



KINGS 3D

The Future is Infinitely Possible

Leading Brand in Industrial SLA 3D Printer

Comprehensive 3D Solutions Bring Your Idea to Reality

KINGS SLA3D PRINTER

24-hour Unmanned Intelligence,
Industrial Innovation Leader

> Batch printing, efficiency increased by 5 times

Kings 3D printer is ultra-fast in printing speed, and is capable of producing multiple products at one time, with the development efficiency increased by 5 times compared with CNC machining.

> Regardless of the complexity, the accuracy rate reaches 0.08%

360° printing makes it easy to produce complex structures like barbs, curved surfaces, hollow products and etc. Accuracy rate: $L < 100\text{mm}: \pm 0.08\text{mm}$; $L \geq 100\text{mm}: \pm 0.08\% * L$.

> Easy to operate, 24-hour unmanned intelligence

Kings control software is very user-friendly, and the automatic production needs no guard, which saves up to 60% of the labor cost compared to CNC machining.



➤ **Multi-attribute materials reduce manufacturing cost by 50%**

Kings has developed printing materials of various attributes that meet the needs of different industries, which saves more than 50% cost for customers.

➤ **1.7 meters, the largest SLA 3D printer in China**

The largest printing size of the Kings 3D printers is 1700*800*500mm, popular in large-size rapid prototyping, such as the automobile industry.

➤ **No noise, low energy consumption, more eco-friendly**

Kings 3D printer brings no noise and the maximum power consumption is lower than 2KW. The 3D printing of model and mould brings no dust or heavy metal pollution, thus providing workers with a healthier environment.

PARAMETER SPECIFICATIONS

LASER SYSTEM

Laser Type	Nd: YV04 Solid Laser
Wave Length	355nm
Power	Minimum Power to Liquid Level $\geq 300\text{mW}$

COATING SYSTEM

Coating Mode	Intelligent Position Vacuum Recoating
Layer Thickness	0.05mm~0.25mm
Accuracy	L < 100mm: $\pm 0.08\text{mm}$; L $\geq 100\text{mm}$: $\pm 0.08\% \cdot L$

ELEVATOR SYSTEM

Vertical Resolution Ratio	0.0005mm
Repeat Positioning Accuracy	$\pm 0.01\text{mm}$

CONTROL SOFTWARE

Machine Control Software	KING3D Control Software
Software Interface	3D Design Software, STL File Format
Operation System	Windows 7
Network Type and Protocol	Ethernet , TCP/IP

INSTALLATION CONDITION

Current Source	200-240VAC 50/60Hz, Single Phase, 10A
Ambient Temperature	20-26°C
Relative Humidity	< 40% , Frost Free

OPTICAL & SCANNING SYSTEM

Light Spot(diameter @1/e ²)	0.10-0.15mm
Scanning System	Germanic Galvanometer Scanner
Scanning Speed	10.0m/s

RESIN TANK

Printing Material	Photosensitive Resin
Resin Heating Method	Bottom Heating with Silicone Rubber



KINGS 1700

Printing Size	1700(X)×800(Y)×600(Z)mm
Apparatus Size	239(W)×159(L)×226(H)mm
Apparatus Weight	≈ 2400kg
Rated Power	1.8KVA

KINGS 3035



Printing Size	300(X)×350(Y)×350(Z) mm
Apparatus Size	84(W)×93(L)×198(H) cm
Apparatus Weight	≈780kg
Rated Power	1.2KVA

KINGS 450



Printing Size	450(X)×450(Y)×350(Z)mm
Apparatus Size	94(W)×102(L)×198(H)cm
Apparatus Weight	≈800kg
Rated Power	1.2KVA

KINGS 6035



Printing Size	350(X)×600(Y)×350(Z)
Apparatus Size	108cm(W)×95cm(L)×198cm(H)
Apparatus Weight	≈ 880kg
Rated Power	1.5KVA

KINGS 600



Printing Size	600(X)×600(Y)×400(Z)mm
Apparatus Size	108(W)×120(L)×198(H)cm
Apparatus Weight	≈ 980kg
Rated Power	1.5KVA

KINGS 650



Printing Size	650(X)×650(Y)×400(Z)mm
Apparatus Size	128(W)×130(L)×200(H)cm
Apparatus Weight	≈ 1180kg
Rated Power	1.5KVA

KINGS 7255



Printing Size	720(X)×550(Y)×400(Z)mm
Apparatus Size	125(W)×116(L)×200(H)cm
Apparatus Weight	≈ 1200kg
Rated Power	1.5KVA

KINGS 800



Printing Size	800(X)×800(Y)×500(Z)mm
Apparatus Size	129(W)×139(L)×220(H)cm
Apparatus Weight	≈ 1200kg
Rated Power	1.8KVA

KINGS 850



Printing Size	850(X)×850(Y)×550(Z)mm
Apparatus Size	135(W)×146(L)×222(H)cm
Apparatus Weight	≈ 1380kg
Rated Power	1.8KVA



TECHNICAL PRINCIPLE

KINGS SLA 3D Printer is an additive manufacturing machine that works by focusing ultraviolet laser onto a vat of photopolymer resin. The resin is photo-chemically solidified and a single layer of desired 3D object is formed, the process of which is repeated for each layer until the model is completed.

