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JDSoft[®]

ArtForm3.0

Art Model Design and Machining Software





ENTERPRISE CONCEPT

Conscientious in behaviors , dedicated in jobs

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Using technical services to promote customers' development in order to realize a win-win situation.

Beijing Jingdiao Group was founded in 1994, one of the national torch plans and key high-tech enterprises, which integrates with scientific research, production, sales and service. The group consists of the parent company Beijing Jingdiao Group co., LTD, 10 wholly-owned subsidiaries including Langfang Jingdiao CNC Machine Manufacturing co., LTD., Beijing Jingdiao Precision Machinery Manufacturing co., LTD., Xi 'an Jingdiao Software Technology co., LTD., and more than 40 branches. For more than 20 years, Beijing Jingdiao has devoted to the research and production of CNC machine tool, CNC system, CAD/CAM software, high-speed spindle, high-accuracy rotary part and some other related fields. The group has more than 4,900 employees and 15,000 plus customer, annual output value is more than 4.0 billion.

Xi' an Jingdiao Software Technology Corporation is one of the subsidiaries of Beijing Jingdiao. It is a high-tech company which researches, develops and sells industrial software and automation integrated solutions. Through continuous extension of product line, the company provides comprehensive solution according to customers' needs and devotes to R&D of CAD/CAM software, information system and automated system.



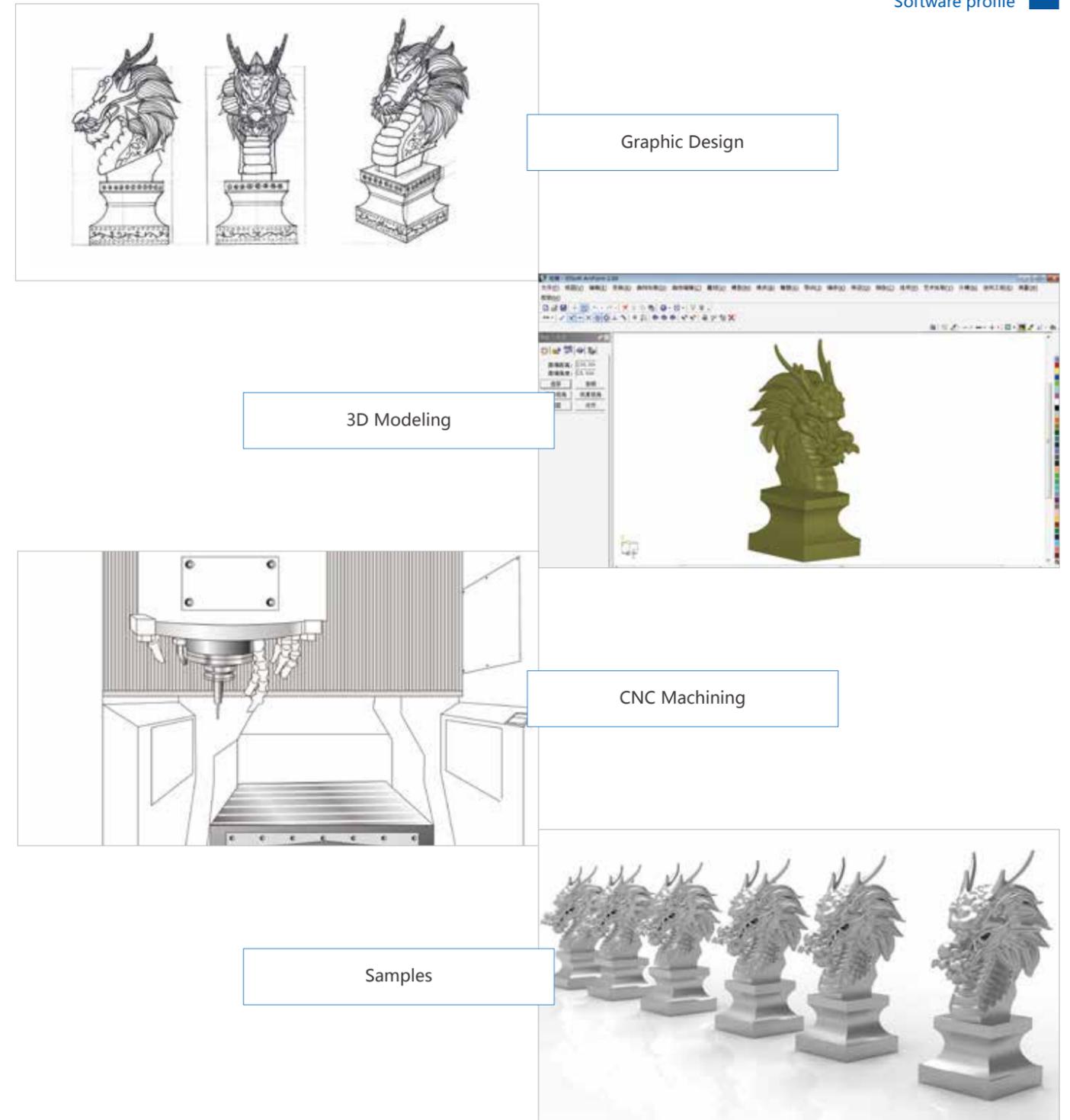


SOFTWARE PROFILE

JDSOFT ArtForm is a professional CAD/CAM software facing relief industry and it is based on the latest JDSOFT SurfMill .



