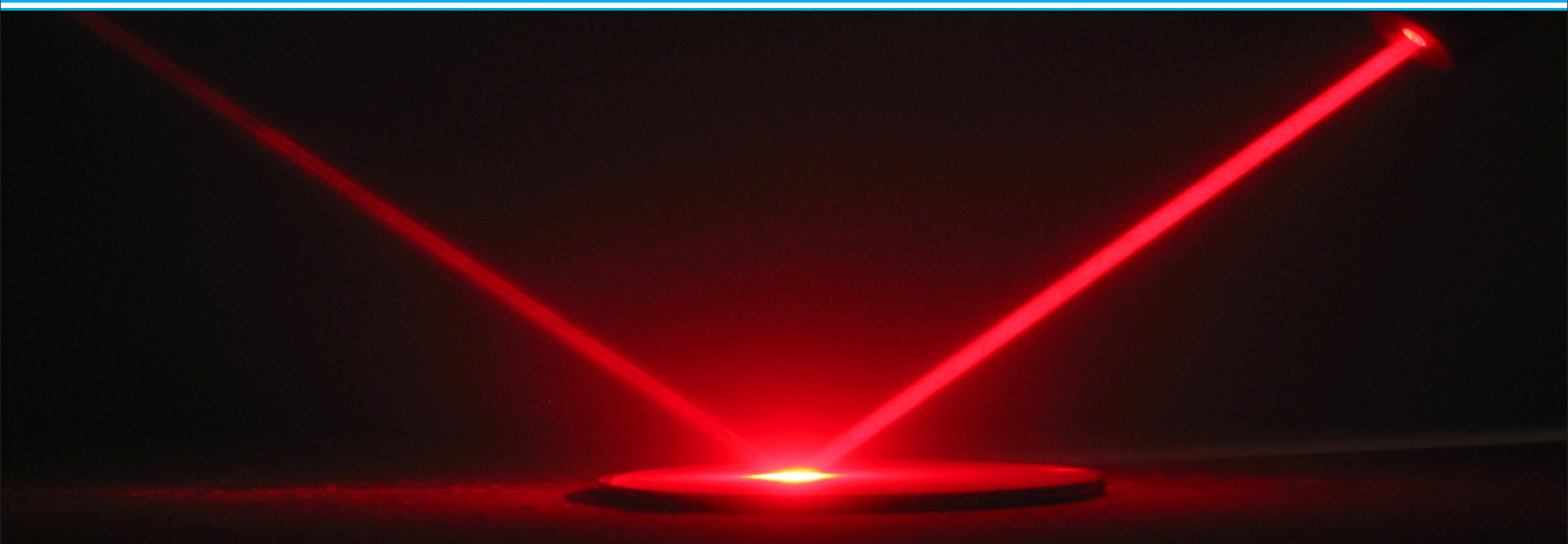
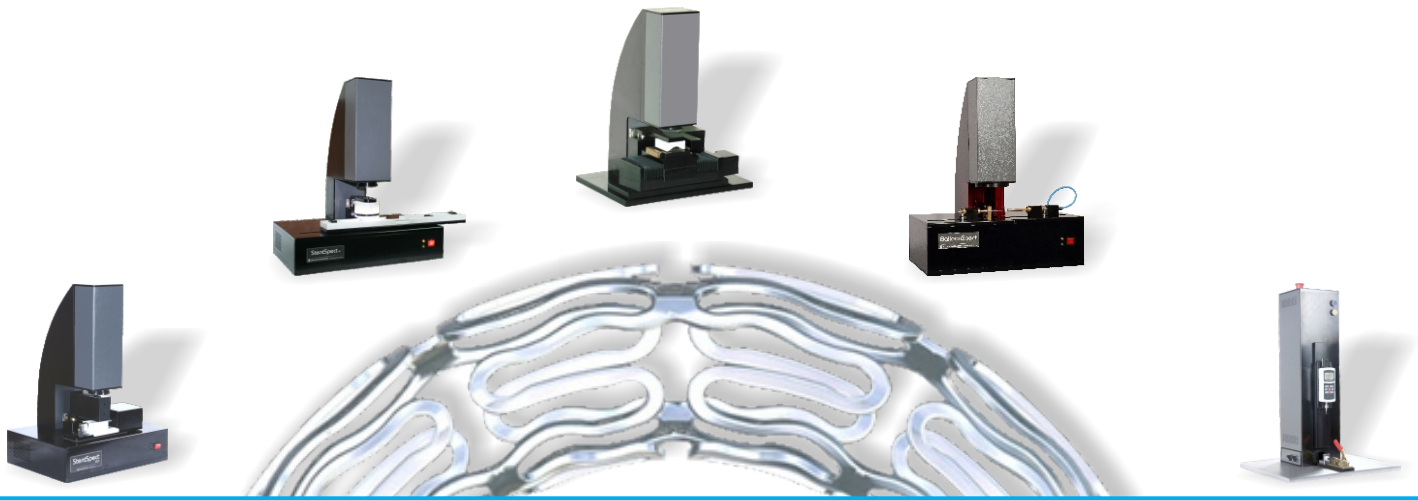


