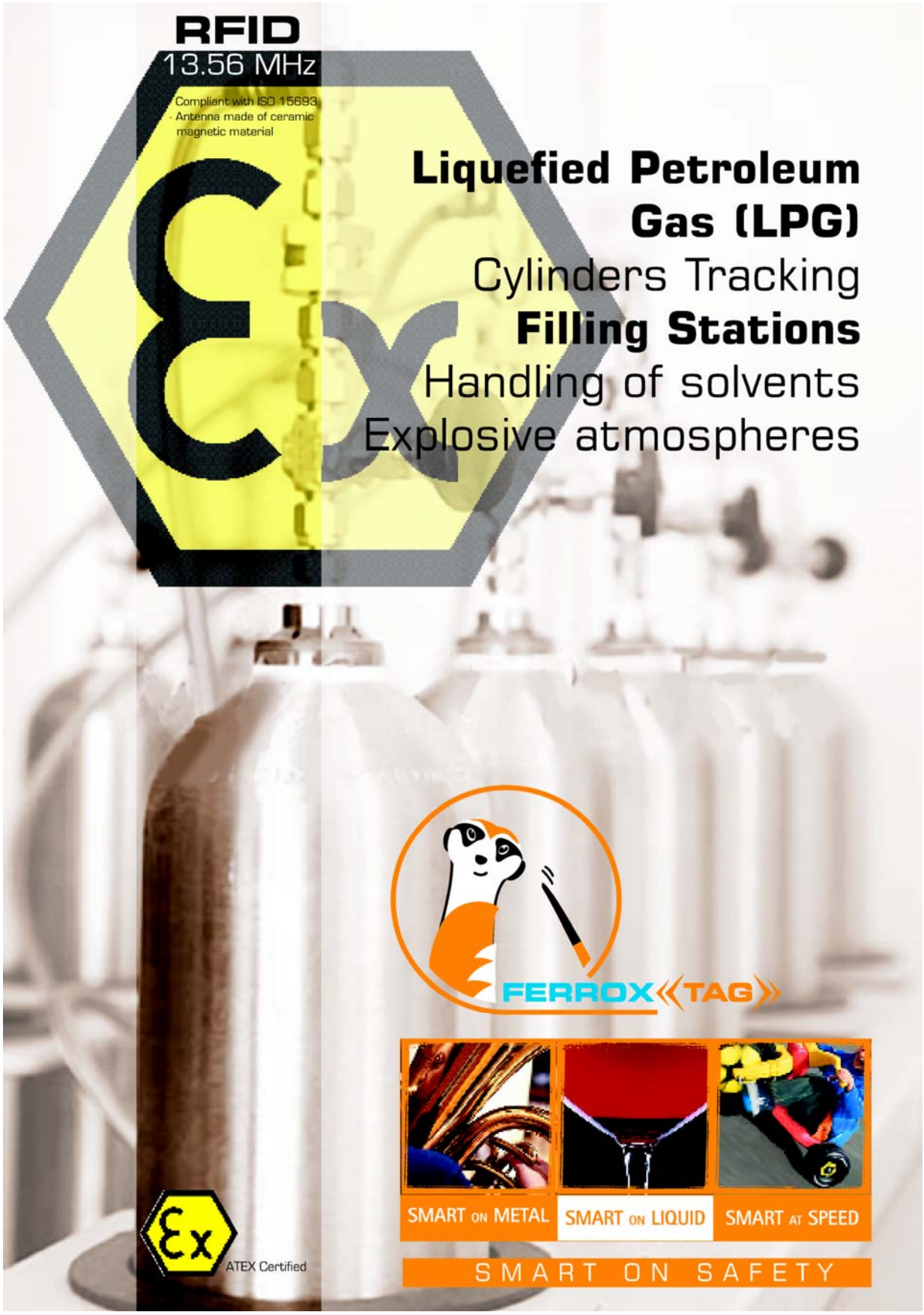
RFID
13.56 MHz
Compliant with ISO 15693
· Antenna made of ceramic magnetic material
Liquefied Petroleum Gas (LPG)
Cylinders Tracking
Filling Stations
Handling of solvents
Explosive atmospheres
FERROX TAG
ATEX Certified
SMART ON METAL
SMART ON LIQUID
SMART AT SPEED
SMART ON SAFETY

FERROXTAG FOR METAL ITEM IDENTIFICATION AT 13.56MHz IN POTENTIALLY EXPLOSIVE ATMOSPHERES

FERROXTAG, THE BEST CHOICE FOR METAL ITEM IDENTIFICATION IN INDUSTRIAL ENVIROMENTS.

The implementation of robust and reliable systems of radio frequency identification in industrial environments remains a real challenge nowadays. In most situations the weak point continue being the transponder, which attached to the item to be identified, is totally exposed to acids, extreme temperatures and high probability of suffering impacts in presence of liquids and metals. It is a proven fact that industrial environments decrease the functionality of RFID tags making it possible even their destruction.

Ferroxtag on metal screw box has already exceeded such challenge, its revolutionary design, with ceramic magnetic antenna makes it possible to reach the largest operating distances of the market when referring to metal item identification, besides, its Polyamide 66 package protects all the tag´s internal components allowing Ferroxtag to work at full capacity under above-mentioned conditions.