The main characteristics of JDSOFT ArtForm 3.0 are relief and cylinder engraving model design and edit. It has superior graphic design module, geometric surface modeling module, reverse-scan modeling module, mesh model parting module and 2.5-axis to 5-axis machining module. The software has all the functions of virtual sculpture module in JDPaint 5.50. There are many breakthroughs and updates for key technology facing relief industry. Customers can customize the format of file encryption and NC paths output according to their needs. The design target of JDSOFT ArtForm 3.0 is to build, modify and decorate 3D, artistic or polygon objects conveniently.

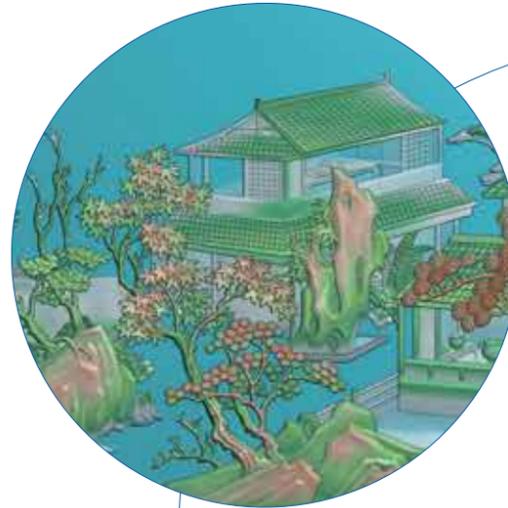


SOFTWARE FEATURES

Easy

Big data model processing is easier and smoother.

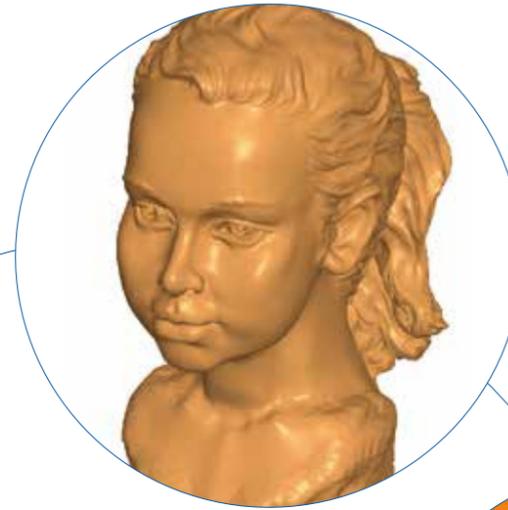
- Supporting 64-bit system, larger physical memory and faster reaction speed. Big relief data can be designed and compiled completely.
- When rotating, moving and scaling big data mesh, the display speed is substantially increased.
- New option "merging multi-layer scanning data" makes scanning data processing more convenient.



Efficient

Characteristic functions make operation more convenient and efficient.

- Abundant sculpture tools help users design beautiful digital models quickly.
- Flexible function "brush customization" makes design works more delicate.
- New function "clone stamp" can select features quickly, copy pieces of texture and make them naturally cohesion.
- New function "mass auspicious cloud" can greatly improve the efficiency of making auspicious cloud model.



Mesh surface modeling function achieves higher precision.

- Abundant and easy-use 3D mesh modeling functions make modeling all kinds of works flexibly.
- Building models with compact triangular and quadrilateral mesh can retain details better.
- Mesh model can be directly parted to avoid losing details when mesh model is converted to geometric surfaces.

Precise

Display virtual sculpture process realistically and interestingly.

- In rendering environment, models can be dynamically built and modified in real time, which means what you see is what you get.
- Flexible manual function provides free space for building artistic model.
- In virtual sculpture environment, complicated artistic models can be built while traditional CAD software can't.

Intuitive



Overall file encryption measures guarantee safety.