# Smart Application Systems



Hi-tech micro-machining manufacturing solutions  
brought to you by



# ABOUT SAHAJANAND GROUP

Since 1993, **Sahajanand** group has emerged as a pioneering enterprise, in delivering hi-tech, innovative and robust solutions for engineering & healthcare industry. In 1998, **Sahajanand** group ventured into the manufacturing of cardiovascular stents and became the first indigenous Stent Manufacturer in world to have two Drug Eluting Stent systems in its product portfolio. It became India's largest manufacturing company, based on Evidence Based Implantable Medical Devices and Medical Equipment. In 2001, **Sahajanand** group further explored into innovative drug discoveries, through natural herbal products and became one of the reputed manufacturers of herbal medicinal formulations, holding 4 US patents.

**STPL** is the flagship company of Sahajanand group, specialised in catering precision micro-machining solutions, meant for Medical and Engineering industry around the globe. It's an ISO-9001:2008 company, possessing two "state of art" manufacturing infrastructural facilities in India. With its DSIR recognised R&D center and an annual spending of around 2 million USD. on multiple research projects, STPL has developed series of innovative micro-machining equipment, catering to various segments of Medical, Diamond and other manufacturing industries. It services its customers with ready to use equipment, as well as customised OEM products. STPL is the first Indian company to introduce laser and vision based equipment to cater the micro-machining industry.

