

SYSTEM INTEGRATION

FTI's stations are comprised of several modules that are sold separately or combined to form an integrated station. Increasingly, customers are looking to FTI to provide fully integrated turnkey compressed natural gas (CNG), liquid natural gas (LNG), hydrogen (H_2) and hydrogen–natural gas blend (HCNG) fueling stations. Station modules include:

COMPRESSOR MODULE

FTI offers a suite of compressors that are reliable, durable and efficient and are available to suit a variety of fueling conditions, including low inlet pressure with high capacity requirements.



FTI's priority panel is designed to efficiently manage the filling of storage tanks and the flow of gas throughout the station.







DRYER MODULE

FTI has engineered the latest in absorption technology that meets the local gas conditions and ensures the proper gas purity for the compressor.





STORAGE MODULE

FTI provides a complete range of gas storage systems ensuring maximum fueling efficiency.

DISPENSER MODULE

FTI's CNG, LNG, H₂ and HCNG dispensers combine a futuristic exterior with the latest in fueling technology, to meet and exceed the fueling requirements of modern commercial fueling stations. Engineered with safety and usability in mind, FTI dispensers are available in a variety of tyles including the Affinity, Classic and Short cabinet configurations.

TURNKEY CNG, LNG, H, AND HCNG FUELING STATIONS

A leader in product innovation, quality engineering, and unsurpassed customer focus, FTI's vision is to provide environmentally friendly fueling stations that fuel the world. FTI's products contribute to the improvement of global air quality and the environment on a daily basis. With alternative vehicle fueling products in over 20 countries, FTI is setting the standard for clean vehicle fueling globally.





COMPRESSOR MODULE

COMPRESSED NATURAL GAS (CNG) COMPRESSOR MODULE

With years of experience in the CNG market, FTI offers a range of durable, high-performance, robust bareshaft gas compressors that are assembled in complete compressor packages. Designed by FTI engineers, these compressors reliably deliver CNG in even the harshest environmental conditions. All FTI compressors operate over a wide range of inlet conditions and flow rates and are available in lubricated or non-lubricated configurations.

HYDROGEN COMPRESSOR

A range of reliable hydrogen compressors are available to meet the specific requirements of any vehicle fueling project. FTI's custom designed compressors meet the demanding technical specifications of hydrogen fueling projects today and tomorrow.

	KEY FEATURES (CNG)	2 THROW	4 THROW			
	HORSE POWER	200	400			
ie.	STROKE (INCH)	4.5	4.5 4 Up to 8			
-	NO. OF THROWS	2				
	NO. OF STAGES	Up to 4				
	MAXIMUM RPM	1500				
	OVERALL WIDTH	29"	54"			
-	OVERALL LENGTH WITH CYLINDERS	72.5″	72.5″			
	INLET PRESSURE RANGE (PSIG)	8 - 900 6000				
	MAXIMUM DISCHARGE PRESSURE (PSIG)					
	CAPACITY RANGE (NM3/HR)	150 - 2500				



DRYER MODULE

Dry gas is essential to vehicle fueling and FTI's custom engineered absorption and filtration solutions for gas purification and separation ensures optimal gas compression. Working with industry experts, FTI is focused on delivering the latest in absorption technology. FTI's dryers use industry certified ASME and PED stamped pressure vessels.

PRIORITY PANEL MODULE

FTI's purpose built priority panel sequentially manages the filling of multi-bank storage cascades. The dynamic interaction between priority panel and storage cascade ensures rapid vehicle fueling.

STORAGE MODULE

As part of its commitment to customer satisfaction, FTI continuously evaluates emerging and proven storage technologies and offers a comprehensive range of storage options for CNG, LNG, H₂ and HCNG gases. Storage is available in a variety of tank types and configurations, depending on the application. Storage capacity ranges from 1200 litres to 8000 litres.