The advantages of SLA 3D printing lie in higher accuracy rate ($\pm 0.08\%$), faster speed, and better surface smoothness (compared to CNC and FDM).

KINGS 3D PRINTING VS CNC MACHINING

	Kings 3D Printing	CNC Machining
Working angles	360° printing, easy with complex structures like barbs, curved surfaces, hollowness	90° vertical carving, with simple structures only
Material	Additive manufacturing, with high usage rate	Reduction manufacturing, with high rate of waste
Worker & Training	One worker can take care of 10+ machines, and training takes 1 day	2-3 workers can take care of one machine, and training takes half a year
Environment Protection	No noise or pollution	Heavy noise and dust pollution
Cost Trend	Cost is low, and continues to decrease	The cost has arrived the lowest point

CE Certification of the Kings 3D Printing Series Products



KINGS-H Series

Professional Rapid Prototyping and Molding

Prototype is widely used to evaluate new designs before mass production. By checking the design appearance and structure, it helps to avoid huge expense loss in case of failure in direct molding, and enable faster time to market.

Kings 3D printers are replacing traditional mould in small batch production, personalized customization, products with complicated structure, and direct mould printing.

Customer Feedback

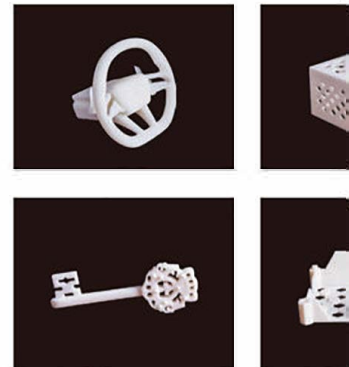
JIAHANG, a product development company based in Shanghai, has been providing rapid prototyping service for 6 years. Its founder Mr. Zhang Lei ordered 87 3D printers from Kings in Dec. 2017.

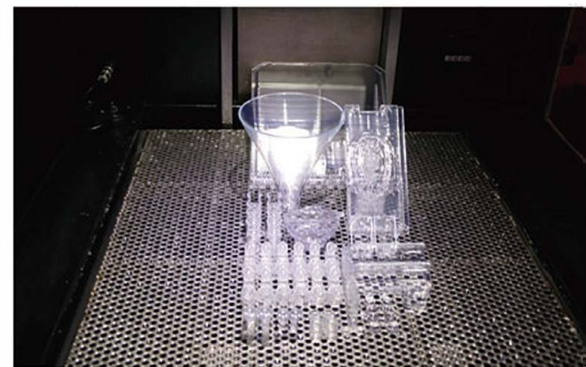
“We used to be afraid of prototype orders with complicated structures. Even if we made it, the cost in time and labor can be barely covered. But if we give up such orders, our customers turn away. This problem is solved after we bought Kings 3D printers, which take both the simple and complex models as the same.”



Recommended Printers

- Kings 3035-H
- Kings 450-H
- Kings 6035-H
- Kings 600-H
- Kings 650-H
- Kings 7255-S
- Kings 800-H
- Kings 850-H
- Kings 1700-H





KINGS-S Series

Precise 3D Printing Shoe Model and Mould

Kings has united 3D printing engineers and professionals from shoe industry to provide 3D printing solutions for shoe molding since 2015, which is the first 3D printer manufacturer to do so in China.

Prototype (quickly checking the design appearance)



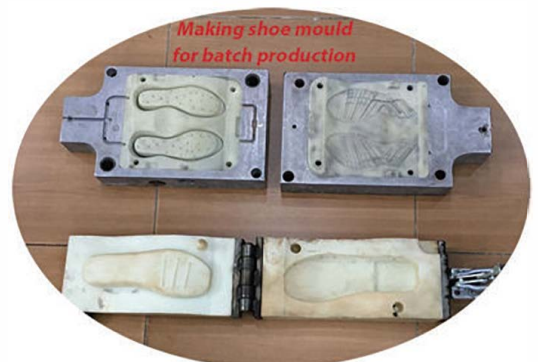
Soft shoe model (fitting test)