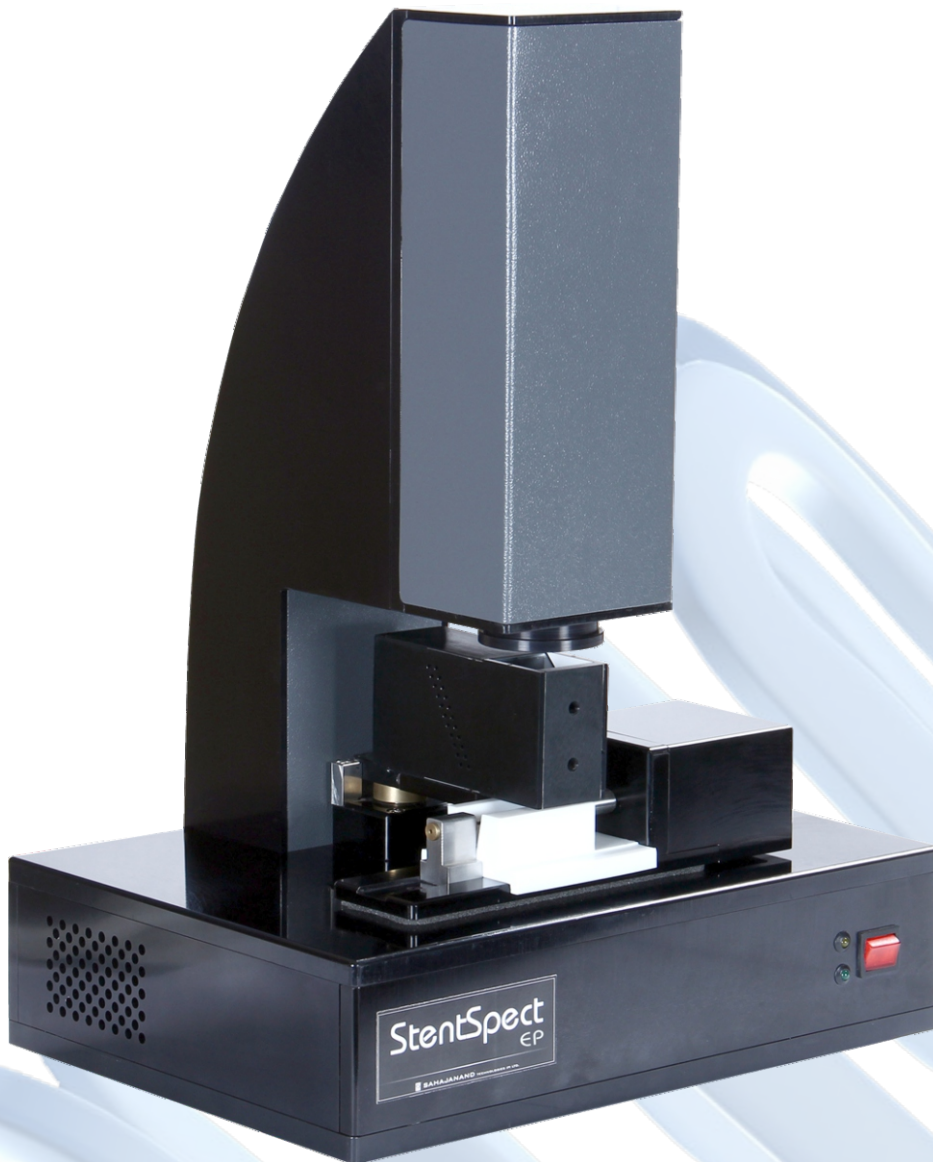


## AWARDS



- ✦ Pride of India Leadership Award - by the President of Mauritius.
- ✦ Golden Jubilee Memorial Trust Awards for Outstanding Work in Research & Development.
- ✦ Outstanding Business person of the year Award by Southern Gujarat Chamber of Commerce.
- ✦ Best export performance Award by South Gujarat Chamber of Commerce & Industry.
- ✦ Best Entrepreneur Award by Federation of Gujarat Industries.
- ✦ India Healthcare Excellence Award.
- ✦ Business Person of the year Award for Innovation & uniqueness in the business by Gujarat Zone.

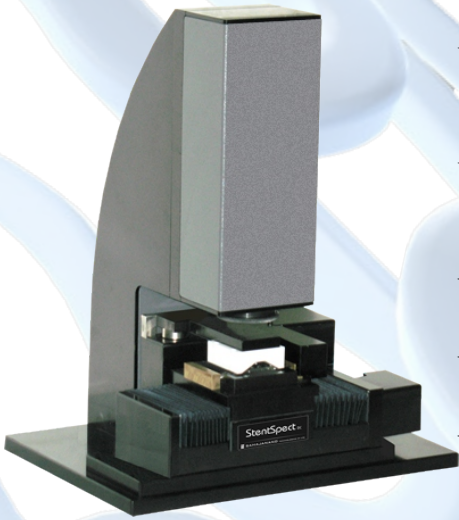




## STENTSPECT EP

- ✦ Fully automatic vision inspection system, with highly repeatable dimensional measurements, covering all the parameters of stent.
- ✦ Measures stent up to 55 mm length and 5 mm diameter (can be further customized for catering any of the client's requirements.)
- ✦ Measures average long length stent in less than 90 seconds, with an accuracy of 3 microns and can capture up to 1400 images in a single test run.
- ✦ Advance lighting system, motion control system and high resolution color images, for in-depth inspection of stent surface and for detecting symmetry defects.
- ✦ CFR 21 compliant, with CAD comparison availability.
- ✦ Provides Statistical Process Control Analytical reports, with graphical presentations.
- ✦ Ensures precision assessment of all the parameters, fed by the Quality Control department.
- ✦ Best value for money on quality control applications, without human intervention and its allied human errors, with an average payback period of 2 years.
- ✦ Easily Accessible and User-friendly Data Management.

## STENTSPECT DC



- ✦ Fully automatic and non-contact visual documentation system for drug coated stents that automatically stores all the data on the network server / computer.
- ✦ Measures drug coated stent up to 55 mm length and 5 mm diameter (can be further customized for catering any of the client's requirements.)
- ✦ Measures average long length drug coated stent in less than 90 seconds.
- ✦ Displays panoramic images of drug coated stent with various rotational angles.
- ✦ Advance lighting system, motion control system and high resolution color images for in-depth inspection of stent surface and for checking the drug coating defects, through a camera resolution of 6 microns.
- ✦ CFR 21 compliant, with CAD comparison availability.
- ✦ Provides Statistical Process Control Analytical reports, with graphical presentations.

