CCYTSA

Since 2007, we have been suppliers to General Electric's transportation division, in the manufacture of tanks for locomotive brake system.













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ABOUT US

INGUSA

Industrias Gutierrez, SA de CV is a 100% Mexican company with offices throughout Mexico and in more than fifteen other countries. Group INGUSA is known for its market leadership for products related to storing, transport, measurement and control of fluids for residential and industrial use.

With more than 50 years of experience under the INGUSA and CYSTA trademarks, we are leaders in the manufacture of LP Gas cylinders and tanks, other type of storage tanks, valves, gauges, propane regulators and other products of highest quality and technology proudly bearing the made in Mexico label: HECHO EN MEXICO

COMPANY HISTORY

1959

Industrias Gutierrez, SA de CV begins operating in Guadalajara, Mexico, manufacturing portable cylinders under the INGUSA trademark.

1975

Manufacturing of tanks including bobtails, semi-trailers, propane vehicle fuel (autogas), and ammonia begins.

1994

Commercial expansion with exports to the United States, Central America, South America, and the Caribbean.

2007

A relationship with GE Transportation commences, INGUSA becoming a world-class supplier.

















1967 of CYTSA

Manufacturing of CYTSA (Cilindros y Troqueles SA de CV) stationary tanks begins.

1983

Startup of manufacturing of propane valves and fittings.

2004

Creation of the New Products
Division with tanks unrelated to LP
Gas, developing special products
such as compressor tanks and
industrial air tanks.

2014

Manufacture of compressor valves begins.

RESPONSIBLE COMPANY



INGUSA is awarded the "Family –wise Responsible Company" distinction by the Ministry of Labor and Social Welfare as a company that promotes good labor practices in matters of gender quality, prevention and addressing of labor violence and sexual harassment, as well as actions and policies that foster attention by employees to their family responsibilities

INCLUSIVE COMPANY



INGUSA has earned this distinction from the Ministry of Labor and Social Welfare by being a company that applies a Good Labor Practice Policy in matters of equal opportunities, inclusiveness, development and non-discrimination towards person in a vulnerable situation.























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APPROVALS



THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME)

A professional association that is a world leader in the generation of codes for design, construction, inspection, materials, and testing for equipment, boilers and pressure vessels. The codes and standards of ASME are accepted and used worldwide.

Equipment manufactured by INGUSA is designed, built, and tested in accordance with the standards set forth in Section VIII, Division 1, of the code, which covers requirements for materials, design, manufacture, inspection, and testing of pressure vessels.



THE CANADIAN REGISTRATION NUMBER

A Canadian registration system for verifying and monitoring pressure containers and accessories; it is one of the most demanding and restrictive registers in this matter in the international milieu.

INGUSA can obtain registration for products that will be used in Canada



THE US DEPARTMENT OF TRANSPORTATION

A US government agency that regulates systems of transport to guarantee safety and efficiency in them. Grupo INGUSA has DOT's authorization to manufacture transportable cylinders according to specifications 4BA and 4BW, under the supervision of an approved inspection agency.



ENTIDAD MEXICANA DE ACREDITACION A,C (Mexican Accreditation entity)

The first prívate entity in Mexico that accredits enterprises known as "Organisms of Assessment Conformity" (analysis laboratories and calibration laboratories).

INGUSA's laboratories are certified to work under Mexican standards:

• NMX-EC-17025-IMNC-2006/ISO/IEC 17025:2005, which establishes general requirements for the competency of analysis and calibration laboratories

• NMX-X-042-SCFI: 2010, which sets forth testing methods for valves for portable LP Gas cylinders



ECHO IN MEXICO

The "Hecho en México" stamp was created to foster, bolster, and promote the purchase of Mexican products, as well as protect jobs and support the economy of Mexicans.

Grupo INGUSA is a 100%-Mexican enterprise and uses this distinguishing mark with pride.