STANDARD SPECIFICA	TANDARD SPECIFICATION					OPTIONAL FEATURES		JITON CA	
DISPENSER (CAR & BUS) PRODUCT LINE	CONFIGURATION	FILLING PRESSURE	MAX. FLOW RATE	DESIGN CODES & STANDARDS	SEQUENCING	APPROVAL	TAME CARD REALEST ESD PO	Solder Power	
CNG Dispensers	High profile Classic & Affinity cabinet, Single / Dual delivery hose, side / lane mounted nozzle	200 / 250 bar	up to 100kg/min	NFPA 52 NEC / IEC NGV 4	Up to 3 bank sequencing	ATEX / UL / W&M	/////	NOTES:	
Hydrogen Dispensers	High profile cabinet, Single / Dual delivery hose, Side mounted nozzle	350 / 700 bar	up to 3.6kg/min	NFPA 52 / 70 HGV4 DRAFT ASME B31.3 SAE J2600	up to 5 bank sequencing	ATEX / UL	////	1. Operation Temperature range for all dispensers is -40°C to +70°C 2. Electrical Requirements for all the dispensers are 120VAC,	
HCNG Dispensers	High profile cabinet, Single / Dual delivery hose, Side mounted nozzle	H2 side - 350 bar CNG side - 200 / 250 bar	H2 side - up to 3.6Kg/min CNG side - up to 100kg/min	NFPA 52 / 70 HGV4 DRAFT ASME B31.3 SAE J2600	Up to 3 bank sequencing	ATEX / UL	////	3. All the dispensers have the ability to communicate with SCADA system through Modb protocol	
LNG Dispensers	High profile cabinet, Single delivery hose, Side mounted nozzle	4.1 bar	up to 80kg/min	NFPA 59A NFPA 57 NFPA 70 ASME B31.3			////	4. ESD Push Button is a mandatory requirement for dispensers based on some countries' standards	



DISPENSER MODULE

COMPRESSED NATURAL GAS (CNG) DISPENSERS

CNG is the fastest growing alternative fuel and FTI is leveraging over 30 years of manufacturing experience. This thorough knowledge of the CNG market enables FTI to deliver dispensers with a reputation for unmatched reliability, quality and safety and operate in the harshest of environments. Designed to meet the technical and esthetic requirements of even the most discerning customer, FTI dispensers are used in modern commercial fueling stations around the world.

LIQUID NATURAL GAS (LNG) DISPENSERS

LNG is a cryogenic fuel that requires special handling during the vehicle fueling process. FTI's LNG dispensers are engineered for safe and fast fueling of vehicles and come equipped with high accuracy flow meters.

HYDROGEN DISPENSERS

Since 1998, FTI has been recognized as a global leader in the provision of hydrogen dispensers and has 70% market share of world's hydrogen vehicle fueling projects. Backed by industry leading experience in this emerging market, FTI has developed state-of the-art safe reliable dispensers that deliver hydrogen at up to 700 bar.

HCNG DISPENSER

Building on FTI's commitment to the environment, the company has designed a unique HCNG dispenser that achieves further reductions in emissions by blending hydrogen with natural gas. This blended fuel can be delivered to traditional natural gas vehicles with little or no engine modifications. A key feature of FTI's HCNG dispenser is its proprietary software that enables customers to tailor the ratio of hydrogen to natural gas.

CNG MASTER METER

Housed in a rugged portable carrying case, the FTI CNG Master Meter is used to calibrate natural gas dispensers. The FTI Master Meter compares and calibrates all dispensers at the station location.





MANUFACTURING EXCELLENCE

Located in Toronto, Canada, FTI's manufacturing facilities are meeting the growing demand for alternative energy fueling stations. By applying modern manufacturing techniques to its innovative fueling station design, FTI provides complete turnkey CNG, LNG, H₂ and HCNG fueling stations.

FTI's progressive manufacturing and fabrication capabilities are in step with its market driven product development strategy.