## STENTSPECT CR

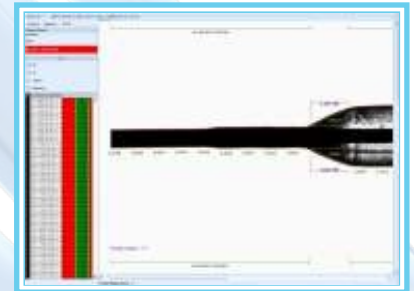
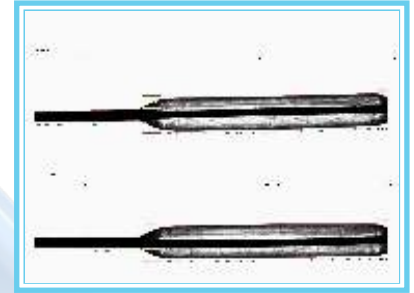
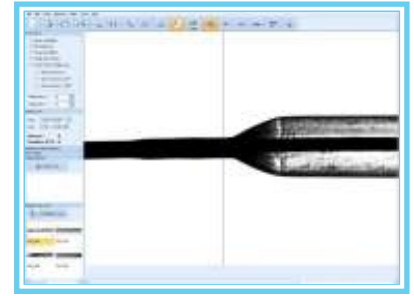
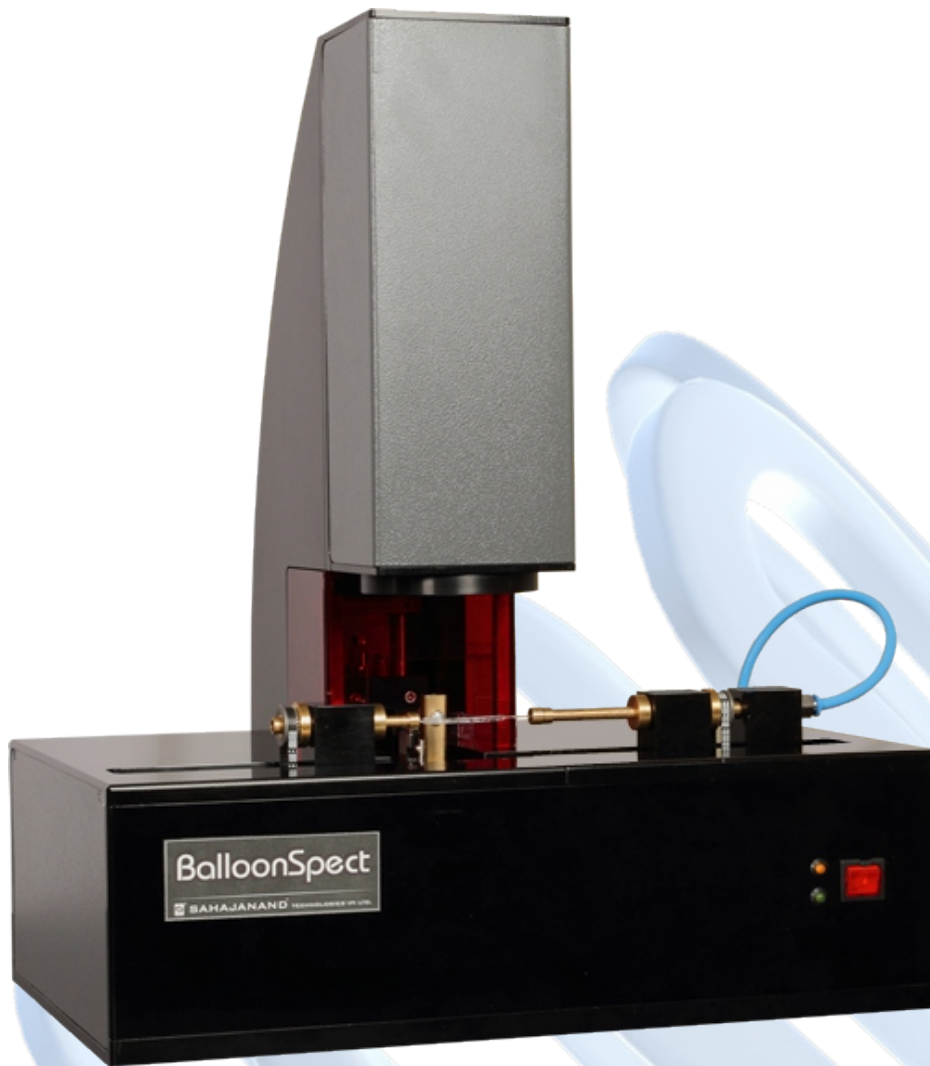
- ✦ Fully automatic and non-contact visual documentation system for crimped stents that automatically stores all the data on the network server / computer.
- ✦ Measures average long length stent in less than 30 seconds.
- ✦ Measures crimped stent up to 55 mm length and 5 mm diameter (can be further customized for catering any of the client's requirements.)
- ✦ Advance lighting system, motion control system and high resolution color images for in-depth inspection of crimped stent, through a camera resolution of 6 microns.
- ✦ Provides Statistical Process Control Analytical reports, with graphical presentations.
- ✦ CFR 21 compliant, with CAD comparison availability.