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ICONTEC

Instituto Colombiano de Normas Técnicas y Certificación (Colombian Institute of Technical Standards and Certification). This entity represents Colombia to international and regional standards organizations such as ISO, IEC and COPANT. In order to manufacture products under this certification INGUSA follows these rules:

In order to manufacture products under this certification INGUSA follows these rules:

- 180196 Resolution: a technical rule for cylinders and stationary tanks used in rendering residential LP Gas service and maintenance processes
- 181464 Resolution: a technical rule for cylinders and stationary LP Gas tanks: requirements for review and marking of universal re-used cylinders and marked new cylinders



NBBI

National Board of Boiler and Pressure Vessel Inspector. A US inspection board that identifies and accredits manufactures of pressure vessels and pressure relief adjuncts, according to design and manufacturing standards of this institution.

INGUSA is certified and authorized to stamp its equipment with the "NB" mark



NOM

Normas Oficiales Mexicanas. (Official Mexican standards) Mandatory standards in Mexico that establish specifications for products and processes in order to ensure minimum and maximum design and manufacture features. INGUSA complies with the following NOM dictates:

• NOM-018/4-SCFI-1993 for portable LP Gas containers for distribution and consumption and their

accessories

- NOM-008-SESH/SCFI-2010 that establishes manufacturing, materials, and testing methods specifications for transportable LP Gas vessels
- NOM-009-SESH-2011 that contains specifications and testing methods for non-transportable LP Gas tanks
- NOM-020-STPS-2011 for safety conditions for pressure vessels (distinct from LP Gas) to be established at worksites



NPGA

The National Propane Gas Association. (Central American Technical Rules) A national commercial organization that represents the propane industry in the US and consists of enterprises involved in selling propane gas, manufacturers and distributors of equipment, cylinders, and tanks, as well as carriers that transport LP Gas.

Grupo INGUSA is a member that represents all the sectors of the propane industry in the US.



RTCA

Reglamento Técnico Centro Americano (Central American Technical Rules). This name applies to rules made and adopted by the technical committees on standards of the standards and technical regulations of the countries of Central America. They include representatives of the academic and consumer sectors, private enterprise, and government. INGUSA products to be sent to this region meet these requirements as

set forth in RTCA 23.01.29:05 for pressure vessels, portable cylinders for LP Gas, and manufacturing specifications.























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UNDERWRITERS LABORATORIES Underwriters Laboratories. US consultar

Underwriters Laboratories. US consultants in safety and certification of enterprises in the areas of safety, validation, testing, inspection, and auditing of products.

UL supports several products manufactured by INGUSA under the following rules:

- UL 1769, for valves destined for use as fill and service valves for LP Gas cylinders in accordance with the standards of the US Department of Transportation (DOT) and Transport Canada (TC)
- UL 132, for relief valves for ammonia and LP Gas for use on vessels manufactured in accordance with ASME Sección VIII, División 1
- UL 125, for valves controlling the flow of liquids/vapor for filling and emptying vessels, piping between containers and their systems that contain LP Gas in a range of temperatures between -4°C and 55°C























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PRODUCTS





PROPANE TANKS **AUTOGAS AND FORKLIFTS**



LP GAS STORAGE TANKS





AMMONIA **TANKS**



SPECIAL PRODUCTS



COMPRESSOR AIR TANKS



VALVES AND REGULATORS



AIR RECIEVER FOR INDUSTRIAL AIR STORAGE























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Residential LP Gas Tanks and Cylinders

120- to 7500-liter Stationary Tanks

INGUSA designs and manufactures stationary LP Gas tanks according to Official Mexican Standards (Normas Oficiales Mexicanas; NOM) in effect and the highest international (American Society of Mechanical Engineers; ASME) standards to guarantee product quality and safety.

Tanks have relief, fill, and service valves, and float gauges—all made by INGUSA.

