need for fast, powerful and reliable electric vehicles is rising continuously, the solution for cooling is also getting more and more important. Forced air cooling has its limits, because the overall heat transfer coefficient can not be increased dramatically over a certain point.

Our predecessors invented a way out of this problem by forcing water to flow over the surface of the heat generating elements. But if you want to cast a case with internal coolant passages, you have to cast a case inside a case silumtaneously.

JY PROTO has its edge in making difficult casts in a very short period of time. We can deliver it in half the time, with higher quality and at lower cost than our competitors.



Inverter Housing



EPCU Housing



EPCU Housing



EPCU Housing





Inverter Housing (Fin Side)



Inverter Housing

Inverter Housing

• Jin Young Proto has grown up doing all the difficult molds in the last decade. Dual structured cast, multi-cored cast, minimum allowance cast. With all the technological superiority, we know how to solve the problems you may have.

• With all the technology and reputation beneath our wings, we are flying high over the world. We will always do our best to bring a better future through the cooperation with world class corporations.





We Cast Your Dreams PARTNEF

If you want more information, please visit our home page, you can have all the information and insights there. www.jyproto.com www.jyproto.co.kr



PHOTOGRAPHY AND DESIGN LACRIMA



JIN YOUNG PROTO Co., Ltd.

We design, develop and deliver

the parts for automobiles, ships, railroad cars, bikes, medical equipment and other industries in compliance with your orders. We have many renowned companies as our client all over the world, including Hyundai Motor Company that designated us as a preferred provider for precision cast parts. We produce and deliver the most reliable parts to you with our ISO9001 certified in-line production system. Our experiences in the field and unique production system have earned and will continue to earn your trust.

• HISTORY OF JINYOUNG PROTO SINCE FOUNDATION

| • DATE | • HISTORY |
|-----------------|--|
| 1999 Jan | FOUNDATION |
| 2005 Oct | ISO9001 Quality Management System |
| 2008 Jun | Enterprise with Bright Prospects by Government |
| 2011 Mar | R&D Center Established |
| 2011 Oct | Jin Young Proto co., ltd. Incorporation |
| 2012 Jun | Certified as Specialist of Parts & Materials |
| 2014 Jan | ISO/TS16949 and ISO14001 Certified |
| 2014 Jul | Certified as Specialist of Root-Technology |
| 2018 Nov | FC Factory Constructed |