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## FERROXTAG, TOGETHER WITH LPG TANK MANUFACTURERS IN SEARCH OF THE 21<sup>st</sup> CENTURY CYLINDER

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World is always looking for new solutions to mitigate its energy necessities. LPG, with its high energy output, instantly available heat, flexibility in use and environmental friendliness has become an important alternative energy source.

Simplicity gives a great advantage to Liquefied Petroleum Gas which can be filled and distributed in adequate cylinders to almost any place on earth.

Gas cylinder manufacturers are aware of the fact that LPG is becoming a true alternative not only for industrial use but also for automotive and households. Looking for the so-called 21<sup>st</sup> century LPG cylinder, tank manufacturers are focused on producing new cylinders:

- Safer and more durable.
- With low-weight.
- Provided with ergonomic handles.
- Easy cleaning and attractive design









All these improvements are being carried out mainly thinking on final customers but, What is about gas filling and distribution companies?.

Next to filling plants, cylinders are the most important assets of the gas industry. Almost all these companies are aware of the benefits of installing RFID systems in their facilities as well as in their supply chain. Purchasing and installation of RFID tags, with more than 70% of the total inversion for the whole RFID system, is the major concern for gas filling industries.

*Therefore the 21<sup>st</sup> century LPG cylinder will be not only safer, easy to handle and with an eye-catching design, but also provided with an RFID identifier right from its manufacture.*

**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.

<p><b>FXT1.2-SLI-X-ATEX</b> (4330 034 10121)</p>		<p><b>On metal tuning</b></p>	<p><b>Epoxy sealed</b></p>	<p><b>HF (13.56MHz)</b> Passive technology</p>
	<p><b><u>MECHANICAL PROPERTIES</u></b></p> <ul style="list-style-type: none"> <li>• 25 x 12.5 x 5 mm -- 2.5 grams.</li> <li>• <b>WHITE</b> POLYAMIDE 66 UL94-V0 (IP68 degree of protection).</li> <li>• Storage temperature: -40°C to +150°C</li> <li>• Operating temperature: -25°C to +130°C</li> </ul> <p><b><u>ATEX CERTIFIED</u></b> Designed for metal items identification in potentially explosive atmospheres.</p> <p> <b>II 1GD</b> <b>EX ia IIC T6</b> <b>EX iaD 20 T85 °C</b></p> <p><b><u>APPLICATIONS</u></b> Fixation method: screws, rivets, glue.</p> <ul style="list-style-type: none"> <li>• Cylinders tracking.</li> <li>• Filling stations.</li> <li>• Chemical industry.</li> </ul>			
<p><b>FXTH.2-SLI-X-ATEX</b> (4330 034 10181)</p>		<p><b>On metal tuning</b></p>	<p><b>Epoxy sealed</b></p>	<p><b>HF (13.56MHz)</b> Passive technology</p>
	<p><b><u>MECHANICAL PROPERTIES</u></b></p> <ul style="list-style-type: none"> <li>• 26.3 x 23 x 5 mm -- 3 grams.</li> <li>• <b>WHITE</b> POLYAMIDE 66 UL94-V0 (IP68 degree of protection).</li> <li>• Storage temperature: -40°C to +150°C</li> <li>• Operating temperature: -25°C to +130°C</li> </ul> <p><b><u>ATEX CERTIFIED</u></b> Designed for metal items identification in potentially explosive atmospheres.</p> <p> <b>II 1GD</b> <b>EX ia IIC T6</b> <b>EX iaD 20 T85 °C</b></p> <p><b><u>APPLICATIONS</u></b> Fixation method: glue.</p> <ul style="list-style-type: none"> <li>• Cylinders tracking.</li> <li>• Filling stations.</li> <li>• Chemical industry.</li> </ul>			

These tags can be easily glued to the metal liner or riveted to the handle.



*Figure 1. Ferroxtag ATEX certified fixed to metal LPG cylinder through epoxy based adhesive.*

Tag could even be placed inside a metal notch in order to be sealed with epoxy resin afterwards. Let us know that is you preferred application and we will tune the tag specially for the notch dimensions.



*Figure 2. Ferroxtag on screw box ATEX certified re-tuned for metal notch applications.*

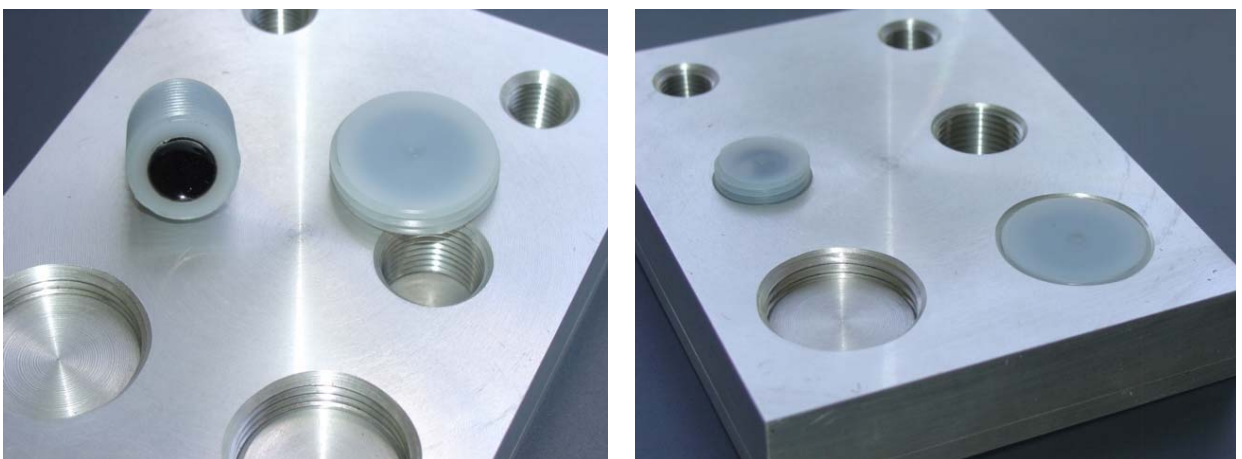
Other references from our wide range of High Frequency tags are:

- **Reduced dimensions Ferroxtags**; to be easily inserted into the ergonomic handles / the plastic jacket of new design cylinders.



*Figure 3. Reduced dimensions Ferroxtag*

- **Screw tag**; to be easily placed in metal or non-metal surfaces



*Figure 3. Screw Ferroxtag references*



Each cylinder or container provided with Ferroxtag will turn into a real mobile data base that will contain information about:

- Tare for each individual cylinder that allow filling operation without operator.
- Successful Leakage tests.
- Records maintenance and repair operations on cylinders.
- Identify LGP batches
- Enables cylinder recall.

**COMPLETE DATA-SHEETS AS WELL AS CAPABILITY GUIDE  
CAN BE FOUND ON WEB SITE: [www.ferroxtag.com](http://www.ferroxtag.com)**

If you can't find any tag that fulfils your RFID necessities, ask for our custom tag-holders and tag encapsulations.

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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.