- All tanks are hydrostatically tested.
- Guarantees against manufacturing defects for ten years for tanks and one year for valves
- · Available in twelve standard sizes and custom sizes on demand
- Shipped worldwide

STANDARD MODEL						
120 L	180 L	300 L	500 L	1,000 L	1,500 L	
1,900 L	2,200 L	2,800 L	3,400 L	3,750 L	5,000 L	
7,500 L						

Vertical Stationary Tanks

INGUSA produces vertical LP Gas tanks: trustworthy, high quality products that comply with Mexican NOM and international ASME standards

- Tanks have relief, fill, and service valves, and float gauges—all made by INGUSA.
- All tanks are hydrostatically tested.
- · Guarantees against manufacturing defects for ten years for tanks and one year for valves
- Shipped worldwide

STANDARD MODEL				
180 L	220 L	454 L		

Residential LP Gas Cylinders

INGUSA has more than fifty years of experience, creating vertical cylinders under the strictest Mexican and international standards (including DOT, RTCA, and ICONTEC), designed for portability and use in all climates.

- Guarantees against manufacturing defects for ten years for tanks and one year for valves
- Marked according to customer's specifications
- Powder coated in a variety of colors
- · Die stamped
- Shipped worldwide



























STANDARD MODEL									
4.5kg (10 Lb)	9.7kg (20 Lb)	10kg	11.3kg (25 Lb)	15.9kg (35 Lb)	18.14kg (40 Lb)	20kg	30kg	45kg	45.3kg (100 Lb)

LP Gas Storage Tanks

Bulk Storage Tanks

CYTSA LP Gas storage tanks for outside use in distribution plants, auto-gas service stations and point-of-use Gas LP installations have a nominal capacity from 12,600 to 350,000 liters. They are designed and manufactured in accordance with the current Official Mexican Standard (NOM) and ASME Code Section VIII Div 1.

- Design pressure of 17.58 kgf/cm2 (250 psi)
- · Finished in primer
- · Design and construction according to customer's specifications
- · Manufactured from steel that meets ASTM specifications
- ASME stamp (available on customer's request)
- Fully X-rayed
- NPT (National Pipe Thread) connections and additional flanges at fill connection on request
- Tanks have relief, fill, and service valves, float gauges and protection for valves and fittings
- · Ground connection plate
- Steel bases available on request
- · Preparation for fire suppression system
- Ten-year guarantee on tank against manufacturing defects
- · Shipped worldwide

STANDARD MODELS								
10,000 L	12,600 L	17,000 L	20,000 L	33,000 L	46,000 L	66,000 L	89,000 L	112,000 L
125,000 L	135,000 L	158,000 L	181,000 L	204,000 L	227,000 L	250,000 L	350,000 L	

Special Tanks

INGUSA makes every effort to meet the specific needs of our customers, offering services of design, development, and custom-made products.

We manufacture equipment according to the customer's engineering, and we stick with complying with their specifications. We also have a product engineering and development department with experience in the design and manufacture of special products.























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Some examples of special products we have made are:

- Main tank for storing air in a locomotive brake system
- · Pressure reduction tank for a control system
- Diesel storage tank
- · Shipped world wide

LP Gas Bobtails and Semi-trailers

Bobtails

INGUSA provides bobtails for transporting LP Gas from distribution plants to stationary tanks at homes, businesses, and industries. These tanks are designed and manufactured in accordance with Official Mexican Standards (Normas Oficiales Mexicanas; NOM) in effect and ASME Code Sec VIII Div 1.

- Turnkey delivery
- · Quality and hydrostatic test certificate
- Gasoline to LP Gas conversion at customer's request
- Equipped according to customer's specifications
- · Shipped worldwide

STANDARD MODEL						
3,300 L	4,000 L	5,500 L	8,000 L	12,600 L	17,200 L	24,000 L

Semi-trailers

INGUSA semi-trailers are used to transport large volumes of LP Gas from bulk storage plants to distribution plants. They are designed and manufactured in accordance with Mexican Official Standards (NOM) and ASME Code Sec VIII Div 1.