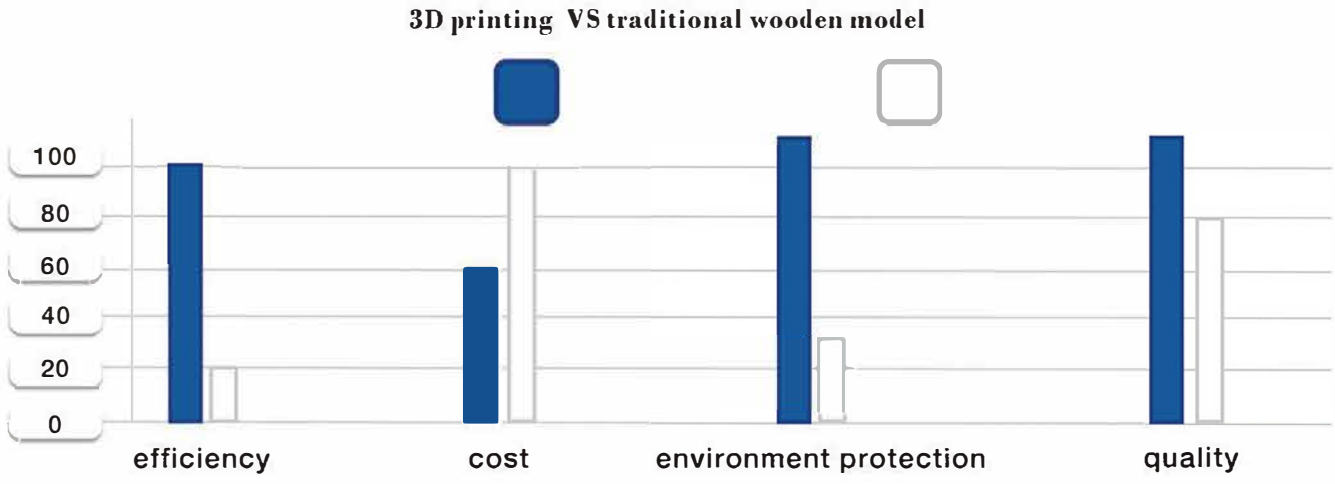


Casting shoe model (replacing wooden model)



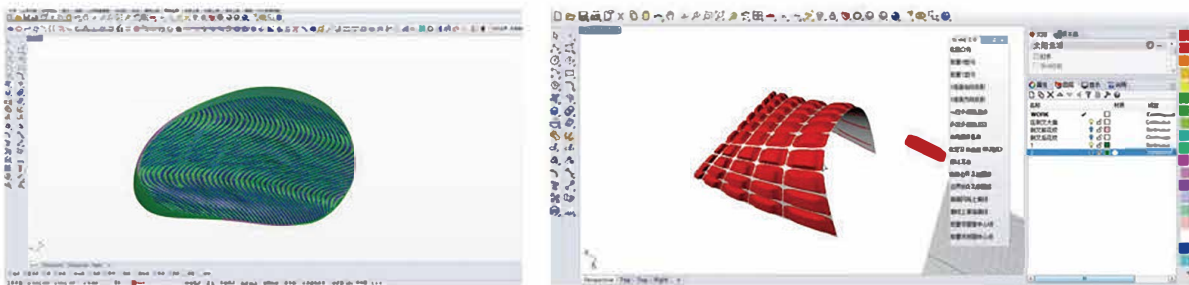
Rapid molding (for small batch production)





Software Advantage

The 3D file in shoe industry is linear three-dimensional, but 3D printing require surface three-dimensional, which resulted in long time in file modification, and has limited the application of 3D printing in shoe industry. To overcome this obstacle, Kings has developed Orang 2.3, a plug-in software to rhinoceros, which saves 30-50% cost in time and labor in the 3d modeling of each shoe model, compared to other 3D printer manufacturers.



Application Case

Shenzhen Yaoqun Industrial Co. was founded in 1993, with 20000 employees and an annual output of 26 million pairs of shoes. 600 professional designers in Yaoqun come up with new ideas every day, some of which end nowhere during the lengthy process of molding. With the help of Kings-6035-S, the idea of the designer turn into a shoe model in 3 hours, which makes the new types of Yaoqun lead the market.

Recommended Printers

- Kings 3035-S
- Kings 6035-S
- Kings 7255-S



KINGS-C Series

Large Industrial 3D Printer Innovating Ceramic Sanitary Ware

Development Period: from 3 Months to 3 Days

Kings 3D printer has shortened the product development period of ceramic sanitary ware. While it takes 3 months to produce a new prototype of ceramic sanitary ware by hand-making, and 15 days by CNC machining, only 3 to 4 days are needed to bring idea to reality for 3D printing. Ceramic sanitary ware like closetool, water tank, lavabo, and etc can all be printed directly, and flush test can be started soon.

