

Chiappa Firearms avant-garde: the new RFID system that aids in manufacturing.

Chiappa Firearms, Manufacturer - August 2011

We have received a lot of mail expressing disappointment about the RFID project that we have in development. Some of them were very offensive, and may have triggered an exasperated reaction from some of our distributors. However, this shower of complaints has been very helpful in letting us understand the position of the US market. As you can well imagine, it is not our intention to upset the American consumer, who has been our primary customer for over fifty years.

We wish to explain our position with the RFID system, and the reason why this technology would benefit both Chiappa Firearms as the manufacturer and you as the consumer.

What is an RFID system

RFID (Radio Frequency Identification) has become the industry standard for the identification of objects, animals, human implants for medical treatment, and even food products. Already established in telecommunications and electronics, RFID technology is expanding in diverse fields due to the enormous benefits it offers compared to barcodes or magnetic strips: RFID chips are read by special transponders in a tenth of a second, and not only a singular code such as by barcodes, but a collection of information can be programmed with options to be rewritten if necessary.

Why is Chiappa Firearms working to introduce RFID

Firearms manufacturers in Italy are faced with tremendous obstacles while complying with laws and regulations of the manufacturing and transport of firearms and their components. These restrictions include all types of firearms, including historic replicas, blank firers and black powder muzzleloaders.

Chiappa Firearms is one of the most technologically advanced firearms companies in the world, pioneering automated methods of manufacture and machining, yielding some of the most innovative designs in firearms such as the Rhino revolver. 100% of the weapon components are produced in-house, and our production turnover has increased substantially in the past years.

This is the reason why Chiappa Firearms, along with the associated participation of the Consorzio Armaioli Italiani (Italian Consortium of Gunsmiths), the Italian Proof House and a few other firearms manufacturers, have been working for the past two years on methods to incorporate RFID technology in the production of its firearms. The aim is to expedite the entire process of manufacturing and transport of products to the National Proof House in Italy, and to meet the increasingly homogeneous European rules.

The difficulty of introducing RFID in firearms

A firearm may be logged in and out multiple times before it is sent to the National Proof House prior to final disposition and exportation. Initially, the desire was to develop a RFID chip that would allow the reading of a group of firearms such as a pallet of products passing thru a reader in a doorway allowing immediate processing of all of the components in a container en route to an offsite destination.

The placement of the RFID chip however, must be done in a manner so that the aesthetic properties of the firearm are not diminished and that the integrity of the chip during metal finishing processes is maintained. Locations for the chip have been chosen that would be in non visible areas such as beneath the grip or stock. Due to the required placement of the chip within a small pocket of the metallic receiver, reading the chip from any distance greater than 10", even with the most powerful transponder, was found to be impossible. It was found that a standard reader can only read the chip from about 2" - which is still suitable for most production requirements, though.

Possible developments of Chiappa Firearms RFID system

The tracking system has to be similar to the barcode, but needs to be readable and writable several times during the production process, since many components progress into various stages changing their sub-codes. Our initial idea was to go further, and allow our customers to use this electronic barcode information in their logistics, pricing system, item coding, and so on.

However, with all the comments we received made us reconsider a correct balance between our logistic needs and the needs of the American customer, who does not like to undergo a potential – or even remotely possible - form of control.

Since our project is still in a phase of development - our goal was to implement the RFID system in spring 2012 - we still have plenty of time to develop a similar system, but employing a removable label instead of a chip inlet inside the receiver. This label made of plastic material can be applied to the trigger guard of the weapon, follow throughout the production cycle and be removed prior to marketing or by the customer.

The US consumer can rest assured that Chiappa Firearms is placing the customer's interest first and foremost, while developing the most efficient method of firearm manufacturing possible.

Media Professionals For more (accurate) information you may contact:

Chiappa Firearms, Ltd., importer and manufacturer of Chiappa Firearms
info@chiappafirearms.com

(919) CHIAPPA
[\(919\) 244-2772](tel:9192442772)