# **SQ50-F-A FIBER LASER MARKING SYSTEM**



World Class Printing Systems for Real World Applications





## MORE OPTIONS FOR MAKING YOUR MARK

Squid Ink's SQ50-F-A laser coding systems are designed for high speed automotive, electronics, medical, aerospace, beverage, and other primary coding applications. The SQ50-F laser can permanently mark onto virtually every common metal including precious metals, stainless and hardened steel, copper, anodized aluminum, and more. It also marks on non-metals such as aluminum foil, PVC, ceramics, plastics, rubber, composite material, and more.

# **APPLICATION VERSATILITY**

- Permanent coding of text, time and date, bar codes, serial numbering and more
- Quick and easy installation for both stationary and moving products
- Compact design easily fits into production environments where space is limited
- Can be integrated in production lines at speeds up to 300m/min
- Laser head can be rotated  $90^{\circ}$  in less than 5 minutes

## **RELIABLE AND ECONOMICAL**

- No ink/consumables and near zero maintenance for lower cost of ownership
- Clean and eco-friendly coding system features low energy consumption
- Rugged cast aluminum controller body
- IP54 rating ensures maximum reliability and uptime in demanding applications
- Integrated key switch and interlock relay for increased safety on the production floor



# **HIGH QUALITY CODE GENERATION**

- Scribing technology produces razor sharp marks on a variety of substrates including metal, ceramics, plastics, and more
- Ability to mix different fonts and logos in a single message
- Discrete coding ability for anti-counterfeiting and traceability
- Ideal coding alternative where CIJ systems are not practical

#### EASY TO START, SIMPLE TO RUN

- All-in-one design for fast installation and line changes
- Easy to use software with smart touchscreen panel
- Removable 10" tethered touchscreen controller for remote mounting where space is limited
- Intuitive system includes focus finder and code area preview window on product during setup; enables initial laser marking setup within minutes
- Easily configurable in a variety of angles with optional mobile stand
- Optional fume extraction systems available that connect directly to SQ-Laser systems

# THE RIGHT SOLUTION

Rugged design. High quality coding. Low cost of ownership. Your benefits go on and on. When it comes to industrial laser coding, rely on Squid Ink to provide the right solution for your coding and marking needs.



1) An optional heavy duty stand is available to simplify setup and install the system in a variety of configurations. 2) The laser head can be rotated90 degrees in less than 5 minutes.









**3)** Easy to use 10" touchscreen controller mounts to cabinet for system configuration and message programming.

**4)** An integrated key switch and interlock relay is included for safety on the production floor.

## SYSTEM SPECIFICATIONS

- Laser Type 50W fiber laser source
- Laser Wavelength 1.064µm (1064nm)
- Laser Galvanometer High-precision 2-dimensional high-speed scanning method
- Controller and Operating System 10" touchscreen controller running Linux®
- Cooling Method Air-cooled
- Power Consumption <500W
- Marking Area 110mm x 110mm standard, optional lenses up to maximum 500mm x 500mm
- Reflector Size 8.5mm
- **Production Line Speed** 0 300m/min (varies according to substrate and message)
- Marking Speed Up to 1200mm/s
- Character Size Adjustable in marking area, no character line limits
   within marking area
- Marking Line Number Code Rotation 0 to 360°
- Drawing Types Dot matrix and vector
- Positioning Method Red light positioning and auto focusing for simple setup
- Software Features Counter, lot counter shift code, time and date, expiration date, 2D and linear bar codes
- Bar Code Symbologies Code 128, Code 39, Code 93, EAN 13, PDF 417, 01Code, QR, DataMatrix, GS1-DM, AztecCode, HanxinCode, DotCode
- Image Formats bmp, dxf, jpg, plt, png
- Operating Languages English, Chinese, German, Spanish, French, Italian, Japanese, Korean, Portuguese, Hindi, Russian, Turkish, Arabic, Persian
- Safety Features Integrated key switch and interlock relay included for safety on the production floor; customer provided shielding necessary to prevent eye or skin exposure
- Interfaces RS-232C, USB2.0, Ethernet, I/O



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# SYSTEM SPECIFICATIONS (cont.)

- Machine Material Anodized aluminum (marking head) and stainless steel (control unit)
- Laser Head Dimensions 18" (458mm) x 3.3" (83mm) x 4.4" (111mm)
- Controller Dimension 19.4" (492mm) x 15" (383mm) x 6.3" (160mm)
- Electrical Requirements 90 240 VAC, 50/60Hz
- Operating Environment 32°F 113°F (0°C 45°C)
- Humidity Range 10 90% relative humidity, non-condensing
- Machine Weight 68.4 lbs. (31kg)
- Agency Approval CE Mark

#### **OPTIONAL ACCESSORIES**

- Print Trigger Optical, fiber optic, ultrasonic, laser, metal proximity, capacitive proximity
- Encoder For operation with variable speed conveyors
- Mobile Stands Heavy duty stand with ability to rotate laser controller in any direction and easily raise and lower marking machine by a single operator; includes casters for easy transportation within plant
- 90 Degree Head Pivot Extension Mirror assembly that allows marking head to point lens in line with unit axis
- Laser Fume Extraction Systems SQ-LFX or SQ-LFX PVC for the proper extraction of laser application fumes
- Installation and Training On-site installation and training available



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040124 Rev A