



Scriba

Nd:YAG laser marking systems



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applications

Laser marking is the technology of choice for permanent product identification, personalisation and tracking. This is just a small selection of the diverse range of applications:

Computer Equipment

- Marking text and graphics on plastic computer peripherals. An entire keyboard can be marked in a single operation

Automotive Products

- Removal of an opaque top coat from a translucent plastic substrate to create back-lit switches, instrument displays and audio bezels
- Marking layout, current ratings and protection information on fuse box covers

Electronic Components

- Marking epoxy packaged ICs and other micro components with text and graphics for identification
- Cleaning epoxy flash material from capacitor legs to ensure integrity of electrical connections

Electrical Switchgear

- Production of text and graphics on plastic relays, circuit breakers and switch covers to meet specific requirements of approvals bodies in different markets

Medical Implants

- Placing text graphics and part identification numbers on titanium heart pacemaker cans and surgical steel repair components

Surgical Instruments

- Generating unique two dimensional codes on surgical steel instruments for inventory management

Communications Equipment

- Removing an opaque layer of rubber or plastic from a translucent substrate to create back-lit text and graphics on mobile phone keypads
- Production of text and logos on plastic bodies of telephone headsets

Agriculture Equipment

- Replacement of hot foil marking to generate text, graphics and bar codes on livestock identification tags

Promotional Products and Giftware

- Origination of text and graphics on pen barrels, key rings, knives, trophies, picture frames, plaques, etc.

Tools and Gauges

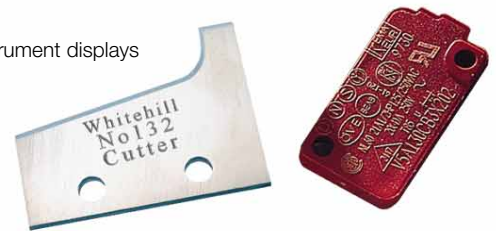
- Marking logos, text and part numbers on drills, saw blades, milling cutters, chucks and collets

Light Shows

- Removal of metallic coatings from glass discs to produce graphics on gobos used in laser light shows

General Engineering

- Marking text, graphics and part numbers to identify ball and roller bearing races, gears, shafts, etc.



product range

The industry standard *Scrība* range of ND:YAG laser marking systems has, since its inception, represented exceptional value for money.

Available as both a lamp pumped laser and a diode pumped system, the *Scrība* range of laser marking systems provides a choice of technologies within the same optical construction.



range characteristics

Scrība E plus - entry-level model for low-to-medium volume applications

Scrība II plus - the high performance lamp pumped *Scrība*

Scrība II Duo plus - the dual head version of *Scrība II plus*

Scrība D40 plus - the high performance diode pumped *Scrība*

Scrība D40 Duo plus - the dual head version of *Scrība D40 plus*

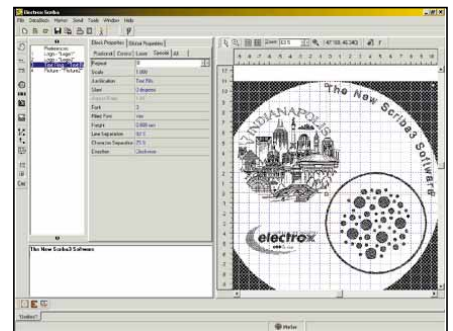
laser specification

Laser Type	Nd:YAG	Operating Modes	CW or Q Switched
Wavelength	1.064 μ m	Operating Temperature	up to 40 ^o C non-condensing
Pulse Frequency	0.1 to 50 kHz	Resonator Construction	Fully sealed against ingress of dust
Max. Marking Speed	up to 5,000 mm/sec	Marking Areas	85 mm to 350 mm diameter

software

standard features

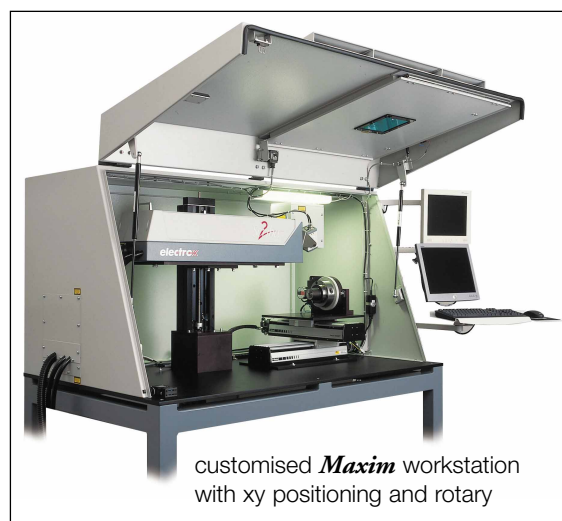
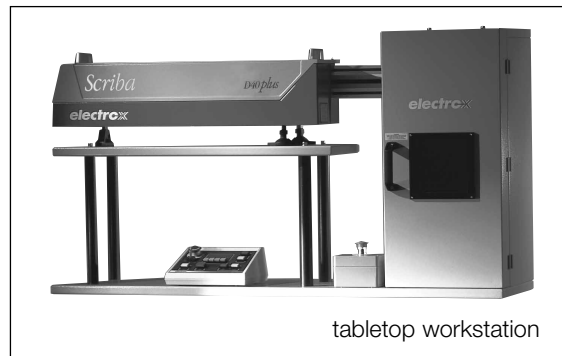
- User-friendly graphical interface
- Full compatibility with Windows 98, 2000/NT, ME and XP
- Fast file transfer to the laser
- File import formats: PLT (HPGL), AI, DXF, PNL (Electrox), BMP, TIFF
- Bar Codes
- Two Dimensional Codes including Data Matrix
- Automatic Serialisation
- File Input Programming (Mail Merge)
- Date Coding
- Fill Editor
- Motion Control (4 Axis)
- Multiple I/O Interface