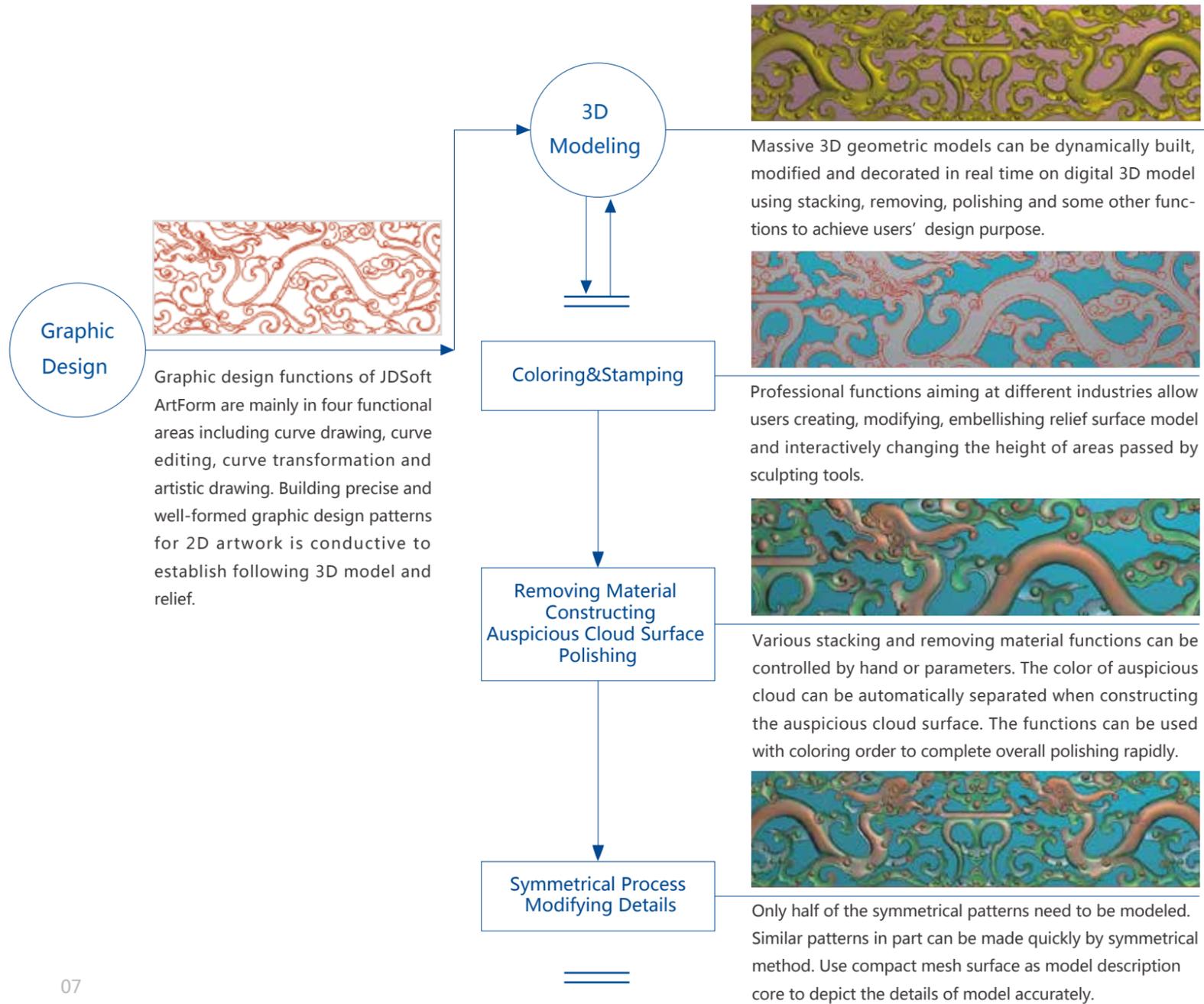
- File encryption method based on USB KEY can avoid files being opened by other companies.
- Transferring files inside the company won't be influenced and the files are easy to manage.
- File save format can be customized. Once saved, the file can only be opened when authorized USB KEY and customized software are used together.

Safe





PRODUCT DIGITAL MANUFACTURING PROCESS





INDUSTRY SOLUTIONS



Wood Carving

Artwork and Decoration

Reverse Engineering

3D Relief

JDSoft ArtForm Application of wood carving industry

Wood carving art and crafts are treasures of Chinese traditional culture. Traditional wood carving industry mainly depends on manual carving, which has low efficiency, long cycle and higher requirements for craftsman's experience and skills. It limits the development of wood carving industry. The appearance of Jingdiao Machine Tool, art model design and manufacture software-JDSoft ArtForm has brought new changes for traditional manual wood carving industry.

JDSoft ArtForm simulates manual carving process which starts with two dimensional sketch in computer. After getting the maximum depth of the relief and finish trimming by coloring, stamping, removing material and polishing on a flat plate, the beautiful model can be designed in computer and the object can be processed in Jingdiao CNC Machine Tool.