Application Case

Foshan FaenAnhua Sanitary Ware, is a subsidiary company of the famous brand Arrow. The application of Kings-C printers have simplified its new product development, and the product function and appearance have been greatly improved, which makes the company more and more competitive in the market.

Recommended Printers

- Kings 7255-C
- Kings 800-C
- Kings 850-C
- Kings 1700-C

➤ **3D printed ceramic sanitary ware prototype**



Kings 3D printer brings design idea to reality in 3 to 4 days. The style, appearance and water flushing can be well tested.

➤ **3D printed ceramic master pattern**



With the above 3D printed master pattern, plaster mould can be made from slip casting, after which batch production of the ceramic sanitary ware can be started.



The above 3D printed ceramic tile master pattern can be used for aluminum mold casting, and then batch production can be started.

➤ **3D printed ceramic sanitary ware**



Kings has invested a lot in the R & D of ceramic material, hopefully in the near future the finished ceramic products can be printed directly.



Other Application Field



Cartoon – Personalized Customization of Real Figure

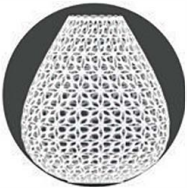
Cartoon model made by Kings 3D printer is very vivid in expression and action, which is replacing traditional rough manual clay modeling in stop motion animation. Kings 3D printer has also met the needs of personalized prototype of modern people, which is printed based on 3D file of real-person photo, and become precious souvenir for wedding anniversary and birthday gift.



Architecture – Rapid Prototyping of Building Model, Historical Site

Restoration “Making a realistic and fine building model was once a real challenge for us, which takes weeks or even months for modeling, engraving and painting.” The design director of Yishenghe real estate said, “ Now with the help of Kings 3D printers, it takes only ten hours to make the model of the whole community, including both the apartments and villas.”

Kings 3D printer is also applied to historic site restoration. Some historic sites damaged by fire, weathering and rain are reliant on experienced engravers for restoration, which is now perfectly solved by kings 3D prints.



Lighting - Refined and Intricate Decorative Lighting

Creative and elegant lighting design makes home classical and colorful. Kings 3D printers realizes your unimaginable idea, no longer restricted by any geometric shape. The crystal and colorful printing materials make the lighting even more artistic and charming.



Arts & Crafts –Mass Production of Masterpieces

Hengsheng Craft is a handicraft company of more than 20 years' design experience, with hundreds of design arts and crafts developed every year. Hengsheng has been using Kings 3D printers since 2016, as they found that Kings 3D printers are much more efficient in producing different styles of handicrafts with perfect accuracy, and the diversity of Kings 3D printing materials has met the varied needs of arts and crafts.



Daily Necessities - Small Batch Customization, Cutting Development Cost

Tianhao is one of the numerous mouse suppliers in Shenzhen Huaqiang North. In order to boost its turnover, Tianhao takes small-batch customized orders. The MOQ used to be 500 pieces, and now with 3D printing technology, personalized mouse can be printed for the customer with a MOQ number of 10, which makes the company very competitive in the market.



Automobile – Rapid Prototyping of Vehicle Moulds

Kings 3D printers has its advantages not only in producing high-precision, small complex parts efficiently, but also in printing large panel with its large-size 3D printers. KINGS has invested a lot in R&D of printing materials specialized for automotive industry. With a printing size of 1700*800*500mm, KINGS 1700 was customized for large size prototypes, such as automobiles, and dual lasers save half the printing time compared with ordinary printers.



Aerospace - Rapid Prototyping of Model Airplane and Precise Parts

Kings 3D printer is capable of making both model airplane and precise parts, including large military aircraft, drone, missile and other military parts. With Kings 3D printing technology, military experts can easily bring their ideas to reality in research & development, and the testing and verification are also easily finished.



Medical - Remodeling Bones for Patients with Broken Leg

Heilongjiang resident Zhang Li suffered a fracture due to skating injury. Malposition was caused due to untimely treatment. In order to determine the position of the patient's displaced phalanx, 3D printing technology was used to reshape the injured bone model for him. Doctor Yang said, "With a 1:1 foot bone model printed, the surgery can be precisely done and operation time could be cut by 50%, which greatly improves surgery accuracy and benefits the patient's recovery."



Dental – Correcting Irregularities of Teeth and Recovering Confident Smile

With Kings 3D printer, a small teeth model with accurate structure can be obtained, which can be used in surgical models, medical orthodontics, crown bridge surgery, and etc. And a variety of materials with medical hygiene certification have been developed to meet dental applications.

Sample appreciation



