



Bring your ideas to life

# Upper Rapid Workshop

**Upper Rapid Workshop** is a company founded in June 2013.

It was born out of a desire to want to offer solutions to the Iternational market in terms of design, prototyping and component fabrication through engineering know-how gained over the years.

The company is fortunate to rely on a team of production engineers who have now been working for more than 10 years in the field of prototyping small and medium production runs (1 to 10 thousand pieces) of components for various industry sectors.

We process any type of material and offer different production technologies such as: CNC machining, silicone molds, injection molding, 3D printing, and sheet metal machining.

Surface finishes complete our service portfolio, enabling us to deliver a high-quality aesthetic-functional product quickly (average 10-15 calendar days).

The company's philosophy is people-centered.

Upper rapid workshop enhances the growth and development of your business through an initial technical feasibility consultation and accompanying you through every stage of production up to delivery at your company.



Upper Rapid Workshop Co.,Ltd

**Service Team:** 

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# **Upper Rapid Workshop**



- Quality control
- > CNC machining
- Rapid vacuum casting systems
- Casting materials
- 3D Printing (SLA and SLS)
- Sheet metal processing
- Surface finishes
- Contact



### **Quality control**

#### Quality inspection equipment:

- 1. Coordinate measuring machine (CMM) SEREIN Croma
- 2. VMS3020 Two-dimensional measurement
- 3. Granite inspection table
- 4. Digital calipers, 0-600 (mm)
- 5. Full range of pin gage, 0.5-12 (mm)
- 6. Full range of slide gauges, 0-100-150-200-300-600-1000 (mm)
- 7. External micrometers, 0-25-75-100-125-150 (mm)
- 8. Surface roughness tester, hardness tester









# **CNC** machining

#### **Materials:**

• <u>Plastics</u>:

ABS, PMMA, PC, PP, PS, POM, PA, PA+GF30, DHPE, HDPE, PPS, PTFE, PEEK, etc.

• <u>Metals</u>: aluminum, brass, bronze, copper, steel, stainless steel

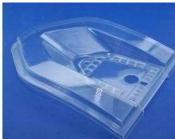












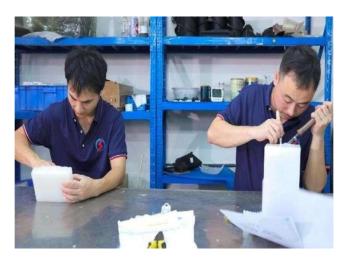


Example metalfmilled partslliche Automotive Sectore

# Rapid vacuum casting systems













## **Casting materials**

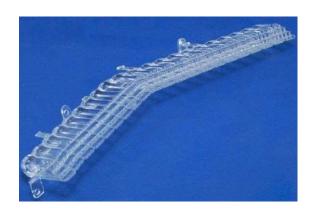
<u>Injection molding materials</u>: ASA, **ABS**, **PC**, **PC/ABS**, **PMMA**, PET, **PA6**, PA12, **PA66** (PA is nylon), **POM**, **PS**, HIPS, PE, DPE, LDPE, **PVC**, **PP**, **TPE**, **TPU**, etc.

Material Type	Material Code	Process	Color	Hardness Shore D/A	Heat deflection temperature	Application
ABS Like	Hei-Cast 8150	Vaccum Casting	Various	80-85	100 ℃	ABS type prototype parts Well-balanced physical properties Easy processing
	Hei-Cast 8158	Vaccum Casting	Various	84	90 °C	ABS type prototype parts Well-balanced physical properties Easy processing
	PX-223	Vaccum Casting	Black	65-80	120 ℃	low viscosity. Impact resistant. Good Impact and Flexural resistance. Temperature resistance above 120°C
	Hei-Cast 8263	Vaccum Casting	Various	83	O 08	Well-balanced physical properties, difficult- inflammability,UL94-VO
	UP 6160	Vaccum Casting	Various	80-81	190 ℃	Good thermal resistance Easy to pigment with CP color system Easy processing and good reproduction accuracy
	MU55	Vaccum Casting	Various	82	93 °C	Good Impact and Flexural resistance.
PC Like	PX-700	Vaccum Casting	Various	80	60 °C	good transparency with low shrinkage
	PX520	Vaccum Casting	Clear	82	70 °C	good transparency with low shrinkage
PMMA Like	UPX 5210	Vaccum Casting	Clear	83	70-90 °C	good transparency with UV resistance
	Z1940	Vaccum Casting	Clear	82	75 10	good transparency with UV resistance, yellow resistance, and corrosion resistance
PP Like	UP 5690	Vaccum Casting	Various	75-83	2	Flexural modulus adjustable High impact resistance, no breakable
Rubber Like	Hei-Cast 8400	Vaccum Casting	Various	30-90	=	Components for variable hardness,20A-90A Easy to pigment with CP color system
	MU-89	Vaccum Casting	Various	20-90	8	Components for variable hardness,20A-90A Easy to pigment with CP color system
	T0387	Vaccum Casting	Clear	30-80		Components for variable hardness, 20A-90A Transparent
POM Like	XU-50	Vaccum Casting	Various	87	145 °C	High flexural modulus of elasticity High reproduction accuracy Easily coloured with CP pigments
PA Like	2180	Vaccum Casting	Black	87	135 ℃	0.2% low shrinkage , Corrosion resistance, acid and alkali resistance. High abrasion resistance

# **3D Printing (SLA and SLS)**

#### Some materials available:

- > ABS
- > PEEK
- > ABS-like resin
- > Transparent resin
- > Nylon
- > Nylon + fiberglass
- > Etc.









### **Sheet metal processing**

#### Materials available:

- > Steel: Q235, 45#, 40Cr, cold rolled plated (SPCC), galvanized sheet (SECC, SGCC), etc.
- > Stainless steel: SS301, 303, 304, 316, 17-4PH, etc.
- > Aluminum: Al5052, 6061, 6063, 7075, etc.
- > Brass, copper and others











### **Surface finishes**

#### Our part finishing capabilities:

- ➤ Mirror polishing/steam polishing
- > Paint finish: matte/glossy/soft touch/electrically conductive
- > Silk printing/ pad printing/water transfer printing
- > Anodizing
- > Chrome plating
- ➤ Galvanizing
- > Vacuum metallization
- > Laser engraving
- > Powder coating
- > Sandblasting
- ➤ Heat treatment, etc.









### Contact us

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