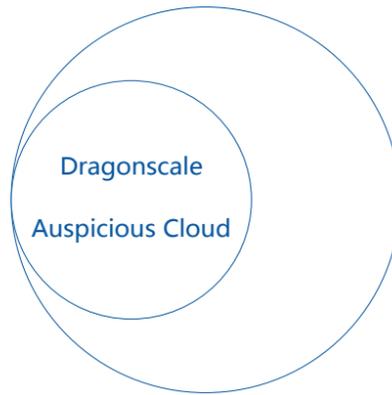
Functions Aiming at Wood Carving Industry



- The professional functions, including dragon scale modeling, auspicious cloud modeling and scribing by cone cutter, are convenient to make wood carving model.
- The particular function can produce mass auspicious cloud surfaces to reduce repetitive work.
- Resourceful model base can be invoked at any time to model more effectively.



Cupboard door



Hollow Screen

JDSoft ArtForm Application of Crafts & Jewelry industry

The products ,such as alloy jewelry, crafts gifts, commemorative coins , have complex shape and rich surface details.The traditional manual sculpture technology has been unable to meet the requirements of modern high production efficiency.Besides,it is also difficult that the traditional CAD software designs the shape.The R&D of Jingdiao CNC machine tool and JDSoft ArtForm has made some possible revolutions in the arts and crafts industry.

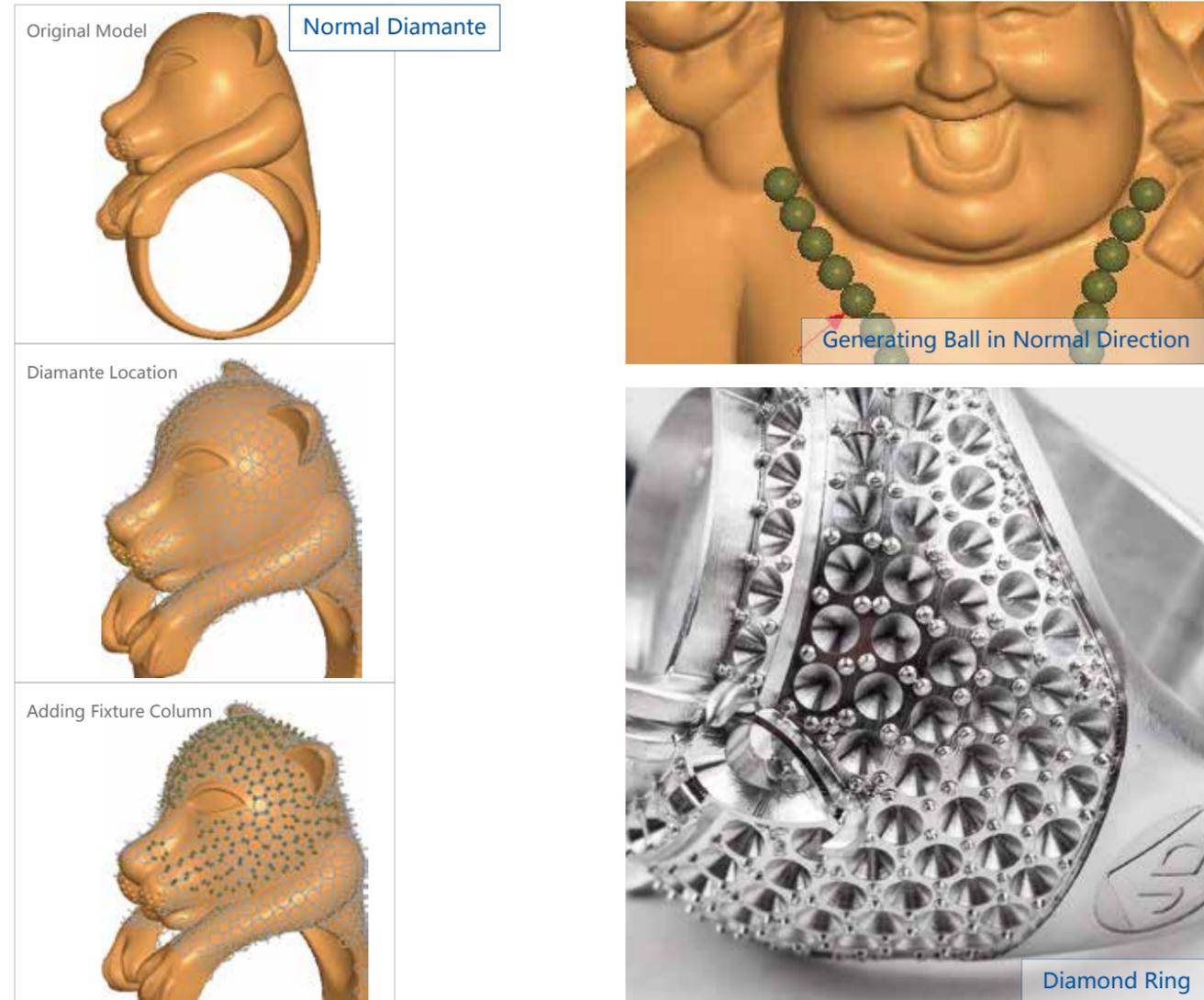


Bracelet



Functions Aiming at Artware and Decoration Industry

- The generation of diamond sticking holes and balls in normal direction and some other characteristic functions make modeling more efficient ;
- The combination of function — features deformation following with curves and stroke types can both recycle the sample figures and control the deformation following with curves by strokes ;
- Develop more professional functions continuously according to customers' requirements.