workstations and handling options

tabletop workstations

Choice of welded steel enclosures with hinged door

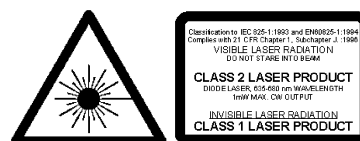


free standing workstations

Maxim welded steel or *Axiom* aluminium and composite panel construction

Both constructions available in two formats, each with manual z-axis:

- universal enclosure with sliding door
- indexing turntable enclosure with safety light curtain



handling options

Programmable z-axis, rotary work piece handling, xy positioning and vision options according to model



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benefits

advantages of laser marking

"an amplified beam of light, focused to a very small spot, to create a wide variety of images - very much like writing with a pen on paper"

Indelible	Permanently modifies surface composition of material
Clean and safe	No inks, acids or solvents
Wide range of materials	Metals, plastics, rubber, etc.
Flexible	Text, graphics, logos, bar codes, etc.
User-friendly	Software driven
No tooling to wear	No direct physical contact with the work piece
Cost effective	Virtually no consumables

principal features - all *Scriba* lasers

Choice of technologies and output powers to address a wide spectrum of materials and throughput requirements

Compact modular construction to make for easy installation onto production lines

Software compatibility with all current versions of Windows to ensure rapid familiarity for programmers and operators alike

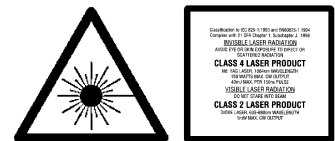
additional features - *Scriba D40 plus* lasers

Diodes guaranteed for 10,000 hours*

Single phase power

Fully integrated cooling system

***or two years which ever is sooner.**



track record

Electrox was established more than 25 Years ago and was first to develop a compact fast axial flow CO₂ laser.

Now a member of the 600 Group plc, Electrox has the financial stability to ensure on-going customer support world-wide.

There are over 2,000 Electrox lasers in regular daily service in over 40 countries throughout the world.

Through its international sales and distribution network Electrox delivers service and support worldwide.

Comprehensive applications development facilities provide manufacturing solutions to a broad range of industries.

installation requirements

dimensions (h x l x w) and weights

	<i>Sc̄riba II plus</i> and <i>Sc̄riba D40 plus</i>	<i>Sc̄riba II Duo plus</i> and <i>Sc̄riba D40 Duo plus</i>
Laser Enclosure	269 x 1061 x 232 mm 37kg	268 x 836 x 594 mm 32kg
Control Unit	640 x 490 x 455 mm 86kg	640 x 490 x 455 mm 86kg
Water Cart (lamp pumped lasers)	640 x 335 x 455 mm 80kg	640 x 335 x 455 mm 80kg
Chiller Unit (diode pumped lasers)	222 x 560 x 440 mm 31kg	222 x 560 x 440 mm 31kg

utilities

	75 & 90 Watt Lamp Pumped Lasers	120 Watt Lamp Pumped Lasers	Diode Pumped Lasers
Input Voltage (50 or 60 Hz)	208 or 380 to 480 (3 phase & earth)	380 to 480 (3 phase & earth)	110, 180, 208, 220, 240 (Single phase & earth)
Power Requirement (kVA)	6.5	7.5	2.2
External Cooling Water* (litres/min.)	19	19	Self contained cooling

*intermittent demand



UK Office

Avenue One, The Business Park,
Letchworth, Hertfordshire,
SG6 2HB, UK.

Tel: +44 (0)1462 472400
Fax: +44 (0)1462 472444
e-mail: sales.uk@electrox.com

USA Office

5601 Fortune Circle, South Drive, Suite A,
Indianapolis,
IN 46241, USA.

Tel: +1 317 248 2632
Fax: +1 317 240 5787
e-mail: sales.us@electrox.com