

LASER CODING SYSTEM ON PRINTED METAL COVER PLATE



QR codes on bottle cap coding plays a key role in ensuring product traceability, brand recognition and regulatory compliance. As demand continues to increase, manufacturers are under tremendous pressure to implement a robust coding system. Sunine has launched laser coding and visual inspection solutions for aluminum plate for caps, provides high speed laser coding and QR code management solution for specific industries. The master system controls all subsystems, such as laser coding system, automation system, and visual system, which can effectively ensure that the system does not have duplicate codes, missing codes or wrong codes, solving many problems in the production process. Sunine's high-quality laser marking technology ensures the high quality of the products. It can print product names, production dates and various QR codes to improve user brand product quality and brand communication.

Item	Specification	Description
Cap type	Crown caps, Pull-tab caps	Iron cover (Crown Caps) or aluminum cover (pull-tab cap)
Minimum caps quantity in one plate	7x22 caps (Aluminum plate)	Line x row, conveyor can be customized based on plate size
Maximum caps quantity in one plate	27x26 caps (Iron plate) 28x22 caps (Aluminum plate)	Line x row, conveyor can be customized based on plate size
Coding method	Single side or double sides	Can print on one side or both sides at the same time
Production speed	≥70m/min	Based on the QR code size of 10x10mm, 22 digits
Pass rate	≥99.97%	Semi-finished products are 100% qualified
Laser type	CO ₂ laser or fiber laser	
Laser quantity	From 1 unit to 56 units in one production line based on speed requirement	Sunine patented technology can configure different numbers of lasers according to production and coding speed, scientifically manage each laser, and a single laser failure will not affect other lasers. Width of production and number of columns, which will decide the quantity of lasers
Control system	Laser coding system, code management system	Independently developed system management software to ensure no duplicate, incorrect or missed codes
Visual Inspection	High-speed visual inspection solution	Mixing detection, deformation detection, size detection, code reading & comparison
Working temperature	0-50°C	
Supply voltage	AC 380V/50Hz	

System Layout