Advantages of Jingdiao On-line Inspection and Smart Modification Technology in Artware and Decoration Industry

Beijing Jingdiao provides complete solutions from designing to processing for artware industry, which changes the production methods of traditional artware industry and improves the market competitiveness effectively.

For high value-added artware processing, especially for the pattern processing on the surface of precious metal, the depths of curved patterns are inconsistent due to billets deformation. Jingdiao On-line Inspection and Smart Modification Technology can guarantee the modeling effects effectively and enormously improve the processing efficiency to reduce labor cost.



Characteristics of Jingdiao On-line Inspection and Smart Modification Technology

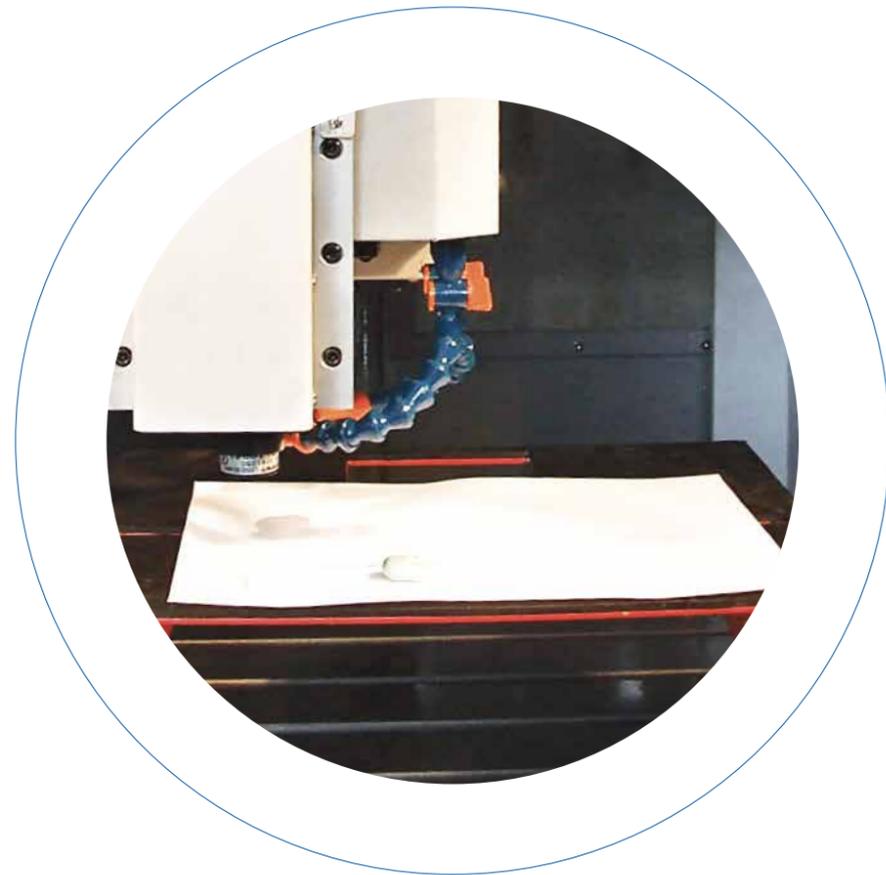
- Eliminate the processing error caused by material deformation through inspection and compensation before product processing ;
- Realize the processing of bas-relief easily to ensure the consistency of lines' depths and satisfy the processing requirements of elaborate modeling artware ;
- Real-time inspection when processing and changing tool directly after measuring improve the processing efficiency.