## RETENSPECT

- ✦ Fully automated machine that measures and records the tensile strength of the crimped stent on balloon catheter.
- ✦ Single column table-top system for dislodgement force testing, whereby the force required to pull out the stent axially from the un-inflated balloon catheter is measured.
- ✦ Real time graphical display of force vs. displacement parameters.
- ✦ Data output includes: profile parameters, peak force, associated displacement and optional pictorial data.
- ✦ High capacity motor for better reliability, with Z Axis traveling capacity up to 180 mm.
- ✦ Adjustable testing parameters, with unlimited profile creation and storage capacity.
- ✦ Force measurement capacity of 25 N, with resolution of 0.01 N.
- ✦ Compatible with computer specifications of Core 2 DUO, 2 GB RAM and 1 GB display card, with power requirement of 230 VAC.



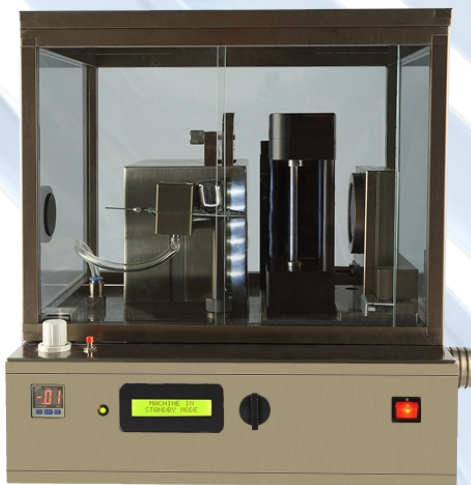


## BALLOONSPECT

- ✦ Fully automatic vision inspection system, with highly repeatable dimensional measurements and all the parameters of balloon geometry.
- ✦ Visual inspection and dimensional measurements in a single operation, with an intelligent image processing algorithm that can measure wall thickness, diameter and cone angle of balloon.
- ✦ Measures balloon up to 60 mm length and 15 mm diameter (can be further customized for catering any of the client's requirements.)
- ✦ Measures average long length balloon in less than 90 seconds, with an accuracy of 15 microns.
- ✦ Measures the wall thickness of balloon ranging from 0.5 to 70 micron (Single side), with an accuracy of 0.05 microns.
- ✦ Pneumatic rotary air chucks, for quick and easy loading / unloading of balloon, compatible with compressed air / nitrogen.
- ✦ Accurate sensor that can measure wall thickness of balloon with excellent precision.
- ✦ Provides Statistical Process Control Analytical reports, with graphical presentations.
- ✦ CFR 21 compliant, with CAD comparison availability.
- ✦ Ensures precision assessment of all the parameters, fed by the Quality Control department.
- ✦ Best value for money on quality control applications, without human intervention and its allied human errors, with an average payback period of 3 years.
- ✦ Easily Accessible and User-friendly Data Management.

