

# Permanent Barcode Tag

#### XIANGKANG ELECTRONIC CO.,LTD

Contact person: Andy Ding M: +86 15021345915 E-mail: andy@czxkdz.com

International office:

No.1199-305 Defu Road, Jiading District, Shanghai, China





# Permanent barcode tag









LPG cylinder

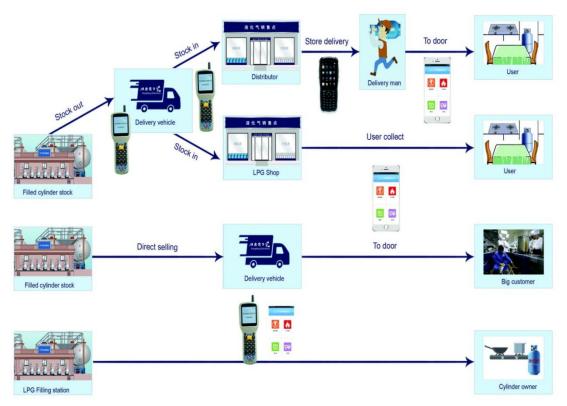
#### Main function(one-dimensional code)



#### **One-dimensional code Main function:**

- ➤ Cylinder ID , cylinder file
- ➤ Internal Filling data Management
- ➤ Cylinder Tracking
- ➤ External Distribution Management



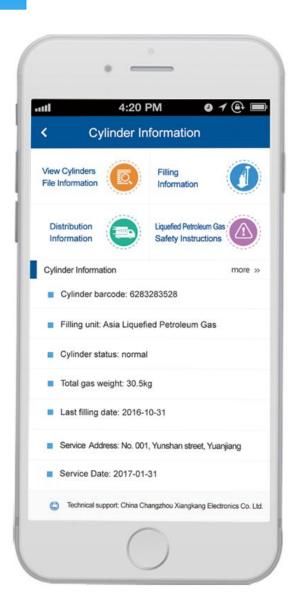


#### Main function(QR code)



#### **QR** code Main function:

- ➤ Link to website
- ➤Scan order
- ➤ Enterprise publicity



#### Barcode Installation





Method for new cylinder installation: Welding

#### Method for old cylinder installation:





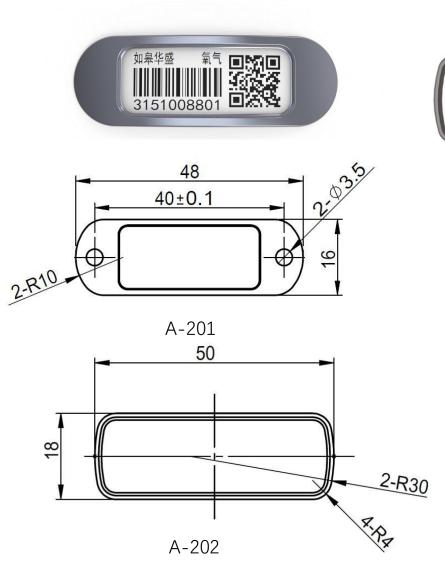


① Drill holes



#### Permanent barcode tag

Used more for Industrail gas cylinders





Industrial Gas Cylinder

#### Perfect performance

# Permanent metal-ceramic barcode









Cylinder barcode tag is the best choice for gas cylinder tracking and management.

- Outstanding high temperature 800°C resistance.
- Low temperature resistance 40°C degrees.
- Scraping 10 times with an art knife without damage to the surface.
- Resistance to chemical reagent corrosion, penetration of acetone reagent for half an hour. Wipe with wire ball for removal without damage.
- White base,black bar code,easy and fast to read.
- Excellent image resistance to damaging UV exposure,outdoor use for more than 20 years.
- Ceramic layer protects the image from chemicals abrasion.
- Unbreakable ceramic technology, little bit bend is available.
- Good bendability
- Customer-design accept

# Comparison of barcode and RFID

#### Compare between Metal-Ceramic barcode and RFID





ltem	Metal-Ceramic barcode	RFID
Life time	No limit,more than 20 years	Life time is limit,normally 2-5 years
Signal	don't need send out signal	Signal is getting weaker and weaker day by day, because it is a kind of electronic components.
Temperatuer allows	-40~800℃	-20~220℃
Reading speed	One by one get asset information with high precision	Batch read, but not stable
Reader	PDA or mobile phone	Requires transmitters, special readers, antennas and other devices
Using environment	Well be used in hostile environment, not affect by metal or water	Can not be well used when metal or water nearby.
Cost	Low	High
Cylinder maintanence process	No need to take barcode down	Must take down and packing in sequence,low efficiency
Successful case	NKoil, Trackout, BOC, LINDE, Praxair, Airliquide, Proto Energy	1

## Cylinders inspection and renewal



To clean residual liquids from cylinders by high temperature firing during renewal process.



Cylinder barcode tags don't need to be taken down, to keep uniqueness for each cylinder.

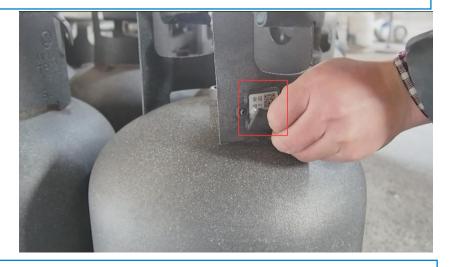
#### Cylinders inspectionc and renewal





Put a rubber cover to the surface of the barcode. Cylinders go into shot blasting machine to remove rust.





After shot blasting, take down rubber cover, the barcode is clearly visible, without any damage.

## Cylinders inspection and renewal





Take off the black flat after reprinting, the barcode is still intact.

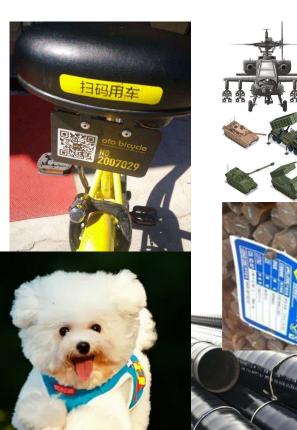




If you just do printing, not do shot blast, paper sticker can replace black rubber cover.

# Application







#### **Typical customers**























康大燃气