Silver Drinking Ware

JDSoft ArtForm Application of Reverse Engineering industry

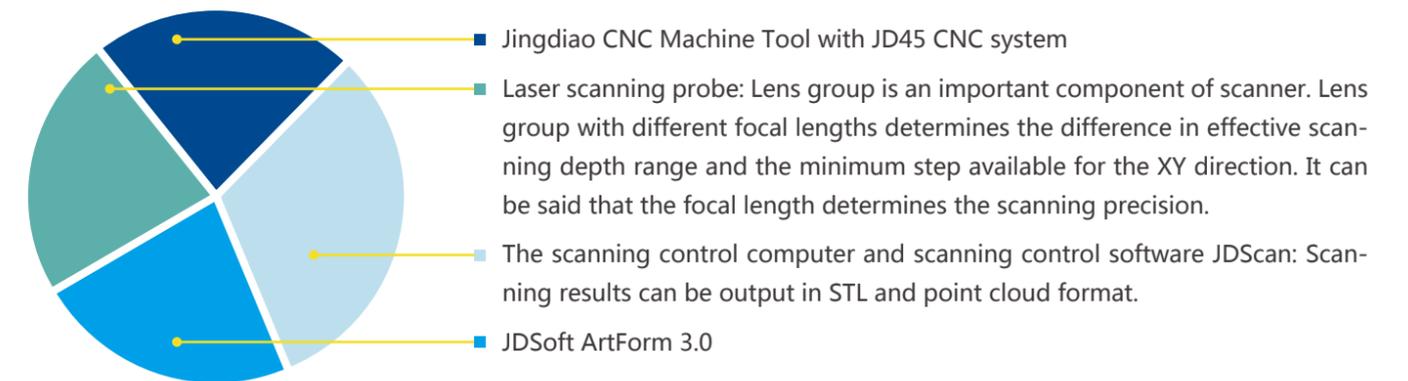
During product processing, it often needs reverse design for the product. The reverse engineering module of JDSoft ArtForm possesses complete solutions from original point cloud to precise model. In conjunction with Jingdiao 3D Laser Scanning System, the original scanning data can be input directly in this module and merged and modified into a complete 3D model. The specific detail modification function of the software can exert the high precision advantage of laser scanning. In presenting details of relief and 3D crafts, the software has incomparable advantages over other systems.



Jingdiao 3D LaserScanning System

Jingdiao 3D laser scanning system belongs to the non-contact and spot laser scanner category, which is very suitable for scanning large-format relief, relief with rich and fine surface details, and 3D objects.

System Composition



System Features

Relief Scanning

When scanning large-format relief and relief with rich and fine surface details, Jingdiao scanning system has the following two advantages:

- Equipped with the lens whose focal length is 16, the high precision scanning probe can make the step in XY direction less than 0.008mm to ensure the edge clear. It can also access data accurately from the straight sides under 85 degrees to ensure the data accurate.

JDSoft ArtForm can read the point cloud data directly and refactor them into rectangular grid without any accuracy loss. The 64-bit JD software can process super large relief model with vertices number up to one hundred million and provide multiple editing functions such as leveling, shape preserving and denoising.



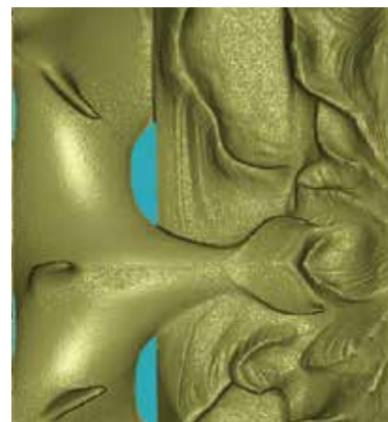
Top View of Cardcase



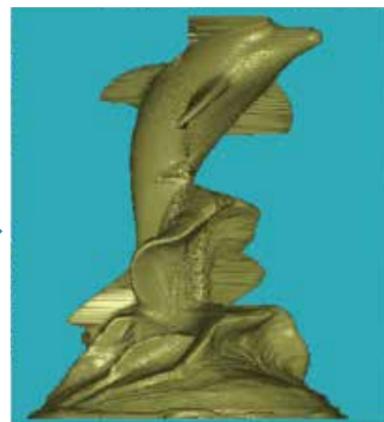
Scanning Image of Cardcase

Rotary Scanning

Rotary scanning and the complete subsequent solutions are the particular features of Jingdiao scanning system. Rotator and its similarities can be clamped on the rotary shaft and scanned in rotary shaft scanning way. The scanned data is equivalent to cylindrical expanded view under a specified radius of the scanned sample. These data can be restored to a seamless 3D model in JDSoft ArtForm software. This scanning method simplifies 3D object scanning into relief scanning.



Original Scanned Date



After Rolled Up



After Modification

Layered Scanning

The effective scanning depth of high precision lens is relatively small. Sometimes the situation that only one of the two aspects—scanning depth and precision can be guaranteed may happen. For example, it can't be completed to scan a fine relief in 6mm scanning depth in traditional way with 0.025mm step (25mm, depth field of the lens is 1.8mm). Jingdiao 3D Laser Scanning System realizes automatic layered scanning successfully and solves the problem by applying JDSoft ArtForm to the layering and the post processing of the automatic data registration.



5-layered Scanning Date



Layered Scanning Date

3D Object Scanning

The complete reverse process can be finished in JDSoft ArtForm. For 3D object, multi-surface scanning is needed after which point cloud processing, triangulation surfaces constructing, surface jointing, mesh modification and mesh model parting can be done in JDSoft ArtForm.