# STENTMASTER

- ✦ Precision micro-machining metal cutting machine, with 100 Watt fiber laser source, with wavelength of  $1090 \pm 5$  nm and cutting speed up to 4 mm/s, for 2 mm tube diameter.
- ✦ Synchronised combination of right laser source, combined with hi-tech software and axis control ensures minimal heat zone effect.
- ✦ Compatible for dry / wet cutting processes, with inbuilt digital controls for all the parameter settings.
- ✦ In-built automatic tube feeding mechanism, compatible for tube diameter up to 7.9 mm (for dry cutting) and up to 3.0 mm (for wet cutting), supported by advanced Vision system for its centre positioning.
- ✦ Fully automated machine, built on solid granite platform, with "one click" intelligent programming software.
- ✦ Velocity profiling ensures for minimal geometry errors, in tight profiles.
- ✦ Precision axis control, with axis travel range of 100 mm (moving path), with axis positioning accuracy and repeatability of  $+ 2 \mu\text{m}$ .



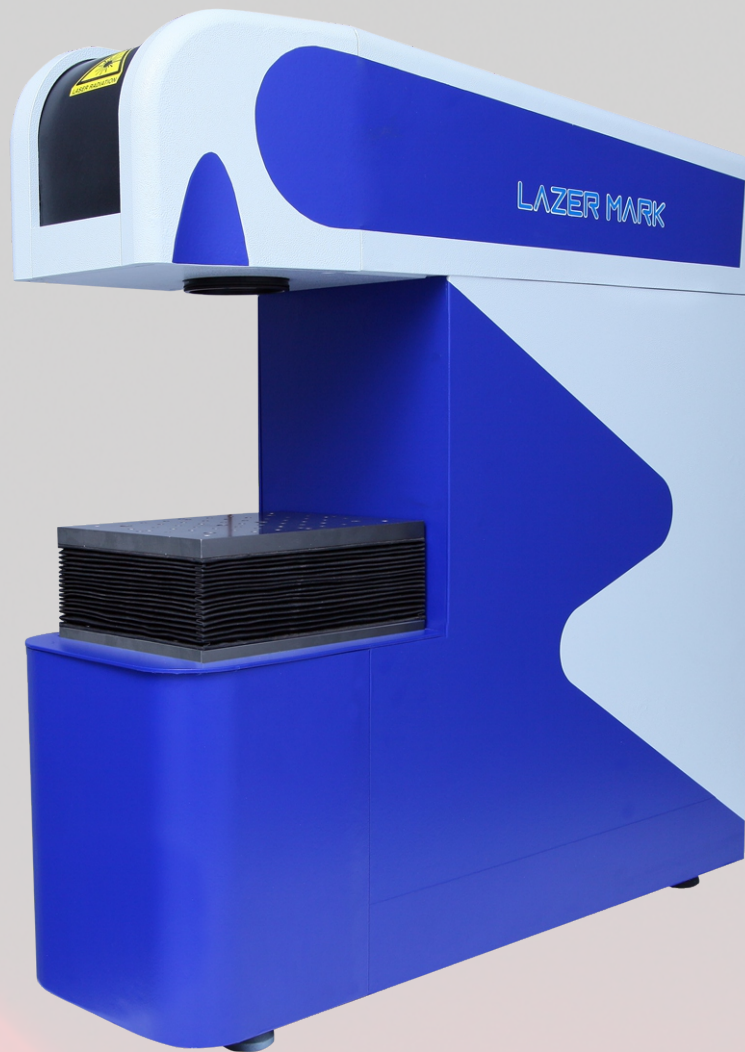
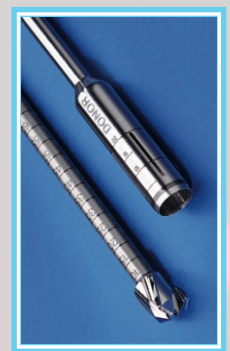
# HUMMINGBIRD

- ✦ Best in its class drug coating machine, for undertaking uniform and multi-layered coatings.
- ✦ Accurate spray pattern, with adjustable spray gun oscillation that can coat the stent with length ranging from 8 to 50 mm.
- ✦ Toggle coating with alternate coating & drying cycle, with pre-fetched time and cycle parameters.

# WONDERSHINE

- ✦ Robust Electro polishing system, for ensuring smooth metal surface and enhanced corrosion resistance of medical devices.
- ✦ High degree of process control, for processing 2 stents simultaneously, with an operation indicator alarm.
- ✦ PID temperature controller, with operating temperature ranging between  $48^{\circ}\text{C}$  to  $80^{\circ}\text{C}$ .





