



InfoSight Corporation
“We Barcode Difficult Stuff”™

INFO-TAGGER™ 2900 **Automatic Slab Tagging**

InfoSight Model 2900

Many mills throughout the world are turning to automated equipment to do their identification. Until now, there has been no reliable system to automatically print and apply high quality bar coded tags to hot slabs. InfoSight Corporation has introduced the first automated slab tagger. The 2900 Automated Slab Tagger uses a CO₂ laser to blacken the tag's white surface allowing the reliable non-contact printing of large man-readable numbers, high quality bar codes, and even logos. The 2900 uses a MIG weld process, which has been utilized in the automotive and steel industries for years, to attach the tag to 1800°F slabs.



The Justification

Automated tagging is the best way to control inventory, reduce man hours and eliminate mixed steel. The 2900 also provides the ability to reliably identify each slab. Coupled with a standard bar code reader, the 2900 verify the tags presence and tracking identity. The number of times a human makes an error is hard to quantify, but, every mill manager has seen his share of mixed steel and the millions of dollars of hidden costs and potential liability this means to the company. The value of assuring the correct identity is on the slab is immeasurable.

Many man hours are spent taking inventory in the steel yard. A high quality bar code attached directly to the slab can reduce this by at least half. Not only does accurate inventory take less time, but the slab yard can be updated in real time using standard portable bar code readers with RF links. The location is scanned or entered by the slab hauler, then the slab is scanned; in real time the host system updates the location of each and every slab stored in the yard.

The Operation

Typically, the slab comes to a stop on a roll table, where the 2900 can perform its automated tagging. As the slab was being cut at the torch, the next tag in the stack has been printed with the information received from the host computer. The 2900 then waits to weld the completed tag to the slab. Once the slab reaches the 2900, the slab is stopped and the weld head extends to the surface of the slab and the two or four welds are performed, one at a time. The two sides of the weld head are independent of one another allowing for variations in uneven torch cut surfaces when applied to the flame cut ends. Tagging the slab side is also possible.

The Tag

The 2900 utilizes the same technology used in InfoSight's KE2800 Laser Marking Machine. The laser marking is done using a high power CO₂ laser to blacken the white ceramic surface of the specially coated tag. The tags are produced by InfoSight at their facility in Chillicothe, OH. Starting with a 430 grade stainless steel substrate [0.2032mm (.008") thick], one side of the tag is coated with a special laser markable high temperature ceramic coating. The tags are then nicked and notched. Typically, tags are 7.62cm (3") wide, but can be custom designed to 10.16cm (4"). InfoSight offers preprinting services for many customers. Preprinted tags utilize a sequential number of the customer's choice along with the corresponding standard bar code. These tags can be used to link specific slab data base information to each sequential number. The tag number can be scanned using a standard bar code reader and then through radio frequency (RF) links to the company's database, information about that slab is updated and available on a real time basis. Short, sequential "license plate numbers", typically eight digits and corresponding large rugged bar codes provide robust scanning in the mill environment.