INNOVATION MEETS QUALITY

FTI is focused on achieving customer satisfaction through consistently developing and delivering innovative solutions and services. Continuous improvement is a critical component of FTI's corporate culture. A cornerstone of that philosophy is the Company's Quality Management System which is ISO 9001 certified. FTI's products have received national and international certifications. Accreditations include:

- ISO 9001 Certified Quality Systems
- ISO 14,000 Certified Quality Systems (certification in progress)
- European approvals CE, ATEX, PED, EMC
- United States/Canada approvals UL
- NTEP Weights and Measures approved

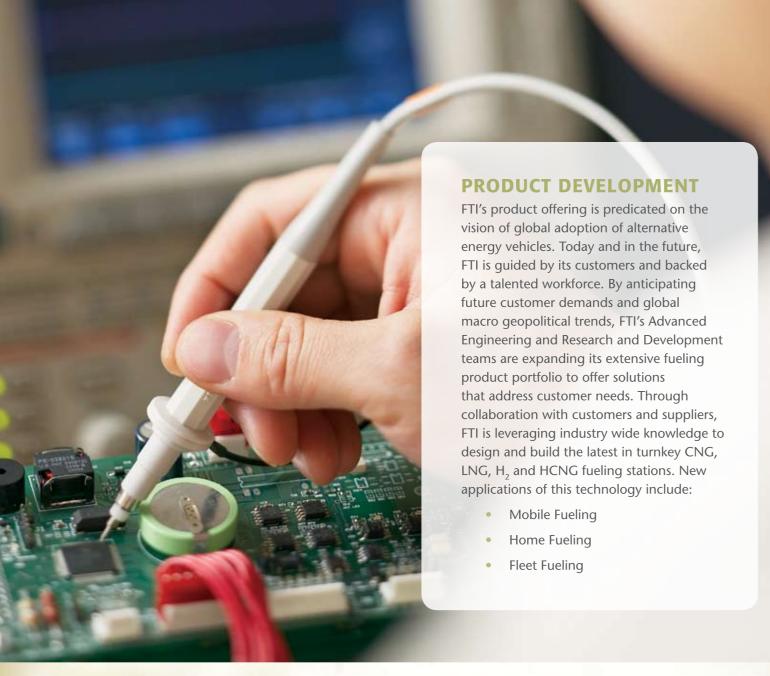
PEOPLE

FTI employs highly qualified and experienced engineers, scientists and technicians. With offices globally, FTI is strengthened by its cultural diversity which enables its talented workforce to produce products that meet individual customer demands while sharing a common focus on innovation and quality. As a result, the company is successfully harnessing the energy and imagination of its people while maintaining a clear customer focused direction.

AFTER MARKET SUPPORT

At FTI, customer satisfaction is paramount. The company has established an on-call global support and after sales network to assist customers. Service visits and parts are just a phone call away.

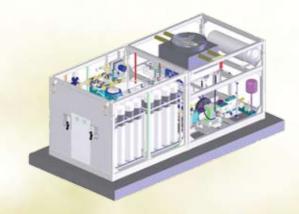




MOBILE FUELING

Based on market research, FTI has designed mobile fueling stations that combine the functionality and ease of use of permanent fueling stations with the ability to transport the station from site to site. The FTI mobile fueling station enables customers to bring the infrastructure to the vehicles. This mobile fueling concept is ideal when:

- A fueling infrastructure is limited or non existent
- Pipelines are not accessible or available
- Permanent stations are under maintenance
- There are limited vehicles in an area, providing a cost effective opion



HOME FUELING

FTI's home fueling product provides the ultimate in consumer independence and convenience. With this technology frequent visits to the corner gas station can become a thing of the past. The FTI home fueling product offers a number of key features and benefits:

- Light weight for easy wall mounting
- Uses standard household electricity
- Safely operates indoors and outdoors
- Convenient and easy to use





FLEET FUELING

Early adopters of clean alternative energy technology include industrial applications of fleet vehicles, including forklifts, ice resurfacers and small fleets. FTI's fleet fueling products are located on site and offer customers a number of benefits:

- Convenient fueling using on-site infrastructure
- Reliable and readily available infrastructure
- Reduced operating cost by centralizing infrastructure
- Achieves indoor air quality
- Improved outdoor air quality especially in critical in non-attainment zones such as airports

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