Now, Ferroxcube adds to its wide range of RFID tags its references ***FXT1.2-SLI-X-ATEX*** and ***FXTH.2-SLI-X-ATEX*** intrinsically safe certified and suitable for use in potentially explosive environments.

Figure 1. New ATEX references.

ATEX certified

FXT1.2-SLI-X-ATEX (4330 034 10121)		**On metal tuning**	**Epoxy sealed**	**HF (13.56MHz)** Passive technology
	**MECHANICAL PROPERTIES** • 25 x 12.5 x 5 mm -- 2.5 grams. • **WHITE** POLYAMIDE 66 UL94-V0 (IP68 degree of protection). • Storage temperature: -40ºC to +150ºC • Operating temperature: -25ºC to +130ºC • **ATEX CERTIFIED** Designed for metal items identification in potentially explosive atmospheres. **II 1GD** **EX ia IIC T6** **EX iaD 20 T85 ºC** **APPLICATIONS** Fixation method: screws, rivets, glue. • Cylinders tracking. • Filling stations. • Chemical industry.			

FXTH.2-SLI-X-ATEX (4330 034 10181)		**On metal tuning**	**Epoxy sealed**	**HF (13.56MHz)** Passive technology
	**MECHANICAL PROPERTIES** • 26.3 x 23 x 5 mm -- 3 grams. • **WHITE** POLYAMIDE 66 UL94-V0 (IP68 degree of protection). • Storage temperature: -40ºC to +150ºC • Operating temperature: -25ºC to +130ºC **ATEX CERTIFIED** Designed for metal items identification in potentially explosive atmospheres. **II 1GD** **EX ia IIC T6** **EX iaD 20 T85 ºC** **APPLICATIONS** Fixation method: glue. • Cylinders tracking. • Filling stations. • Chemical industry.			

COMPLETE DATA-SHEETS CAN BE FOUND ON WEB SITE:
www.ferroxtag.com

WHAT DOES "INTRINSICALLY SAFE" MEAN ?

Intrinsic safety is a protection technique employed in potentially explosive atmospheres. Devices certified as "intrinsically safe" are designed to be unable to release sufficient energy, by either Thermal or electrical means, to cause ignition of flammable material (Butane, petrol, Propane, Benzene, etc).

FERROXTAG ATEX CERTIFIED, ESPECIALLY DESIGNED FOR METALLIC ITEM IDENTIFICATION IN HAZARDOUS LOCATIONS.

Ferroxtag **FXT1.2-SLI-X-ATEX** and **FXTH.2-SLI-X-ATEX** are Ferroxcube´s new vehicles for metal item identification at 13.56MHz in hazardous environments, those that typically exist in the chemical and petrochemical industry where security and reliability are essential requirements.

LPG cylinders and many other high quality containers related to power market are one of the most valuable assets for companies. Due to the huge number of cylinders and the geographical spread of energy distribution, most companies lose track of the exact number of cylinders owned and their physical conditions. The impossibility to carry out an efficient tracking resulted in loss or deterioration of 5% of cylinder park every year.

Ferroxtag ATEX certified will help LPG and energy industries not only to improve the management of their supply chains but also to the filling stations automation. Each cylinder or container provided with Ferroxtag will turn into a real mobile data base that will contain information about its identity, current status, its history and its future. Now, for each processing station will be possible not only to read all this information but also update it.

For this competitive sector where there are not many opportunities for product differentiation between manufacturers, Ferroxtag can make the difference by means of:

- Cost saving, through the reduction of lost cylinders. Now each and every one will be uniquely identified and associated with a customer number which will allow efficient tracking as well as cylinder park optimization.

- Real time information control, mouse-click available records of maintenance, life certifications, billing and inventories.

- Quality and security improvement, quality can be tested at different check points located at the end of processing stations, results will be stored in order to be analyzed before the delivery to final user. Relevant data as leakage test results, weight, pressure and batch number can be carried with the cylinders and be read when and where necessary, for example at filling stage.

WHY FERROXTAG ?

1. Ferroxtag is nowadays the only reduced dimensions high frequency transponder especially designed for metal item identification, being at the same time certified for work in potentially explosive atmospheres.

2. Based on HF technology (13.56MHz), so it is much faster than other tags based on low frequency (LF) that require the tagged item to cross the interrogation zone slowly, besides, thanks to its magnetic ceramic antenna, Ferroxtag is more robust to external influences (liquids, metal), main weakness of conventional HF tags.

3. Thanks to Ferroxtag´s reduced weight and dimensions, cylinders/containers of any shape and material can be uniquely identified by means of screwing or sticking the tag in a few seconds without modifying or altering the cylinder and therefore at minimum cost.

In conclusion, larger operating distances than any other tag on metal, anti-collision capability that enables reading of several tags at the same time, baud rate up to 53 Kbits/sec and 1024 bytes of re-writable memory, qualify Ferroxtag ATEX certified without a doubt, as the best choice to fulfill all the identification necessities of chemical and petrochemical industry.

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DISCLAIMER
These products are not designed for use in life support appliances, devices, or systems where malfunction of these products can reasonably be expected to result in personal injury. Ferroxcube customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Ferroxcube for any damages resulting from such application.