### HAN\*S 3D 大族三维

# Sub-surface Laser Engraver Machine INSIDER-I

## **Promotion Plan**



#### I. Company Profile

Han's 3D Technology Co., Ltd. is a subsidiary of Han's Laser who produces laser engraving machines for decades. Han's Laser, a professional laser equipment listed company, (listed on Shenzhen Stock Exchange, Stock code: 002008), is a world famous enterprise, and the largest manufacture of laser equipment in Asia.

At present, the main product portfolio covers more than 200 models of industrial laser equipments including Laser marker Series, Laser Welder Series, Laser Sub-Surface Engraver Series, Laser cutter Series, Laser display Series, and Computer to plate system etc. They have been widely adopted in the production of crafts, electronic appliances, Integrated Circuits, Telecommunication equipments, instruments & meters, automotive, precision machineries, construction materials, fashion & clothing, urban illumination, wearing accessories, packaging and many other fields. So far we have some key customers including Omron, Sony, Motorola, Siemens etc.

Our laser marking machine and laser welding machine has played a leading role in domestic market. In 2007 our annual sales volume exceeded ten thousand sets. In 2008 our annual sales volume reached 1.76 billion RMB. 2009, we are still keeping growth even under economic contraction. Now the revenue of Han's Laser already surpassed 2 billion and forming six main product lines including laser processing equipment, PCB drilling equipment, computer and CTP plate fast cutting equipment, and medical laser equipment etc. of those total, the sales volume of laser marker equipment production occupy the first 80% domestic market share, and PCB drilling machine's are third in the world.

Our company realized application of R&D for making clients' respective characteristics of laser system of enterprise through setting up technology service centers in domestic range which was supported by research and development strength of Han's international top laser technology in Silicon Valley, US. We possessed the eight of



international laser invention patents (including five important American invention patents), hundreds of domestic patent, fifteen of computer software copyright.

Han's Laser has 6000 passionate employees, among which there are 16 academic experts and over 162 engineers with Master's Degree or higher educational background. In China, we have over 80 offices and technical network system service. A number of branches are founded in overseas countries, such as Korea, Vietnam, India, Malaysia, Thailand, Indonesia, Mexico, Brazil and so on. At the same time our laser products has passed the authentication through those countries and are also exported to South Korea, Australia, the United States, Canada, Singapore, Thailand, Taiwan, Hong Kong, Macao and other countries or regions. We provide the most excellent resources and comprehensive technical service to support customer, thus "where there is Han's laser equipment, there is Hans's laser service".

#### II. INSIDER-I Green Laser Engraving Machine Introduction

INSIDER-I Green Laser Engraving Machine adopts seamless technology, to engrave large area by moving worktable. High resolution of equipment (the resolution of different laser will be different) can ensure the quality of crystal pictures which will be more exquisite and vivid, so as to realize the collection value of the crystals. Moreover, the engraver software interface is user friendly, which can directly read function of 3D point cloud data, without using a third-party software, easy to operate.





INSIDER-I laser engraving machine picture

#### 1. Components of Sub-Surface Laser Engraving Machine INSIDER-I

- Green laser;
- Laser Power Device;
- Cooling System: Air Cooling;
- GSI high speed and high accuracy optical scanning mirror and driver imported from Germany;
- A set of homemade beam expander system and a set of homemade optical
  F-θ focus lens.
- Laser engraving accessory equipped with a computer (including an exclusive control card of our company).
- Software system: Special laser engraving software
- Working platform: triaxial linkage worktable with high precision

#### 2. Technical Specifications



- Laser Wavelength: 532nm
- Acousto-Optic Q Switching Frequency: 2KHZ;
- Cooling System: Air Cooling
- ◆ Size of engraved image: 120mm x120 mm x80mm
- ◆ Size of crystal: 160mm x160 mm x100mm
- ♦ Maximum Resolution:720DPI
- ◆ Laser Pulse width < 8 ns</p>
- Standby Consumption: 300W
- Power Maximum Consumption: 600W
- ◆ Power Supple Input: AC220V;50/60Hz
- Weight of Main System: 103KG
- ◆ Dimensions of main system: : 480mm\*780mm\*750mm

#### 3. INSIDER-I Laser Engraver Machine Feature

#### Fast Engraving Speed:

Normal engraving time, taking the crystal sized 50\*50\*80mm as an example : 120 thousand points <60/s. High efficiency is good for promoting our business.