## LAZER MARK

- ✦ Fully automatic, compact, powerful, robust, portable and noise-free laser marking machine, with "plug & play" integration.
- ✦ Single mode, high precision fiber laser source, with an output of 20 W, wave length of 1064 nm (Near Infrared) and frequency range of 1 to 500kHz.
- ✦ User-friendly software, compatible with Windows 2000, Windows XP and Windows 7 operating systems, for carrying out end number of different marking operations, as per the fetched parameters incorporated by its operator.
- ✦ Provides marking speed up to 8000 mm / sec, with minimum line width of 0.02 mm.
- ✦ Comes with an in-built air cooled laser source (no extra chiller required), with Beam Quality of  $M2 < 2.0$ .
- ✦ Maintenance free machine, providing bigger marking area of 110x110 mm and 160x160 mm (can be further customized for catering any of the client's requirements).
- ✦ Compatible with bitmap format (BMP, JPEG, GIF) and vector graphics (PLT, DXF, AI), whereby data can be imported from a database file on a click.
- ✦ Compatible with X, Y, Z, R (four axis) stepper motor control function.
- ✦ Can perform rotary marking (with an optional fixture), 1D / 2D barcoding and wide variety of fill / hatch functions.
- ✦ Multiple user level management that supports multi-document / multi-window operations
- ✦ Real time preview ensures accurate positioning, for marking the text on article.
- ✦ Designed to address any level of customization, for catering the laser marking on material like jewellery, gift articles, auto components, machine tools, medical/surgical devices, electronic components and much more.




**BSCIC**  
CERTIFICATE OF REGISTRATION

QUALITY MANAGEMENT SYSTEM

This is to certify that:  
**SAHAJANAND TECHNOLOGIES (P) LTD.**  
PLOT NO. 33, 34, 35, 52, 53 & 54  
SURAT SPECIAL ECONOMIC ZONE  
SACHIN, SURAT - 394 230, GUJARAT, INDIA

Hereby granted the Certificate Number: **BN2011/1565:0310**  
Subsequent to the Re- Assessment conducted on 23 Dec. 2012 and the organisation found operating a Quality Management System which complies with the requirements of **ISO 9001:2008** for the following Scope:

**Manufacture and Services of Gemstone Processing Machines, Industrial Laser Machines for Material Processing, Vision Based Machines for Inspection & Measurement & Industrial Automation Systems**

Originally registered: 03 Mar. 2010    Latest issue: 03 Mar. 2013    Expiry Date: 02 Mar. 2016

For BSCIC CERTIFICATIONS PVT. LTD. :

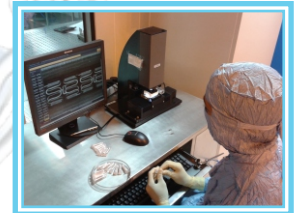
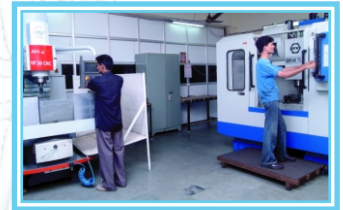
*(Signature)*

Sanjay Seth, Managing Director Page: 1 of 1

Validity of this Certificate is subject to Annual Surveillance Audits to be done successfully on before 19 Feb. / 2014 and 19 Feb. / 2015 resp. Please re-check the validity thereafter at <http://bscic.com/admin/control/certificatestatus.php> or [www.bscic.com](http://www.bscic.com) at REGISTRATION STATUS.

This certificate of registration is granted subject to relevant provisions of the BSCIC Certifications Pvt. Ltd. Contract Form & Scheme for Registration Form & ISIR (Latest version). Please see # ISIR at our website [www.bscic.com](http://www.bscic.com)

The certificate of registration remains the property of BSCIC Certifications Pvt. Ltd. and shall be returned immediately upon request.  
BSCIC headquarters: 1st Floor, SDO 150, Sector - 21 C, Faridabad 121001 Haryana, INDIA

ISO 9001:2008 Certified Company

"Sahajanand Estate", Vakhariawadi, Near Dabholi Char Rasta, Ved Road, Surat - 395 004. GJ, India.

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