Full model processed by multi-surface scanning date registration



Full model processed by multi-surface scanning date registration

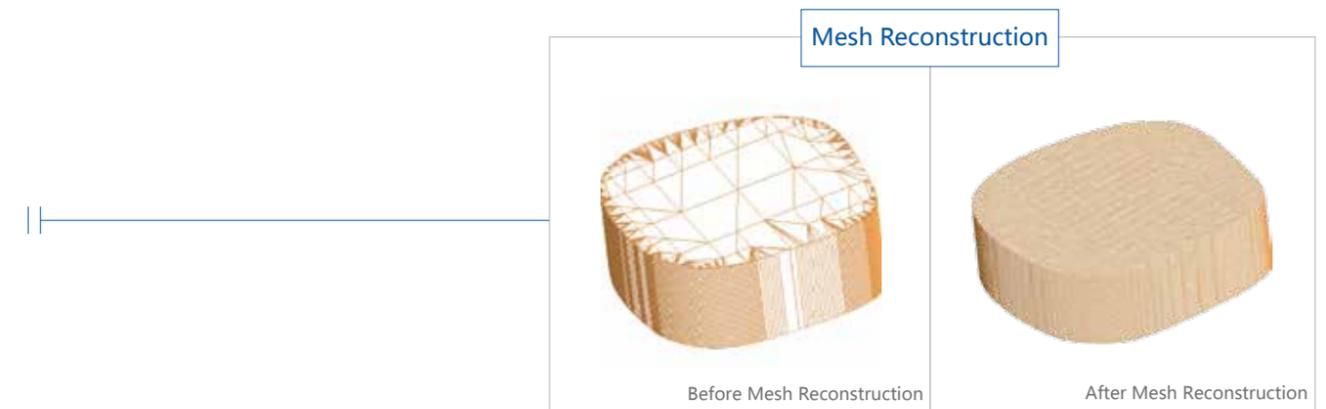
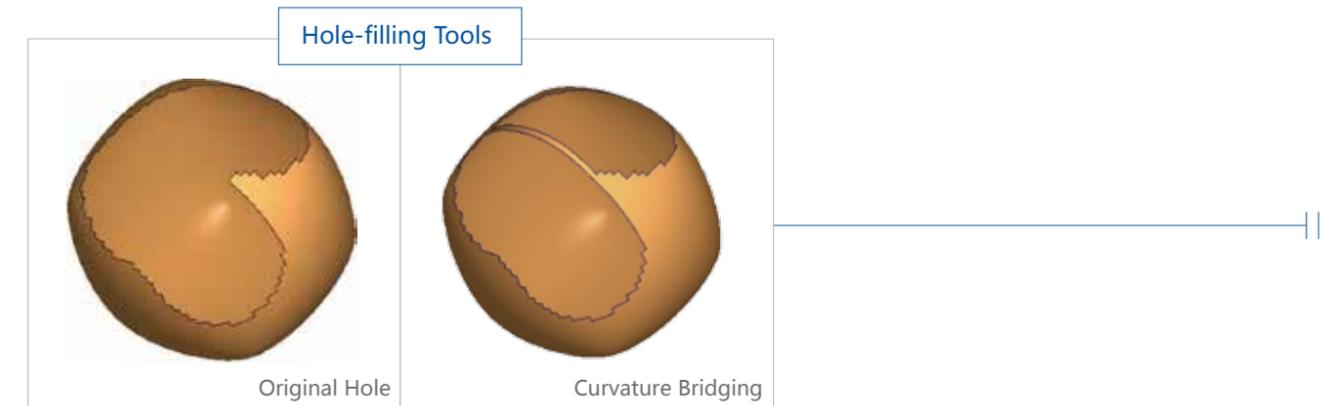
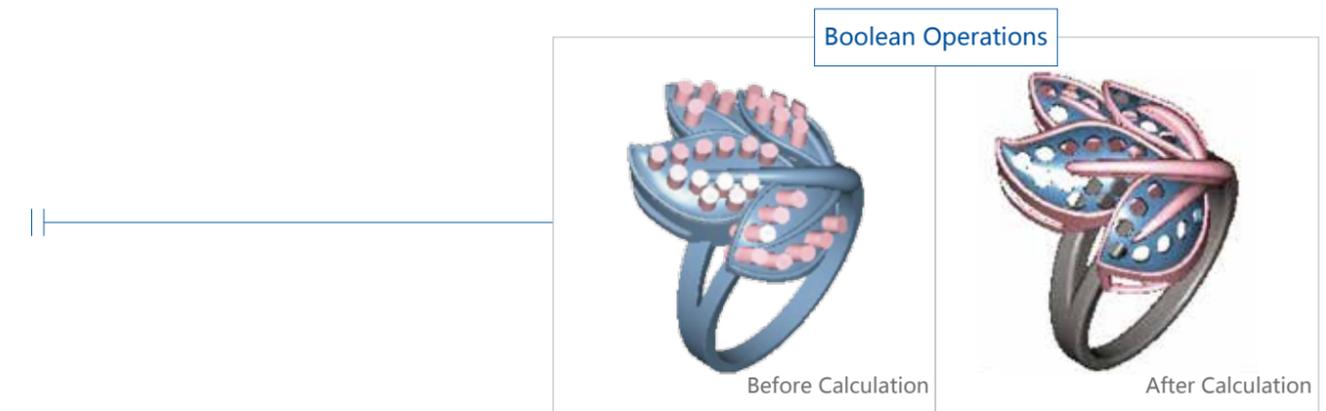
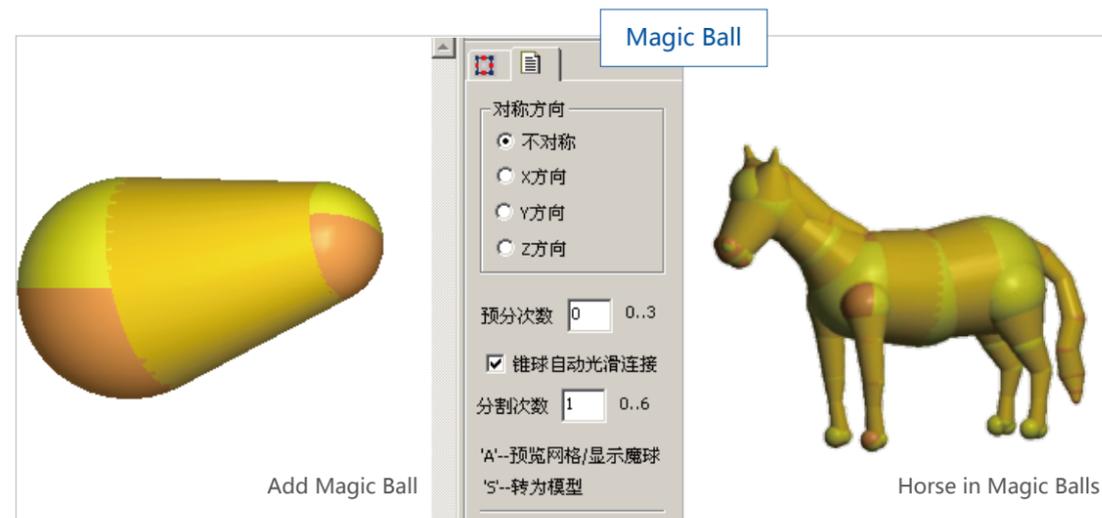
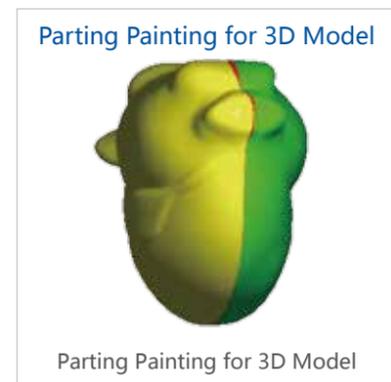
JDSOFT ArtForm Application of 3D Relief industry