#### Easy Operation:

For starters, it takes two days to get familiar with the software of camera and the machine.

- **4. Dementions of the machine:** 600mm x960 mm x1170mm
- 5. Environmental operating temperature
  - If the environmental temperature is beyond 15-30℃, it requires



air-conditioning.

- Environmental Humidity:40%-80%。
- Power supple fluctuation: ±5%, power system is comply with international requirement. When voltage amplitude of the area is above 5%, auto-voltage regulator and current stabilization device should be installed.
- There should be no strong electromagnetic signal interference near the equipment. Avoid installing the equipment near radio station (or repeaters).
- Foundation Amplitude: Less than 50um amplitude; Vibration acceleration: < 0.05 g. Avoid large stamping machine nearby.
- Make sure the space around the equipment is smokeless and dust-free, avoiding environment with floating metal grinding powder.
- Atmospheric pressure: 86-106kpa;
- Some place should install anti-static floor, strengthen shielding, etc.

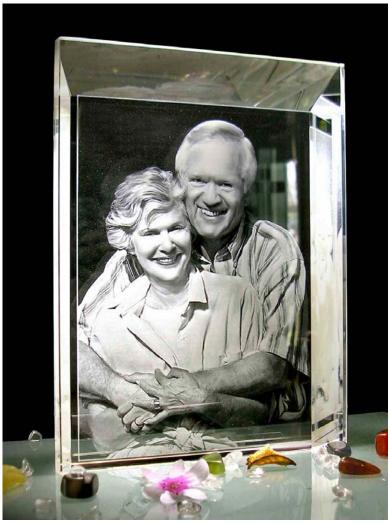
#### **III.** Engraving Crystal Photos











#### IV. HAN'S 3D Service Promise

Han's 3D persists in customer-oriented strategy to provide customers with satisfactory pre-sale and after-sale service of installation, commissioning, training and maintenance etc.

#### 1. Pre-sale Service

Before signing the contract, our company will offer various proposals of production process, the technical consultation, testing samples, selection of equipment models etc.

#### 2. Installation and Debugging

According to the contract, we will deliver equipment to the user's specific place within the stipulated time and dispatch technical engineers for installation. Generally, it takes one or two days for Installation and Debugging.

#### 3. Training

There is free technical training no less than 3 days for buyer's operators in seller's or the buyer's training center. The main contents are as follows:

- Training on common use of the drawing software;
- Training on operation of engraving software;
- Training on procedures of switching on or off the machine,
- Training on the significance of panel and software control parameters, the parameter selection scope;
- Basic maintenance and cleaning;
- Solvents of common hardware malfunction;
- Problems in operation;

We also provide relevant technical support of products for users.

Warranty for one year, life-long maintenance.

Free technical consulting and software upgrades etc



The response time of the customer service is within 24 hours.

After the warranty period, users only have to pay for the cost of repair parts, while the users also enjoy the life-long service.

#### V. HAN'S 3D Manufacturing Standard

GB7247—1995 (IEC825—1984) Radiation safety, classification and requirements of products, and user guides of laser equipment

GB10320—1995 Electric safety of laser device

GB/T15490—1995 Solid-state laser generic specification

GB10320-1995 Electric safety standard of laser equipment and device

GB/T13740 Testing specifications of Laser radiation angles

GB/T13741 Testing specifications laser beams diameter

GB 8702-88 Electromagnetic radiation protection standard

GB 8702-88 Criterion of electromagnetism radiation protection

Product Quality Standards: ISO9001: 2000

We established quality management system to strictly control and manage the quality of product according to the ISO9001 standard, so as to manufacture products that can reach the customers' expectation.

Criteria on Installation and Acceptance of products: After signing the contract, we should customize, manufacture, and install the equipment in accordance with the customer's technical indexes and requirements. After the equipment is fully tested, it will be shipped to customer within the contracted time during when the technical engineers should be available for installation, training and maintenance.