- Two- and three-axle semi-trailers to transport LP Gas
- Turnkey delivery
- · Quality and hydrostatic test certificate
- Fenders and wheels available in aluminum or steel
- REPUVE (NIV) registered
- · Weights, dimensions, and fittings in accordance with Ministry of Commerce and Transport NOM-SCT standards
- Steel conforms to ASTM specifications
- · Stress relieving on all units
- Top-quality personalization according to customer's needs
- · Optional air-lift belly axle
- · Optional pumping equipment
- Optional rear installation of service fittings
- Polyurethane exterior white base paint





























STANDARD MODEL					
38,000 L	40,000 L	45,690 L	53,100 L	55,000 L	

Air Receiver for Industrial Air Storage

Air Receiver

CYTSA brand lung tanks are designed and manufactured under the specifications of ASME Code Sec. VIII Div 1; their main function is storing air to guarantee the supply of pneumatic pressure in industrial processes.

- Custom made to meet customer's needs
- Manufactured for a working pressure of up to 1000 psi
- Five-year guarantee against manufacturing defects
- · Available in different colors or with primered finish
- Delivered with calibration memory, construction diagram, and certificate of hydrostatic testing
- ASME/NB/CRN stamp available on request
- · Shipped worldwide

STANDARD MODELS					
1,000 L	1,500 L	2,000 L	2,200 L	2,500 L	
3,000 L	3,400 L	4,000 L	5,000 L	6,000 L	
7,500 L	8,000 L	10,000 L	13,000 L	20,000 L	

Valves and Regulators

LP Gas Valves

Propane valves permit or stop the flow of fluids into or out of the vessel.

INGUSA manufactures forged brass propane valves according to current NMX and UL standards with defined processes, trained personnel and certified laboratories. INGUSA guarantees the safe operation of each valve.

• One-year guarantee against manufacturing defects.



























VALVE	S	
APPLICATION	VALVE	TYPE
	Fill	TE-2
	TIII	IV-B-S
Stationary tank	Safety relief	TE-1
	Vapor return	TE-3
	Service	TE-4
	Fill stop	TC-1
Auto goo (motor fuel) topk	Service	TC-2
Auto-gas (motor fuel) tank	Safety	TC-3
	Fill	TC-4
	Less than 10kg	IV-A
Cylinder	Less than 10kg	IV-C-A
	From 10 to 45kg	VI

LP Gas Regulators

The purpose of the regulator is to control the flow of gas and lower the pressure from the tank to the appliance(s) in the gas system.

INGUSA regulators have been designed for residential and business LP Gas installations and meet the strictest NOM safety standards.

- Intake pressure 7.0 k/cm2
- One-year guarantee against manufacturing defects
- Tested precision components guarantee correct functioning

REGULATORS					
APPLICATION	APPLICATION PROPERTY				
	Low demand – no hose	R-3			
Cylinder	Low demand – with hose	R-3-050			
	With bypass	R-1-BP			
Stationary tank	Without fittings	R-1			
	With pool connection	R-1-A			
	With hose connection	R-1-C			
	High demand	R-5			























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LP Gas Float Gauges

Float or percentage of fill gauges show the approximate level of the liquid gas in the tank, indicating the volume in the tank as a percentage of the tank's total capacity.

INGUSA float gauges are manufactured with quality standards that guarantee correct measurement.

- One-year guarantee against manufacturing defects
- · Shipped worldwide

FLOAT GAUGES	
APPLICATION	TYPE
Autogas tank	TC
Stationary tank	TE
Replacement part	Gauge dial

Compressor Valves

INGUSA makes high quality valves for air compressors. They are designed and manufactured with defined processes according to current standards.

Check valves for compressors are used to control the intake of air into the container.

Pressure relief valves serve to relieve air pressure in the container once it has reached the maximum limit calibrated on the valve spring.

Purge valves are used to drain condensation from inside the tank

- Pressure relief valves calibrated at 125 or 185 psi
- Hex screw in check valves for maintenance
- · Completely tested
- One-year guarantee against manufacturing defects
- · Shipped worldwide

MODELS REGULADOR				
APPLICATION	PROPERTY	TYPE		
	½" x ½"	TAC-1		
Check valve	3/4" x 3/4"	TAC-2		
	1" x 1"	TAC-3		
Cofoty volvo	125psi, ¼" diameter	TAS-1		
Safety valve	185psi, ¼" diameter	TAS-2		
1/4" diameter	TAP-1			

























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