In JDSOFT ArtForm, you can give full play to your creativity and generate complicated artistic 3D relief by a series of powerful and easy-use relief designing tools. Functions, such as automatically extracting parting line, manually editing the parting line on the model, creating parting surfaces and parting, constitute the complete process from design to machining.



Characteristic Functions for 3D Relief Modeling

- The relative functions of magic ball can construct basic mesh model fast.
- According to the picture of physical sample, users can depict sketch and design a 3D model quickly.
- The Boolean operations between mesh models make the model construction more convenient.
- Hole-filling and defect mending on mesh model can fast modify the damaged surface.
- The surface remodeling for 3D mesh model can provide mesh models which meet the requirements of manifold.
- Functions such as weight adjustment and parting painting for 3D model make the designed model more suitable for machining.



Chess





Free Pro Edition

Free professional edition of software is available for customers, which can be downloaded at <http://bbs.jingdiaosoft.com>.



Effective Engineering Service

There are more than 50 branches across the country. Our technical support team can provide fast response to all kinds of technical problems from customers and solve processing problems in production.



Comprehensive Software Training

A set of choices for technical training is available according to customers' time and demands. For example, training on site and training at our branches..



Software Version Upgrade

Continuous upgrade for software brings a better operating experience and provides more effective and stronger technical support for product development.



Remote Technical Support

During your use of software, you can get support by instant message tools, such as phone, E-mail and QQ when you encounter problems. You can also search solutions on our forum.